MTC–00029649

Wayne Stringer
1270 205th St
Fort Seott, KS 66701
January 26, 2002
Attorney Renata Hesse
Department of Justice, Antitrust Arty
601 D Street NW, Suite 1200
Washington. DC 20530

Dear Attorney Hesse.

I strongly encourage your support in accepting the proposed settlement in the Microsoft antitrust suit ''Microsoft. has simply provided a product that meets a market demand at a price the consumer is willing to pay. If anything, their competitors have used similar tactics to grow their own business—in a sense. keeping the marketplace fair.

The unfairness lies in Microsoft's competitors using the marts to accomplish what they couldn't do in the marketplace. ??'s Larry Ellison has very publicly decreed their he will unseat Microsoft as the number one player in the software industry, and he will do anything to accomplish that goal I sincerely object to this move to replace the free market system with court manipulation.

With all due respect. I hope you object as welt.

I encourage yore full acceptance and approval of the settlement. I truly believe it addresses all involved and allows Microsoft and the industry to move forward on a positive, note.

Sincerely,

Wayne Stringer
January 27, 2002, 11:40 pm
Antitrust Division
U.S. Dept. of Justice
601 D Street NW, Suite 1200
Washington DC, 20530–001

To Whom It May Concern:

I am writing to exercise my right under the Tunney Act to voice my strong disapproval of the current proposed settlement of the Microsoft anti-trust trial. The proposed settlement is both weak and lacking strong enforcement provisions, and is likely to have zero (or worse) effect on competition within the computer industry, with continued and increased harm to consumers in the form of fewer options in the software market and continued increases in the price of the Microsoft software consumers are forced to buy.

Microsoft was convicted of abuse of monopoly power by one Federal judge, and the judgment was largely upheld by another seven Federal justices. In evaluating any proposed settlement, keep repeating one Important Phrase over and over: ''Microsoft is guilty.''

The seven justices of the appeals court ruled that any actions taken against Microsoft (a) must restore competition to the affected market, (b) must deprive Microsoft of the ''fruits of its illegal conduct,'' and (c) must prevent Microsoft from engaging in similar tactics in the future. The proposed settlement fails on every one of these.

(A) Restore Competition

Among the many flaws in the proposed settlement is the complete disregard for the Open Source software movement, which poses the single greatest competitive threat to Microsoft's monopoly.

Most organizations writing Open Source software are not-for-profit groups, many without a formal organization status at all. Section III(J)(2) contains strong language against non-for-profits, to say nothing of the even less-formal groups of people working on projects.

Section III(D) also contains provisions which exclude all but commercially-oriented concerns.

To restore competition the settlement must make allowances for Open Source organizations—whether formal not-for-profit organizations or informal, loosely associated groups of developers—to gain access to the same information and privileges afforded commercial concerns.

(B) Deprivation of Ill-Gotten Gains

Nowhere in the proposed settlement is there any provision to deprive Microsoft of the gains deriving from their illegal conduct. Go back to the Important Phrase: ''Microsoft is guilty.'' In most systems of justice, we punish the guilty. But the current proposal offers nothing in the way of punishment, only changes in future behavior.

Currently Microsoft has cash holdings in excess of US$40 billion, and increases that by more than US$1 billion each month. A monetary fine large enough to have an impact on them would be a minimum of US$5 billion.

Even a fine that large would be a minimal punishment. Microsoft's cash stockpile is used, frequently and repeatedly, to bludgeon competitors, buy or force their way into new markets, or simply purchase customers, with the long-term intent to lock people and organizations into proprietary software on which they can set the price. Taking a ''mere'' US$5 billion from their stockpile will have zero effect on this practice.

For that reason, Microsoft's cash stockpile must be further reduced. In addition to the monetary fine, Microsoft should be forced to pay shareholders a cash dividend in any quarter in which they post a profit and hold cash reserves in excess of US$10 billion. The dividend should be substantial enough to lower Microsoft's cash holdings by US$1 billion, or 10%, whichever is greater.

(C) Prevention of Future Illegal Conduct

The current proposed settlement allows Microsoft to effectively choose two of the three individuals who would provide oversight of Microsoft's conduct and resolve disputes. The proposed settlement also requires the committee to work in secret, and individuals serving on the committee would be barred from making public or testifying about anything they learn.

This structure virtually guarantees that Microsoft will be ''overseen'' by a do-nothing committee with virtually zero desire or ability to either correct Microsoft abuses, or even call attention to them.

Instead of the current proposal, a five-person committee should be selected. Microsoft may appoint one person, but will have no influence over any of the other four. For the four, two should be appointed by the Federal court of jurisdiction, one should be appointed by the U.S. Department of Justice, and one should be appointed by the U.S. Senate. At least two of the appointees should have technical experience and be competent to evaluate technical proposals and arguments by themselves, without the filters which assistants would bring.

These are hardly the only thoughtful and reasonable suggestions you will no doubt receive regarding the proposed settlement of this anti-trust case. And these are hardly the only suggestions which should be adopted if the settlement is to prove effective. But all of them are essential to that aim, and adopt them you must,

Thank you for your time and the opportunity to comment.

Respectfully,
Michael A. Alderete
569 Haight Street
San Francisco, CA 94117
(415) 861–5758
michael@alderete.com

MTC–00029652

Ms. Renata Hesse
Antitrust Division
Department of Justice
601 D Street, NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I am writing in supp ort of the consent decree for the Microsoft settlement. Microsoft has show itself to be an innovator and a company whose products make lives better for he average American. This lawsuit is bad for consumers and ba?? for the economy.

By supper ting the consent degree, you will put an end to a lawsuit theft has become more political than substantive. The Bush administration priorities have been amazingly out of step and out of touch with the American public Hopefully they will at least get this one right and settle the suit. The I maybe we can all move on to a healthy economy and a healthy debate concerning the future of our nation.

Thank you.

Sincerely
Tim Allison Executive Board Member
CA Democratic Party

Title for identification purposes only. This letter reflects the solely the opin on of the signer.

MTC–00029653

January 25, 2002
Renata hesse
Trial Attorney, Antitrust Division
Department of Justice
601 D Street, NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

The Microsoft Lawsuit Is Bad for Business and Bad for Consumers.

For many, the idea of attacking one of the most successful companies in American history, and its CEO Bill Gates, sounds like fun. But the Department of Justice's pursuit of Microsoft is no laughing matter, having cost American taxpayers well over $35 million in litigation so far and the meter is still running.

The reality is that this lawsuit does nothing to benefit consummers. It does however benefit Microsoft's competitors, who after spending millions of dollars lobbying the Department of Justice to file this suit want a return on their investment. Also, it benefits the lawyers who have made a fortune on both

sides of this issue... and the Attorneys General and bureaucrats who are making political hay, back home by demonizing Microsoft. The real beneficiaries are the powerful anti-Microsoft forces not consumers.

The Cost To Businesses and Consumers in Just Too High.

Rather than protecting consumers, drastic remedies such as breaking up Microsoft would be a disaster for consumers and businesses. The integration and standardization Windows brought us has been a boon for the public as well as for our economic productivity. What Bill Gates understood, much to his competitors'' chagrin, was that consumers- people who use computers, not live computers—want an affordable and reliable system that works with and understands other systems.

Government intervention into the world of high tech programming and design sets a dangerous and potially disastrous precedent. Dictating to Microsoft what technology it can develop will decrease the effectiveness of existing products or meet the expanding needs of users could cripple the technological innovation that has been the hallmark of hour high tech, internet economy.

One could argue in fact that the genesis of the huge decline in the Nasdaq, which so far has resulted in more than $2 trillion of lost wealth, is primarily the result of the government's sustained attack on Microsoft's right to innovate. After all, today Microsoft, tomorrow Intel.

Over the past 10 years, Microsoft has lowered its prices, created a better product, and invested enormous sums of money in research and development. This doesn't sound like monopolistic behavior by any standard.

The government's pursuit of Microsoft has cost the American taxpayer over $35 million so far with devastating results for state and private pension funds, and small investors, all over the country, [illigible] state pension funds have lost $144.2 billion. Here in California, since the March, 2000, break down of mediation on the case, Public Employee Retirement System funds have dropped more than $59 billion while the State Teacher Retirement fund lost $15 billion.

We hope the consent decree is adopted and the federal lawsuit is dropped. If not, it may be time to [illegible] our elected representatives to do the right thing and allow Microsoft to continue its history of investment, innovation and improvement The American economy depends on it.

Sincerely
Joe [illegible]
Executive Director, SBCTA
214 East Victoria Street,
Santa Barbara, California 93101
Tel: 805.965.9415
Fax: 565–7915
email: info@sbcta.org www.sbcta.org

MTC–00029654

January 9, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D S??et NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

As a member of the North Carolina General Assembly, I have always sought to make government a cooperative partner of business and industry. After all, business and industry creates jobs that enhance the lives of countless North Carolinians.

For several years, I have witnessed the federal government's pursuit of a lawsuit against Microsoft, one of the most successful companies in the history of American business. This suit has cost the taxpayers upwards of $30 million over the past years.

I request that Judge Kollar Kotelly approve the settlement that the Department of Justice and Microsoft have both agreed upon. In addition, I am pleased to say that my state, North Carolina, has also signed the agreement and decided to settle.

In spite of the fact that nine state attorneys general plan to prolong their cases against Microsoft, I believe the federal case should be settled.

Sincerely,
Jeffrey L. Barnhart
State Representative

MTC–00029655

January 23, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street, NW suite 1200
Washington, DC 20530

Dear Ms. Hesse,

As a business executive who travels to Chicago on business from my home in Greensboro nearly every week, I know how important Microsoft's business technology is to American business, In fact, I find Microsoft's products to be bery helpful when I travel abroad on business as well.

I realize that not everyone travels to the extent that I do, but I would imagine that most people who work In business do rely on Microsoft products to a great extent. And shouldn't they? Microsoft's products are universally recognized as the industry leader and they've improved communication for American businesses, schools and government.

Virtually everyone uses Microsoft's products, Executives, attorneys, entrepreneurs, educators and government officials know that Microsoft is the universal leader in technological innovation They all have great confidence In Microsoft's products to get the job done.

I read recently that Microsoft and the federal government agreed to settle the antitrust lawsuit they've been engaged in for a number of years. That's good news for businesses, families, the stock market and the American economy, our economy needs a shot in the arm at this point in time, and I believe that this settlement will provide it, I request that Judge Kollar-Kotelly approve this settlement. Thank you for your consideration of my comments.

Sincerely,
Kumar Lakhavani
Senior Manager
HR Dynamics Global Practice

MTC–00029656

Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

As a member of the Greenville City Council, I am concerned about the off??er that the Microsoft anti??rust lawsuit is having on both the business and educational institutions in our city. I am a newly elected member of the council, a member who ran in order to create a more efficient government for our ??tizens. I am also concerned that the government operates efficiently.

The American people have a twofold desire in regard to the Microsoft suit, as I see it. First, they want the federal government to work to create a more positive business climate for all Americans. Government needs to use its power to encourage private investment, innovation and job growth, Second, it is the moral responsibility of the federal government to use taxpayers' funds wisely.

The government's work in fostering a strong coonomy is par??licularly timely right now. After all, the unemployment rate is up, the stock market is down, and consumer spending is off. We've got to get back on track. I can think of no more positive action for the federal government to take than for its courts to approve the settlement in the Microsoft case.

Also, Americans today are paying taxes to the federal government at the highest rate per capita in over fifty years. It is the government's responsibility to see to it that these funds are used responsibly for the benefit and general welfare of the American people. The Microsoft lawsuit has cost the American people $30 million to prosecute. It's time to and this litigious spending.

Thank goodness both parties want the suit to end. They have come to art amicable settlement. I urge Judge Kollar-Kotelly to approve the settlement.

Sincerely,
Ray Craft
Council Member

MTC–00029657

January 18, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Departnent of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

As a business leader who has served as Chairman of the American Furniture against Microsoft is close to ending. Virtually all of the executives in business and industry that I am in contact with want to see the case settled.

Our society has become more litigious than ever. Litigation costs business money... and can cost employees their jobs That's why l believe that we ought to move beyond this ease. There are so many societal problems for us to contend with no the least of which is

our ourrent economic recession. We need to focus on growth, and we aced the government to be a true partner in that effort.

The company that I own uses Microsoft products every day. t find them to be useful in making my business more efficient. En??epreneurial life is much different from the legal profession. If I am not constantly looking for now niches in which to make a profit, my business will lag. Microsoft products have made my business more productive, and I think it's time to settle this lawsuit so that Microsoft can focus all its resources on creating new products to benefit businesses like mine.

Microsoft and the federal government are in agreement On the settlement, I strongly urge Judge Kollar-Kotelly to quickly approve the settlement Let's set me economy moving again.

Sincerely,
J. Ray Shufelt
CEO

MTC–00029658

Beth Saine
Lincoln County Commissioner
1760 Whispering Pines Drive
Lincolnton, NC 28092
704.735,3297
January 18, 2002
Renata Hesse
Trial Attorney
Antitrust Divisions Department of Justice
60l D Strut NW, Suite 1200
Washington, DC 20530
Fax: 202–616–9937

As a member of the Lincoln County Commission, I am pleased that the United States Justice Department is settling with Microsoft. Technology is so important to the future of counties like ours all across America, and this settlement will enhance all facets of the tech industry in the coming years.

Our neighbors in Mecklenburg County have had many advantages over Lincoln County, and other counties in the past. Charlotte is the nation's mega banking centaur. That attracts business, and with it comes a substantial local fax base. I'm not saying that money is everything, but huge counties have had a traditional advantage over smaller ones in the past. As a result, they have had an easier time funding essential county services, such as school improvements. Technology quite simply levels the playing field for average-sized counties across America.

When someone togs on to the internet, it doesn't matter if they're sitting in Raleigh or Hanging Dog, their access to information is the same, and their ability to profit from the proliferation of information is the same, The tech industry needs a shot in the arm so that it can continue aiding America's counties in o significant way. Fore this reason, I'd like to request that Judge Keller Kotelly approves the settlement that Microsoft and the federal government have reached. It will benefit Lincoln County, and counties like ours across America,

Regards,
Beth Saine

MTC–00029659

North Carolina Federation of College Republicans
BOX 16160
SULLIVAN HALL
NCSU
Raleigh, NC 27607
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601D Street, N–W Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

As one of the younger members of the North Carolina Republican Party's Central Committee, I have a strong interest in how government interacts with technology so the economy is strengthened in the future. As Chairman of the North Carolina Federation of College Republicans, I want to formally ask that Judge Kollar Kotelly approve the landmark settlement between the federal government and Microsoft. Here's why:

I do not believe that Microsoft has done any harm to even one single consumer. And without consumer harm, what reason exists to bring an antitrust case? None. Face this fact: the future is in high tech jobs. Also, every industry is going high tech. Imagine the damage done by the federal government suing the technology industry's leading company. It discourages young people from being innovative. It discourages them from becoming entrepreneurs. Our Republic will only survive is maintain a strong free market system. And our market system can only thrive if companies continue to be innovative. I hope the settlement is finalized soon, so that American business can operate at its full capacity again soon.

Thank you for your consideration of my comments.

Sincerely,
Matthew Adams
State Chairman

MTC–00029660

Wake Forest Town Commission
January 11,2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

As a member of the Wake Forest Board of Commissioners, I am all too aware of the high cost of government despite the fad that our citizens and businesses endure terrible economic conditions in our state. Out town needs revenue from increased business activity, not higher property taxes. It seems to me that all our local industries will be enhanced when the settlement of the Microsoft lawsuit is completed.

As you can tell, I am adamantly opposed to higher taxes in whatever form and work hard to ensure that tax money is spent wisely. But, the fact is, in our growing community, we have services that need to be paid for by government. The best way for our town to generate additional revenue is to increase business activity in Wake Forest. That is why I was happy to see that the federal government's case against Microsoft had come to a settlement agreement in the court of Judge Kollar-Kotelly, I know that this case has cost the taxpayers of this nation $30 million, not to mention lesser sums in the t 8 states that also brought the original lawsuits. More significantly, it has hurt business, and local revenues, in our town and towns across America.

I am pleased that North Carolina is one state that decided to agree with the settlement and now no more state tax money will be expended. I hope to see the same thing happen in the federal case as well. That is why t am strongly urging the judge to agree to the settlement in this case.

Sincerely,
Chris Malone
Town Commissioner
401 Owen Avenue—Woke Forest, NC 27587

MTC–00029661

January 25, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200 Washington, DC 20530 Fax: 202–616–9937

Dear Ms. Hesse:

Microsoft's products are the greatest in the technology industry, and that is the major reason that they are regarded as a leader m the American economy. Given that fact, it is no wonder that when the federal court announced that Microsoft would be broken up, the stock market came to a screeching halt, and tumbled down from record highs.

I am very encouraged that Microsoft and the federal government have agreed to a settlement in the antitrust case. I believe that this is good for the economy, the government and other societal institutions, which increasing rely on industry to invent new products to make their operations more effective.

The settlement provides for more oversight into Microsoft's operations, and a more competitive playing field for all companies in the industry. That's welcome news for everyone who demands consumer choice. It will also send the right signal to investors that the government is prepared to work in a cooperative effort to spur economic growth and job creation.

I request that Judge Kollar Kotelly will approve the settlement, so that the Justice Department can conserve resources for more pressing legal matters. Additionally, closure in this matter would send a message that government is prepared to work with the American business in taking constructive steps toward a brighter future for all Americans.

Thank you,
Trustee
Rowan-Cabarrus Community College

MTC–00029662

Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax: 202–616–9937

Dear Ms. Hesse:

As a young business executive, I am relieved that the federal government and Microsoft, which have been engaged in a protracted antitrust lawsuit, have arrived at a settlement arrangement that is amicable to both sides. Settling this case as soon as possible is important to the technology industry, as well as many other important segments of the economy.

In the business world, companies look at industry leaders for innovation, and they often try to emulate the corporate giants'' successful business strategies. This partially explains why the tach sector of the economy has been in a tailspin for an extended period of time. When the antitrust suit is finally ended once and for all, a dark cloud will be lifted from the entire industry. The American economy, and to some extent, the world economy has never been more interconnected. Each change within one economical sector creates a ripple throughout the rest of the economy. A major shift in one sector results in a sea change across the board of leading economic indicators.

I work in the mortgage banking industry, a business that is highly sensitive to the state of the national economy. While ending the Microsoft litigation will not alone create record revenues for our industry, I feel certain that it would boost consumer confidence, and encourage investments in many types of business enterprises.

Finally, I am excited about the future of technological innovation in the workplace. Microsoft has led the way in this regard, and finalizing the settlement will help the company refocus on developing new and exciting products. That means a more productive workplace in the future.

I request that Judge Kollar Kotelly approves the settlement.

Sincerely,

Stewart

MTC–00029663

January 24, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Fax: 202–616–9937

Dear Ms. Hesse:

As a long-term care specialist, I am concerned that the tumble that the sock market has suffered is draining the finances of our nation's elderly. We've got to get the nation's economy back on track. The government needs to focus on ways to spur economic growth like never before. In less than ten short years, the baby boom generation will begin to reach retirement age. A record number of seniors will inundate our nation's hospitals, nursing homes and assisted living facilities. These people will need savings not for luxury items, but to cover living expenses associated with aging.

Our nation's greatest generation, for the most part, worked at one company for their entire working career. Their pensions are largely vested in stocks. When the stock market is unstable, their financial situation, and living conditions, become unstable as well. The baby boom generation are less likely to have worked in one company, and are less likely to have saved for a retirement. They are, however, more likely to have invested a substantial portion, or all, of their savings in the stock market. IT IS IMPERATIVE THAT WE STRENGTHEN THE ECONOMY IN ORDER TO BOLSTER THESE SAVINGS.

I request that Judge Kollar Kotelly approves the settlementbetween Microsoft and the federal government. This lawsuit has been proven to have caused much of the turmoil within the economy in general, and the stock market in particular. Our nation's retirees need security, and deserve governmental cooperation.

Sincerely,

Douglas McCabe Russell

MTC–00029664

GEORGE W. LITTLE & ASSOCIATES, INC.
INSURANCE CONSULTANTS—BROKERS
January 22, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Fax: 202–616–9937

Dear Ms, Hesse:

I have been involved in business, industry and economic development for over thirty years. Over that period of time, I have come to understand that a quality education system, a solid public infrastructure and a strong flee market system are the keys to economic development in North Carolina and across America.

Virtually every societal institution which is vital to economic development has benefited from the proliferation of technological advances in the past decade. Leading the way in innovative technology is Microsoft. Their products have benefited businesses by saving countless hours of time and making communications between businesses seamless. Microsoft's benefits to the education system are tremendous, Research, class instruction and other benefits have been realized through application of these useful tools. Governmental institutions also rely on Microsoft to maximize their efficiency and serve, the public in a responsive manner.

For these reasons, I am gratified that federal government and the Microsoft have agreed to a settlement in their antitrust case, Microsoft will be able to focus its energies once again on research and development, while the government is granted unprecedented oversight into Microsoft's operations. Under this settlement, economic development wins, and so do the American people.

I hope time Judge Kollar Kotelly will approve the settlement.

Sincerely,

MTC–00029665

January 23, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Fax: 202–616–9937

Dear Ms. Hesse:

I write to express my desire that the government will act in a cooperative manner with Microsoft and similar business interests in developing a mutually beneficial relationship. I am convinced that now is the time to end the federal government's litigation against Microsoft. Microsoft and the federal government have agreed to settle the suit. The public is yearning for an economic recovery. Congress is debating an economic stimulus package. With these facts in mind, I am quite confident that we should move beyond the Microsoft case and work to get our stagnant economy moving again.

As an attorney, I realize that antitrust law is an important component of maintaining a competitive marketplace. However, company innovation and product improvements are as well, and since both parties have agreed to settle the lawsuit, I believe that it would be advantageous for everyone if Microsoft can get back to doing what it does best: researching and developing useful technological tools for the American workplace and the American home.

The settlement guarantees that other companies will have market access. Every new Microsoft operating system will have to include a mechanism that enables end users to remove or re-enable Microsoft s middleware products. While end users can already remove Microsoft middleware from Windows XP, this settlement would make it even easier for users to change middleware products.

I hope that Judge Kollar Kotelly approves the settlement.

Regards,

Phillip J. Strach

Attorney

MTC–00029666

Professor Eric Brodin
P.O. Box 209
Bules Creek, NC 27506
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

During my career as a columnist and professor. I have written over 3,000 articles for various publications such as the Dana Daily Record, the Coastal Piedmont leader and other Journals, newspapers and magazines in twenty countries. I feel compelled to write to you on a hot contemporary issue: the pending settlement of the federal government's antitrust case against Microsoft.

I live in a university community. In the past ten years. I have seen a technological explosion on campus that has revolutionized learning processes and intellectual research. I have found the technological advancements of the newspaper to be beneficial in my work as a columnist. The technological advancements to which I refer are in no small measure due to the entrepreneurial success of Bill Gates and Microsoft. After all, Microsoft has developed products that have aided the process of word processing immeassurably,

as well as improved columnists'' ability to transmit data.

I served as the Endowed Chair of the Landry-Fetterman School of Business at Campbell University from 1980 until 1983. During my tenure, I did my utmost to promote the notion that our societal liberty is largely dependent upon the foundation of the free enterpriss system. I fully realize that antitrust laws are needed in order to foster a competitive marketplace, however if a corporation's business practices do not result in harm to the conssumer, the government should not interfere. I have seen no evidence that Microsoft's business practices have harmed consumers in any way. On the contrary, I believe that Microsoft has benefited the American consumers greatly.

I urge Judge Kollar-Kotelly to approve the proposed settlement of the lawsuit. It's time to allow the free market system to determine the corporate winners and losers in our great land.

Sincerely,

Professor Eric Brodin

MTC–00029667

Steve Tyndall
PO Box 33358 Raleigh, NC 27636
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax: 202–616–9937

Dear Ms. Hesse:

The business of America is business, according to President Woodrow Wilson. That statement has held true for the entire duration of our nation's young life Whenever business is good, we say that ''times are good'' in America. When business is off, we say that we're going through a ''tough time''. ! regret to say that I believe that tough times are currently upon us and our economy needs for business to get back on track. In some areas, the government can play an active role in restoring consumer confidence, and strengthening investor resolve.

The stock market is in limbo. Investors are in a period of uncertainty that began when the federal government announced that Microsoft would be dissolved into a series of small companies. The tech sector of the economy, which had been largely separated from government, and looked to Microsoft for leadership, became a very unstable place for investors and employees to be that day. We need to recapture the magic of the 1990s economy by putting the Microsoft lawsuit behind us once and for all.

The federal government and Microsoft are in agreement on the terms of the settlement. All that remains is for Judge Kollar Kotelly to approve the settlement. I hope and pray the settlement will be approved. A renewed spirit of entrepreneurial innovation will be started on that momentous occasion.

I am honored to live in the Unites States of America, a country in which we have a fair and impartial judicial system. The trial has run its course. The verdict is in. Both parties want to settle, in order to save the American people and the American economy irreparable harm. It's time to move forward.

I request that Judge Kollar Kotelly will approve the settlement. Senior Tactical Management Specialist Planner John Deere Corporation

MTC–00029668

Scott Lampe
Former Treasurer, N.C. Republican Party
3707 Waterton Leas Court
Charlotte, NC 28269
January 21, 2002

Dent Ms. Hesse:

I believe that the United States of America has the highest standard of living of any country in the world. I am certain that our prosperity is a direct result of the free enterprise system that enables our economy to flourish. I enjoy following current events, end participating in the political process when I believe that my participation is needed.

The federal government's lawsuit against Microsoft is a prime example of an issue that has stirred my passions and evoked my interest in the public good, From the outset of the lawsuit, I have worried about the suit's impact on the American economy as a whole. I noticed that the entire stock market began its slide at the point which the federal government annoyed Microsoft's breakup.

Microsoft's, innovation has been beneficial for industrial and educational institution across America. I strongly believe that the government ought to be as supportive as possible of all companies that are vital to American enterprise and American jobs. It's important to families that their tax dollars be used to strengthen, not weaken, the economy. That's why I believe that the proposed settlement between Microsoft and the federal government is a positive development for America. The settlement provides for like access and monitoring of Microsoft. In essence, everybody wins... business, industry, the government, and most importantly, the American people.

I hope that Judge Kollar Kotelly will approve the settlement.

Thank you,

Scott Lampe

MTC–00029669

January 18, 2002.
Ms. Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001

Dear Ms. Hesse:

I am encouraging you to accept the Microsoft settlement. It is fair! For three years, I've been reading about the litigation, lobbyists, lawyer's fees and millions of dollars in taxpayers monies spent.

It's time to have less regulation in technology and to have more competition in the market. As a consumer, I want affordable, high quality products that Microsoft creates. This settlement will allow the company to again focus on leading in technology rather than fighting for survival in the face of litigation.

Thank you for considering my input as you deliberate this decision.

Liberty Carty
620 S Highland Dr
Andover, KS 67002
Journalism major, Butler County Community College Member, Kansas Republican State Committee President, Buffer County Republican Assembly

MTC–00029670

Gerald R. Slifka
2028 Winston Place
Waterloo IA 50701
January 27, 2002
Renata Hesse Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Attorney Hesse:

I am writing to urge the court to accept the settlement proposal of the Microsoft anti-trust case. As a consumer I have witnessed the value of our constantly advancing technology on a daily basis. Like most Americans I am at the same time thrilled and overwhelmed by the new products that are available. These have gone along way toward helping work and live more efficiently. I work in the printing industry and can tell you first hand that technology has had a significant impact on how this industry operates. The quality of our work improved to a great extent while the product turnaround time has been significantly reduced

We are living in a time of financial uncertainty in this country. We must do whatever we can to regain stability in the stock markets and the job market. Ending the government's case against one of our leading companies will help lead our county to continued prosperity.

Please accept the settlement before you.

Sincerely,

Gerald R. Slifka

MTC–00029671

January 16, 2002 Ms.
Renata Hesse, Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

I appreciate that my ideas as a livestock business owner can be shared regarding the Microsoft antitrust ease.

It is important that the Federal Courts recognize the benefits of competition in business and technology. The Anti-trust laws were written over 100 years ago to protect consumers. In this day and age, it seems, some of Microsoft's competitors want to use them as a safe-guard from competition. A better use of the government's legal power would be an examination of the vertical integration of agricultural conglomerates.

I personally agree with settlement and hope that you will accept it to bring closure to this litigation that is costing us so much in time and tax dollars.

Sincerely,

Vernon Suhn, Owner
Suhn Cattle Company
RR2, Box 67
Eureka, Kansas 670445–9428
(620) .583–5923

MTC–00029672

January 22, 2002

Judge Kolar Kottely
U.S. Department of Justice,
Antitrust Division
601 D Street, N. W., Suite 1200
Washington, DC 20530

Dear judge Kottely:

As an educator, with 37 years of experience, I have followed the Microsoft antitrust suit with much interest and would like to express a major concern regarding the timely disposition of this matter.

I believe the principle parties of this suit have come to a fair settlement for all concerned. However, the nine remaining attorneys general and the District of Columbia need to put aside their individual grievances and settle in the interest of consumers as well as the technology industry which so greatly affects the growth of our economy. It disappoints me that the Attorney General of Kansas is one of the parties who have resisted settlement.

I am encouraged that this settlement has the prospects of more healthy competition in the software industry as well as the increasing the availability of a variety of software to consumers. I sincerely hope you will actively work toward approving the settlement of this case as soon as possible.

Sincerely,

Kent Austin, Speech Pathologist/Audiologist
2520 Coronado Ct.
Emporia, Kansas 66801

MTC–00029673

Patricia Piester
12122 willow Lane, #1124
Overland Park, KS 66213
January 21, 2002
Judge Kolar Kottely
U.S. Department of Justice, Antitrust Division
Attention: Renata Hesse
601 D Street, NW, Suite 1200
Washington, DC 20530

Dear Judge Kottely,

The Federal government has been pursuing its case against Microsoft for 3 years and has spent $30 million of the hard-earned taxpayer's dollars in an effort to protect the consumer against Microsoft's perceived unfair business practices. The result has been confusion and no clear answers.

The Court of Appeals effectively put an end to this case by throwing out a break-up plan instituted by a lower court. This move was clearly in the right direction. We should follow their lead by putting an end to this case. Nothing good will come from dragging it out any longer at an even greater cost to taxpayers and consumers.

Instead, we must see action now in order to spur the American economic recovery we need, especially for our ailing technology industry.

Please support the proposed settlement in this case.

Thank you for considering my opinion on this case.

Sincerely,

Patricia Piester

MTC–00029674

January 25, 2001
Renate Hesse
Antitrust Division,
Department of Justice
Fax (202) 616–9937

To Whom It May Concern:

I am writing to express my support for the Department of Justice settlement in your case against Microsoft. I understand that you are close to a settlement and have asked for public input about this issue.

Our tax dollars are spread thin as well our governmental resources. Enough time and money has been spent on this case to come up with the current settlement. The settlement is impartial and the punishment fits the wrong.

My concern at this time is ''who'' will actually benefit from continuing this case against Microsoft, I believe it will be Microsoft's competitors and not consumers. The current settlement creates a stronger technology industry and consumers will be the overall winners. The case against Microsoft stands as an obstruction to progress. We are going through a war and economic recession. Refusing to settle and extending the campaign against Microsoft is technically out-of-date and just another reason for the country slow down. It is time to get back to work.

Thank you for your time and your efforts to settle US v. Microsoft as soon as possible.

Sincerely,

Jaye Stretesky
P.O. Box 2553
South Lake Tahoe, CA 96158

MTC–00029675

Renata Hesse
Trial Attorney; Antitrust
U.S. Department of Justice
601 ''D'' Street NW
Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

It has come to my attention that the Department of Justice has brokered a settlement with Microsoft that could end the government's anti-trust case against this company. I am very supportive of this.

I live in Kansas where our own Attorney General Carla Stovall has been. a leading advocate for the breaking up of Microsoft and has refused to join. the settlement of this case. I am very disappointed that the Attorney General who was elected to protect my interests continues to pursue this case.

The basis for this suit has always been a mystery to me. Microsoft creates great products that people want to purchase. Because the company is in tune with American consumers and is very innovated they have grown tremendously. This growth has benefited us through lower prices, a growing technology industry and a previously skyrocketing NASDAQ. If Attorney Generals like my own were really interested in protecting the public good they would join this settlement. Besides, it appears to me that those who sought to punish Microsoft are getting much of what they want in this agreement.

I urge you to accept this settlement.

Sincerely,

MTC–00029676

To: c/o Renata Hesse, Trial Attorney
Date: Sun Jan 27 21:39:18 CST 2002
Pages (including cover): 4
From: Rick Voland
Comments: Please oppose the proposed settlement in United States v. Microsoft Corporation.
2120 University Ave., Apt. 210
Madison, WI 53705–2343
January 27, 2002
Renata Hesse, Trial Attorney
Suite 1200, Antitrust Division
Department of Justice
602 D Street NW
Washington, DC 20530
fax (202) 616–9937

Dear Renata Hesse,

Thank you for this opportunity to comment on the United States v. Microsoft Corporation; Revised Proposed Final Judgement and Competitive Impact Statement. I write as an advanced user. I am not a programmer, but I rely on computers for my work and am very much concerned about preserving diversity, choice, and quality in computer software.

I am concerned about the power of Microsoft to coerce its competition. Microsoft paid money to both Corel and Apple when each company was desperate and Microsoft could control the terms. I am also concerned that Microsoft forces computer manufacturers to bundle Microsoft applications with the result that computer buyers now assume that Microsoft applications are part of Windows and are included at no cost. The settlement proposed by the Department of Justice would not cover either of these situations even thougt1 riley are clear examples of the power of Microsoft to coerce its competitors into less competitive postures.

In Apple Computer's 10K annual report for the fiscal year ended Sepbember 30, 2000 is the statement of an agreement between Apple Computer and Microsoft. ''Microsoft purchased 150,000 shares of Apple...preferred stock...for $150 million [p. 52]. Apple in turn agreed to limit computer production, and thus competed less against Microsoft.

In August 1997, the Company and Microsoft Corporation entered into patent cross licensing and technology agreements. In addition, for a period of five years from August 1997, and subject to certain limitations related to the number of Macintosh computers sold by the Company, Microsoft will make future versions of its Microsoft Office and Internet Explorer products for the Mac OS. Although Microsoft has announced its intention to do so, these agreements do not require Microsoft to produce future versions of its products that are optimized to run on Mac OS X. The Company will bundle the Internet Explorer product with Mac OS system software releases and make that product the default Internet browser for such Mac OS releases. [p. 24, ''SUPPORT FROM THIRDPARTY SOFTWARE DEVELOPERS,'' emphasis added] The same document discusses Apple Computer's continued dependence on CPU chips from Motorola [INVENTORY AND SUPPLY, pp. 22–23]. Apple Computer's new operating system, now known as Mac OS X, derives from Nextstep and Openstep purchased with NEXT, Inc. Both Nextstep and Openstep run well on CPU chips by Intel

or Motorola. I am writing this letter on an Intel PC minting Openstep 4.2. Even the bridging version between Openstep and Mac OS X (a developer-only release known as Rhapsody) ran on both Intel and Motorola CPU chips.

This cross-platform technology would have left Apple Computer far more flexible and competitive as Motorola continues to have manufacturing problems that leave Apple Computer with more marketing problems (the megahertz gap) and a more hazy future. Motorola chips currently cannot achieve the same clock speeds (megahertz) as CPU chips from Intel, AMD, etc. Consumers often choose computers on the basis of clock speeds, so they tend to discount Apple computers even though the Motorola chips accomplish more work than Intel chips for the same clock speed (the megahertz myth). Apple Computer has been aware of this situation for several years.

The statement that Apple Computer agreed to limit its production is not about Apple limiting its production of the Apple computers using Motorola chips. Apple agreed at that time to stop development of Mac OS X for Intel which would have been a far more serious competitor to Microsoft. A consumer could buy an inexpensive PC and replace the Windows operating system with Mac OS X for Intel. Mac OS X is derived from Unix and is known for great stability. Also, Mac OS X has special software development tools that would attract developers because individuals could complete aggressively with far larger software colt)orations. Mac OS X for Intel would have allowed Apple Computer to move from selling hardware (Macintosh Computers) and proceed to selling software only (Mac OS X) in the same way as NEXT, Inc. moved from selling hardware and software to selling software only. The investment by Microsoft in Apple was incidental. Apple Computer's real concern was that Microsoft threatened to cease development of Microsoft Office for Macintosh, leaving Apple Computer without a strong word processor and office suite. In return, Apple Computer agreed to make Microsoft Internet Explorer the default web browser, instead of Netscape. Macintosh computers don't use Windows, but they largely still depend on Microsoft Office, and Microsoft maintains a hold. Microsoft played one rival (Apple Computer) against Netscape, another rival.

In press release dated October 2, 2000, Corel, Inc. announced that Microsoft agrees to buy 24 million shares of Corel preferred stock at US $135 million. Corel now owns and develops WordPerfect, a competitor to Microsoft Word. WordPerfect was once a dominant word processor, but is now far in the minority. The DoJ Microsoft trial included evidence that Microsoft shipped flawed versions of the Windows 95 operating system to WordPerfect developers in order to leave WordPerfect a flawed product that could not easily compete with Microsoft Word. Also, Microsoft cultivates bundling agreements where PC manufacturers include Microsoft Word and other components of Microsoft Office with Windows computers so that consumers do not even think of purchasing WordPerfect. Then, when they upgrade their software, they continue to purchase Microsoft Word and do not consider WordPerfect. This agreement with Corel, has Microsoft offering .NET, a sort of networking server technology, to Corel. It is interesting that Corel now offers all its graphics products in versions optimized for the new Mac OS X, and advertises its cooperation with Apple. At the same time, it has ceased development of WordPerfect for Macintosh. WordPerfect for Linux exists and could be easily ported to the new Unix-based Mac OS X. This agreement between Microsoft and Corel looks like an agreement to dissuade Corel from continuing to compete agressively with Microsoft Word. Isn't perception an important part of this case?

Microsoft bundles many small applications with Windows that leave fewer opportunities for third-party competitors. Windows now includes image editing software that took away opportunties from Kodak. Kodak negotiated some new opportunties. Kodak now offers little support for Macintosh computers. The larger number of Windows computers is not a true measure of the market here. A large proportion of the images on the Internet were created with Macintosh computers. The graphics and desktop publishing industries still rely heavily on Macintosh computers, yet Kodak digital cameras offer far less support for Macintosh computers than for Windows computers.

Microsoft is now offering very inexpensive versions of its software to schools at prices far below even academic prices. Here at the University of Wisconsin-Madison, Microsoft Office is available at $25–30 for a fully functional suite, and Microsoft Windows 2000 at a similar price. In return, Microsoft often pressures schools to replace their server software with Microsoft products. These prices are attractive because they offer a product students want at an attractive price, but they leave server operators subject to pressures unrelated to product quality. Also, end users may find themselves with fewer opportunties because Microsoft server products do not interoperate well with non-Microsoft products. Microsoft has a history of adopting Internet standards and then releasing an ''enhanced'' version that only works with Windows computers. By the way, the DoJ uses an opensource product (OpenBSD) downloaded from Canada (www.openbsd.org) for its most sensitive communications that require the ultimate in security.

The proposed agreement (final judgement) between the US Department of Justice and Microsoft does not provide protections for Apple Computer or for developers of Linux and other opensource software (e.g., FreeBSD) that would compete with Microsoft products. Linux, FreeBSD, and Hewlett-Packard servers would face unfair competition as I describe in the previous paragraph. The DoJ proposal does not address these concerns. Please separate the Microsoft operating system and application (e.g., Word) divisions. Titus, I favor a breakup of Microsoft into at least two parts.

Thank you for your time and consideration.

Sincerely,

Rick Voland

MTC–00029677

MINDI COOK
4824 SW 98h Ter
Augusta KS 67010
January 21, 2002
Renata Hesse, Esq.
U.S. Department of Justice
Anti-trust Division
601 ''D'' Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I was truly glad to learn that the court was conducting a comment period during which I might write to express my views regarding the lawsuit currently being waged against Microsoft. I have been opposed to this lawsuit for quite some time for many reasons, including its high cost to American taxpayers, its apparent negative effect on the technological industry and general economy, and its attempts to over-monitor the business activities of an American company. If I could see that Microsoft was, in any way. threatening our free marketplace and driving up consumer costs, I might feel differently about the matter. But I see no indication that Microsoft has hurt the tech industry in any way. It makes me wonder who and what is really driving the campaign against Microsoft and I resent having to pay for a lawsuit that most likely serves the interests of Microsoft's competitors—not the American public.

We, the American people, need to have the court decide this matter in a manner that truly serves our needs -not the needs of a big business. In light of that fact, I ask the court to please accept the settlement proposed by President Bush's team and end this lawsuit as soon as possible.

Sincerely,

Mindi Cook

MTC–00029678

??
2825 Ya??cy St. SW
Seattle, WA 98126
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

I am writing you today to express my opinion in regards to the US vs. Microsoft settlement. I support Microsoft in this dispute and I believe this litigation is costly and will have adverse effects on consumers. I support the settlement that was reached in November and would like to see a permanent resolution to this dispute.

The settlement that was reached is reasonable and far more than sufficient to deal with the issues of this lawsuit Under this agreement, Microsoft must grant the same rights to all of the twenty major computer makers who want to install Windows on their machines, no matter how the companies configure the platform.

I think this witch hunt to try and make Microsoft the villain is going to have a detrimental effect on the business climate for now and the future. Please pick another battle .... like national security.

We are facing a lagging economy presently. We must do all we can to boost and stimulate our economy, Stifling Microsoft will not

accomplish this. Letting them go back to Washington State to develop more software will. Please support this settlement and allow Microsoft to get back to business.

MTC–00029679

Renata B. Hesse, Trial Attorney
Suite 1200,
Antitrust Division
U.S. Department of Justice
601 D Street NW
Washington, DC 20530–0001
Via Fax @ 202–307–1545

The undersigned is opposed to the proposed settlement in the Microsoft antitrust trial because the settlement does not fully redress the actions committed by Microsoft, nor substantially inhibit their ability to commit similar actions in the future, or most importantly, attempt to restore competition to this important market.

Furthermore, there are concerns regarding the fact that none of the provisions within the settlement effectively address Microsoft's abuse of its monopoly position in the operating system market. Even non-educated, non-technical citizens can recognize the absurdity and inequity of the requirement that consumers pay for a Microsoft OS on a new PC—whether it is wanted or not—and yet this most basic issue has never been addressed.

Perhaps most appalling is that the proposed settlement does nothing to address Microsoft's previous misdeeds. Software piracy or violations of the DMCA result in million of dollars in fines and potential incarceration, yet no penalties are stipulated in this settlement? it is equally disheartening that there are no provisions to address future abuses instead the settlement, from a technical perspective, appears to bolster Microsoft's expanding control of the Internet and other related areas, Letting the US government publicly reward criminal behavior simply makes a mockery of the law.

Microsoft's monopolistic practices cause the public to bear increased costs and deny them products and innovation that would otherwise be created because of competition. Consequently it is incomprehensible that obvious cost free measures, such as a requirement for the inclusion of Linux and dual-booting on all OEM PC's, is not even considered.

The finding that Microsoft was (and is) an abusive monopoly must be followed by specific, well-defined measures to address past practices and compensate those harmed by the abuses, In addition, substantial penalties and measurable sanctions are required to prevent future monopolistic abuses. Based on past history, it is even more crucial that strong constraints be placed on Microsoft to mitigate their proven propensity for illegal and unethical activities. The proposed settlement is clearly inadequate to serve its function and calls into question the United State's Judicial System's ability to appropriately perform its purpose. As such, it is respectfully requested that the entire matter be reconsidered in a public courtroom.

MTC–00029680

Elsie Zeurcher
1556 SW Santa Fe Lake Road
Towanda, KS 67144
January 24, 2002
Ms. Renata Hesse
Anti-trust Division
Department of Justice
601 ''D'' Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I understand that the Department of Justice is currently conducting a comment period during which members of the American public may express their opinions regarding the Microsoft anti-trust settlement proposed by the Bush administration. I am grateful to have this opportunity to voice my thoughts and would like to thank you in advance for your consideration of my views on this matter.

I firmly believe that the court should approve the settlement which I understand Microsoft has already agreed to accept. At this time in our nation, saving resources for homeland defense and taking steps to strengthen our economy should be at the top of the government's priority list. If the court agrees to the Microsoft settlement, thus ending this expensive and troublesome lawsuit, it will be appropriately addressing both of those pressing needs by: (1) freeing up resources for defense and (2) allowing one of our nation's most productive companies, Microsoft, to continue to generate health activity in the marketplace.

Please consider carefully the realities that face the United States today and approve the Microsoft anti-trust settlement. Thank you again for your consideration.

Best regards,
Elsie Zeurcher

MTC–00029681

Jim Morrill
2220 Casement Road
Manhattan, KS 66502–6628
January 21, 2002
Renata Hesse, Esq.
Trial Attorney, Anti-trust Division
Department of Justice
601 ''D'' Street NW, Ste. 1200
Washington, DC 20530

Dear Ms. Hesse:

I would like to thank the court for inviting the views and opinions of individual United States citizens regarding the Microsoft anti-trust lawsuit and proposed settlement, it seems only right that those of us on the front lines, paying taxes and supporting the economy, should have a voice in this matter.

Free trade is a cornerstone of American capitalism and I believe that the court has been attempting to protect our free trade through its pursuit of Microsoft. However, in spite of all good intentions, the court's efforts appear to have damaged free trade and enterprise instead of protecting it. As a result of the court's actions, Microsoft, one of our nation's most productive business giants, has been forced to pour untold resources into defendin9 itself against an ever-changing, never-ending lawsuit that has yet to establish that the company has harmed the marketplace in any way. In fact, as a result of Microsoft's commitment to improving technology, average American consumers now have access to affordable computer products that were out of reach to them only a decade ago. In the interest of free trade, the court should allow such a company to continue to generate products and business without undue interference.

Additionally, as the court makes its decision regarding the Microsoft settlement. I ask that it consider the amount of taxpayer money it will save by ending this expensive litigation. Too man.,,, hard-earned dollars have already been thrown at this dubious case. Acceptance of the proposed settlement will stop the bleeding and save American citizens further needless cost. I ask the court to make the decision that will truly protect free trade and best benefit the American public. Accept the settlement and end the Microsoft anti-trust case quickly.

Respectfully,
Jim Morrill

MTC–00029682

Logan Overman
632 Tara Court ?? Wichita ?? KS ?? 67206
Renata Hesse
Trial Attorney
US Department of Justice
601 D Street, N-W Suite 1200
Washington, DC 20530

Dear Attorney Hesse:

As an avid consumer of new technology products I am writing to express to you my support for the settlement of the Microsoft anti-trust lawsuit. There are many arguments why the case against Microsoft was an ill-founded decision. However, I feel the economic reasons are the most compelling.

The whole premise of the government's case has been that Microsoft was responsible for significant consumer harm. It is quite apparent this is not the case. Microsoft is the leading choice among consumers because they find its products to be of superior quality. Yet the government has spent millions of dollars prosecuting a case that the public does not support. The cost to the taxpayer has been staggering

The damage this case has caused to our nation's financial well-being goes beyond the wasting of public funds. This case and the government's threat of break-up have served as a deterrent to investment in the computer and communications industry. There are many contributing factors to the major decline of the NASDAQ, however, the threat of serious government intervention in our nation's fastest growing industry only added to the problem.

In an effort to end this case, DOJ and Microsoft negotiators have found enough common ground to reach a settlement. Based on my knowledge of the agreement this settlement is a solid one. Microsoft will be held responsible for portions of the complaint upheld in court and an independent commission will monitor its compliance with the provisions of the settlement.

The settlement of this case is a good indication that companies like Microsoft will be free to compete and grow in our open market. Both our economy and consumers will benefit.

Sincerely,
Logan Overman

MTC–00029683

Kristen Boulware
Renata Hesse, Antitrust Division
Public Comment
U.S. Department of Justice
601 D Street, NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

Finally, Microsoft and the U.S. DOJ have agreed upon a settlement of the marathon-style anti-trust suit against the company. I think that having nine states sign on to the deal proves its value.

From what I have read and heard about the proposed settlement that is pending your approval, it goes a long way toward what the DOJ wanted to accomplish, but does not completely tie Microsoft's hands in a way that they cannot compete. To me this makes great sense as a worthy compromise.

I am hopeful the judge will approve this settlement and allow all the case's participants to go back to doing business as they should.

Thank you.

Kristen Boulware
11780 West 118th Terrace
Overland Park, KS 66210

MTC–00029684

Ms. Renata Hesse
U.S. Department of Justice, Anti-trust
601 D Street Northwest, Suite 1200
Washington, DC 20530

Ms. Hesse:

I am writing to express my support for the Microsoft antitrust settlement propsed by President Bush and his administration.

While I appreciate the Department of Justice's concerns regarding the effects Microsoft creates in our marketplace, I believe the facts all point to this conclusion: Microsoft is not a threat to free trade. I believe the real threat in this matter lies in the exorbitant cost of continuing to pursue Microsoft in court.

I ask the court to please approve the proposed Microsoft settlement and put an end to this lawsuit.

404 Traders Ave
Fall River, KS 67047

MTC–00029685

Scalio, Inc.
Tel: (425)889–8553
Fax: (425)889–9303
6119 114th AVE NE
Kirkland, WA 98033
FAX COVER SHEET
Date:——/——/——Pages, including cover page:————
To:
Name:
Office Number:
Phone Number:
Fax Number:
From:
Name:
Office Number:
Phone Number:
Fax Number:
Note:
Ramon G. Pantin
From: ''Ramon G. Pantin'' <rgp@scalio.com>
To: <Microsoft.atr@usdoj.gov>
Cc: <rgp@veritas.com>
Sent: Sunday, January 27, 2002 11:59 PM
Attach: commenls-040.html
Subject: Microsoft Settlement

Dear Department of Justice representative,

Attached is an HTML document with my comments about the settlement proposed. I have included my background and contact information in that document.

Please feel free to contact me at:
rgp@scalio.com
or at home at:
425–889–1043
if you have trouble with the attached documents.

Sincerily,
Ramon G. Pantin

Introduction

My name is Ramon G. Pantin, I have been in involved in commercial Operating System development since 1989. I have worked on the design and implementation of a large variety of Operating Systems and system software (operating system components) including chronologically:

. IBM's AIX 3. I, AIX 3.2, AIX 4.1 and AIX 5.x UNIX operating systems for their RS/6000 product line (recently renamed eServer pSeries) as a consultant.

. Tandem's NonStop UX UNIX operating system for fault tolerant systems (as an employee of Tandem Computers).

. IBM's now defunct WorkPlace OS desktop operating system (successor to their OS/2 product)) (as a consultant and later as an employee).

. Microsoft's Windows NT4.0 and Windows 2000 (employed by Microsoft).

. ICCOS (a now defunct operating system) (employed at TagoSoft, Inc.)

. FreeBSD UNIX operating system (at TagoSoft, Inc and consulting for Shawn Systems, Inc).

. SUN's Network Filesystem V3 for Windows NT (as a consultant)

. SUN's PC/SKIP product for Windows NT (as a consultan0

. Impactdata/Megadrive/Data Direct Networks CDNA shared storage SAN file system (as a consultant and later as an employee)

. At Scalio, Inc developping storage management software for both Windows 2000 and UNIX systems.

. IBM's AIX 5.x UNIX operating systems for their RS/6000 product line (recently renamed eServer pSeries) as a consultant to Veritas Software making changes to AIX as part of an IBM/Veritas relationship.

I have also taught operating systems design classes at Universidad Simon Bolivar (Venezuela) in 1989 and professional system software classes, both for UNIX and Windows NT. I consider myself eminently well versed as a software enginner with 12 years of hands on operating system design and development.

The issues herein are of great importance to me and the industry that I am a participant of. I appreciate the opportunity to comment about the proposed settlement.

Below is a long list of comments. Each comment's name is of the form ''Comment X.Y'' where X is the major section of the proposed settlement within which the commented terms are discussed, and Y is simply a sequential number of the comments that I have written and it is actually independent of the acutal comment numbering within the proposed settlement itself. Each comment includes the appropriate reference to text in question within the proposed settlement document.

I am available for comment and clarification in any and all issues hereing, preferrably thorugh email, please contact me at:

Ramon G. Pantin
rgp@scalio.com or at:
Ramon G. Pantin
6119 114th AVE NE
Kirkland WA 98033

Sincerily,
Ramon Pantin
January 26th, 2002

Comment III.1

Section III.A reads:

''A. Microsoft shall not retaliate against an OEM by altering Microsoft's commercial relations with that OEM, or by withholding newly introduced forms of non-monetary Consideration (including but not limited to new versions of existing forms of non-monetary Consideration) from that OEM, because it is known to Microsoft that the OEM is or is contemplating:'' There are 3 problems with this section:

1. It allows Microsoft to withhold existing forms of non-monetary Consideration, because it only prevents witholding newly introduced forms;

2. Monetary considerations are explicitly excluded, they shouldn't be excluded.

3. Microsoft knowledge is irrelevant and hard to establish, that text only contributes to the ambiguity of this section. Section III.A should be not be constrained or qualified in these ways. It should be replaced with this text:

A. Microsoft shall not retaliate against an OEM by altering Microsoft's commercial relations with that OEM, or by withholding any forms of Consideration from that OEM, because the OEM is or is contemplating:''

Comment III.2

Section III.A.I reads:

''1. developing, distributing, promoting, using, selling, or licensing any software that competes with Microsoft Platform Software or any product or service that distributes or promotes any Non-Microsoft Middleware;''

There are 2 problems in this section:

1. Microsoft in the past has retaliated against OEMs that market products that compete against Microsoft products, not just Microsoft Platform Software. For example, Microsoft retaliated against IBM when IBM decided to pro-install its SmartSuite product (a product that competes directly with Microsoft Office) on its PCs, see Findings of Fact, paragraph 122 which reads: ''... Then, on July 20, 1995, just three days after IBM announced its intention to pro. install SmartSuite on its PCs, a Microsoft executive informed his counterpart at the IBM PC Company that Microsoft was terminating further negotiations with IBM for a license to Windows 95. Microsoft also refused to release to the PC Company the Windows 95 ''golden master'' code. The PC Company needed the code for its product planning and development, and IBM executives knew that Microsoft had released it to IBM's OEM competitors on July 17 ....''

2. The words ''any software that competes'' allow for retaliation against the development, distribution, promotion, use, sell, or licensing of any technology that competes against Microsoft technologies. Examples of such technologies, include but are not limited to: technical standards, open or proprietary protocols, services, hardware products, etc. Section III.A1 should be not be constrained or qualified in these ways. The existing Section III.A.1 should be left as part of the text and a new paragraph should be added to the list. Thus Section III.A.4 (a new paragraph) should be:

''4. developing, distributing, promoting, using, selling, or licensing any technology or product that competes with any Microsoft product, technology or service;'' Comment III.3

Section III.A.2 reads:

''2. shipping a Personal Computer that (a) includes both a Windows Operating System Product and a non-Microsoft Operating System, or (b) will boot with more than one Operating System; or'' Microsoft currently forbids OEMs, or it imposes Market Development Agreement penalities or it withholds Consideration from OEMs when they offer for sell Personal Computers without a Microsoft Operating System. Because of the earlier consent decree imposed on Microsoft, instead of requiring that every Personal Computer include a Microsoft Operatin System, Microsoft requires that for each model of Personal Computer offered by the OEM that each Personal Computer of that model be sold with a Microsoft Operating System. If this isn't done, Market Development Agreement penalties or Considerations are withheld from the OEM. Theoretically, the OEM is free to offer a model of Personal Computers for which it expects to sell such a high fraction of them without a Microsoft Operating System, that offering them in that way doesn't cause harm or competitive disadvantage to the OEM. In reality, node of the models of Personal Computers are expected to sell in any large enough percentage without a Microsoft Operating System, thus the OEM ends up paying for a Microsoft Operating System for each Personal Computer for each model that it offers, thus it is forced to always pay for a Microsoft Operating System.

Microsoft, additionally requires that the end user of the Personal Computer accept a license agreement, and the it indicates that if the license agreement is not accepted, that the Microsoft Operating System product should not be used and that the Personal Computer manufacturer should be contacted for a refund.

Because of Microsoft per unit per model royalty imposition on the OEM, the OEM has no incentive to provide such a refund to the end user and these requests are largely ignored by the OEMs thus resulting in end users that desire to purchase a Personal Computer to pay for a software licesnse for a Microsoft Operating System, even if they never use such a software. Given Microsoft's creativity in constraining OEMs in their business decisions, a broad based term should also be included. For example, Microsoft could technologically constraint the GEM from supporting non-Microsoft Operating Systems, for example by Microsoft imposing on the GEM technological standards that must be used in the Personal Computer design and because of intellectual property reasons the use of these standards prevent non-Microsoft Operating Systems from functioning on the Personal Computer (for example because Microsoft might have patents on the technology).

Section III.A.2 should be augmented with these subclauses to allow consumer to purchase Personal Computers without a Microsoft Operating System:

''2. shipping a Personal Computer that (a) includes both a Windows Operating System Product and a non-Microsoft Operating System, or (b) will boot with more than one Operating System, or (c) does not include any Operating System of any kind, or (d) includes a Windows Operating System Product and provides for the removal of the Windows Operating System Product during the startup of the Personal Computer, as long as the Windows Operating System has not been used by the consumer, and allows for a refund to be issued to the comsumer for the price of the operating system, or (e) in any way supports or provides non-Microsoft Operating Systems; or''

Comment III.4

Section III.A by virtue of enumerating the activities that the GEM ''is or is contemplating'' allows Microsoft to retaliate for any activities not explicitly enumerated in this list (III.A.1, III.A.2, III.A.3, etc). A broad term should be added that prevents Microsoft from any other cause for retaliation. Section III.A.5 should be added (Section III.A.4 was proposed to be added above in Comment III.2):

5. engaging in any lawful activity by any means by itself or in cooperation with any party.

Comment III.5

Section III.A in the fith paragraph (the paragraph under III.A.3) reads in its last two sentences: ''Microsoft shall not terminate a Covered OEM's license for a Windows Operating System Product without having first given the Covered GEM written notice of the reasons for the proposed termination and not less than thirty days'' opportunity to cure. Notwithstanding the foregoing, Microsoft shall have no obligation to provide such a termination notice and opportunity to cure to any Covered GEM that has received two or more such notices during the term of its Windows Operating System Product license.''

There are three problems with these sentences:

The time period of thirty days for cure is extremely short and would lead to unnecessary hardship on the OEM because of product distribution considerations (channel, distribution, resellers) that might require a constly product recall to be able to cure in thirty days. A period of at least 90 days is more appropriate. It is interesting to notice how terminating a Covered OEMs license and thus putting the OEM immediately out of the Personal Computer business is codified into this consent decree, when any restraint on Microsoft's illegal monopolistic behaviour requires (so far) years of litigation and continued complaints about how ''draconian'' such measures are.

2. The non-obligation to provide a termination notice can be used by Microsoft as a means of retaliation by not enforcing contractual terms on some OEMs while enforcing them on others, thus easily allowing for just two such notices to cure to be used as retaliatory means. The number of notices should be a function of time, for example 2 notices per year.

3. Microsoft should be required to enforce contractual terms in a non-discriminatory way across all OEMs, it should not be allowed to selectively enforce contractual terms because it would provide an easy retaliatory tool against the OEMs. Additionally, Microsoft must show that if it makes efforts to enforce certain terms, then it must enforce all terms across all OEM with equal effort, dilligence and strength.

4. The notion of termination notices, per se, is problematic, because termination notices might not even correspond to actual OEM behaviour but to misunderstanding between the parties or Microsoft's desires for retaliation against the OEM. Any such termination notice should be submitted to the Technical Committee for technical consideration, the Microsoft Internal Compliance Officer, and to all the Plaintiffs; together with detailed documentation of the non-discriminatotry enforcement by Microsoft of these and any other contractual terms across all Covered OEMs. This communication is important because it ensures that the antitrues enforcement parties are involved from the start when any such notice is given. Comment III.6

Section III.A, last paragraph reads:

''Nothing in this provision shall prohibit Microsoft from providing Consideration to any OEM with respect to any Microsoft product or service where that Consideration is commensurate with the absolute level or amount of that OEM's development, distribution, promotion, or licensing of that Microsoft product or service.''

These issues should be addressed:

1. Such Consideration should be offered to all Covered OEMs in a non-discriminatory basis.

2. The Consideration should be objectively measured according to established accounting practices.

3. The Technical Committee, the Microsoft Internal Compliance Officer, and all Plaintiffs should be informed and provided a copy of any and all such agreements and be allowed to requests additional documentation and conduct interviews related to the agreement.

Comment III.7

Section III.B, first paragraph reads:

''B. Microsoft's provision of Windows Operating System Products to Covered OEMs shall be pursuant to uniform license agreements with uniform terms and conditions. Without limiting the foregoing, Microsoft shall charge each Covered OEM the applicable royalty for Windows Operating System Products as set forth on a schedule, to be established by Microsoft and published on a web site accessible to the Plaintiffs and all Covered OEMs, that provides for uniform royalties for Windows Operating System Products, except that:'' Issues:

1. In the first sentence, where it reads ''... with uniform terms and conditions.'' it should read:'' .... with uniform terms and conditions and Considerations.'' Considerations established outside or after the license agreement has been entered should be communicated to the OEMs in a uniform manner. All agreements and Considerations should be provided to the Technical Committe, the Microsoft Internal Compliance Officer, and all Plaintiffs and these parties must be allowed to requests additional documentation and conduct interviews related to the agreements and Considerations.

2. Microsoft in the past has discriminated against OEMs and other Personal Computer manufacturers (for example Apple) by threatening to not make Microsoft products available on those manufacturers computers, for example Microsoft Office cancellation for Apple's Macintosh systems. Additionally, Microsoft has used the OEM prices of these non-Operating System products as a means to discriminate against OEMs. The prices and the offering of any Microsoft product to any Covered OEM for bundling with a Personal Computer should be nondiscriminatory and subject to uniform license agreements.

3. Volume discounts of groups of Microsoft Operating System Products and Microsoft non-Operating System Products should not be allowed, because it might lead to exclusion from the market of products that competed against the Microsoft non-Operating System Products. For example, group discounts for a bundle of Microsoft Windows XP and Microsoft Office; or Microsoft Windows XP and Microsoft Word (or Microsoft Excell, etc); or Microsoft Windows XP and Microsoft Works; must not be allowed.

Comment III.8

Section III.C reads:

''C. Microsoft shall not restrict by agreement any OEM licensee from exercising any of the following options or alternatives:''

This should read:

C. Microsoft shall not restrict by agreement or any other means any OEM licensee from exercising any of the following options or alternatives:

For example, Microsoft could, through verbal or written communication, or through the quality of service that it provides the OEM restrict the OEM, or threaten the OEM from exercising the alternatives. Microsoft has in the past retaliated against OEMs, particularly IBM and Gateway, as is described in detail in the Findings of Fact through means other than agreements. For example by witholding IBM participation in marketting programs, or threatening Gateway with sofware audits.

Comment III.9

Section III.C.1 and others enumerate:

''icons, shortcuts, or menu entries'' this list should be: icons, shortcuts, folders, appliactions, explorer hierarchies or menu entries

Comment III.10

Section III.C.1 ends in ''with respect to non-Microsoft and Microsoft products.'' This should be changed to read: ''with respect to non-Microsoft and Microsoft products or technologies that offer similar types of functionality.'' For example, the technology might be provided by a network service and not by a product installed in the Personal Computer, how the technology is provided should not be a reason for allowing Microsoft to retaliate or discriminate.

Comment III.11

In general, section III.C.1 and throughout the document, it is assumed that the only way to allow applications or software facilities to be used is through ''icons, shortcuts, or menu entries'', when in reality, applications/middleware can also be activated by associating it with particular types of data, and when such types of data are accessed, the application associated with it is activated. For example, when a file with a given extension is accessed, or when a URL is accessed over the interact, the type of the data is determined and the application associated with that type of data is activated. It is vital that such associations be allowed in a non-discriminatory basis between Microsoft and non-Microsoft technologies. For example, when a Internet audio URL is accessed, the media player associated with the data type is invoked to cause the audio to be decoded and played. It is not unsusual for multiple competing technologies, such as Microsoft Media Player, Real Networks and Apple's Quicktime media players to be capable of supporting the same data types, thus the preservation of the setting chosen by the user is important. Discrimination in this area has occurred in the past against both Apple's Quicktime and Real Network's Real Player. The document should be updated throughout to take into account this form of application activation through data type and file name extension associations.

Comment III.12

Section III.C.2 reads:

''2. Distributing or promoting Non-Microsoft Middleware by installing and displaying on the desktop shortcuts of any size or shape so long as such shortcuts do not impair the functionality of the user interface.''

The term shortcuts should be replaced with icons, because many types of items can be shown on the desktop and these are not limited to shortcuts. For example, applications, files, folders, etc.

Comment III.13

Section III.C.3 reads:

''3. Launching automatically, at the conclusion of the initial boot sequence or subsequent boot sequences, or upon connections to or disconnections from the Interact, any Non-Microsoft Middleware if a Microsoft Middleware Product that provides similar functionality would otherwise be launched automatically at that time, provided that any such Non-Microsoft Middleware displays on the desktop no user interface or a user interface of similar size and shape to the user interface displayed by the corresponding Microsoft Middleware Product.'' Issues:

1. The qualification: ''if a Microsoft Middleware Product that provides similar functionality would otherwise be launched automatically at that time'' is simply a form of restraint of trade. Microsoft usually doesn't lead in innovation, it follows, copies and bundles other's innovations into its products. It is unreasonable to require that Microsoft launch some software at a particular time to allow others to launch their software at that time. Usually some third party or OEM will developped these concepts and only later (much later sometimes) Microsoft will copy the concepts and include them in their versions of such functionality. The qualification should be removed.

2. The second qualification is also very unresonable, here Microsoft again thinks that it can dictate or retrain through its actions (or lack thereof the innovations of others. The qualification reads: ''provided that any such Non-Microsoft Middleware displays on the desktop no user interface or a user interface of similar size and shape to the user interface displayed by the corresponding Microsoft Middleware Product.'' Again, it is ludicrous that competing ISVs or OEMs be reatrained to only mimic Microsoft's actions when usually innovation happens the other way around. This qualification should be removed. Why should microsoft care about the size of the user interface? If the OEM creates a user interface that is too small, or narrow, or large, it doesn't cause any harm to Microsoft, only to the OEM in user dissatisfaction and support costs (none of which are Microsoft's concern given that it doesn't bare any of those costs, and given Microsoft's treatment of Hewlett Packard with respect to startup sequnce shells, it has shown that it doesn't care about those OEM costs).

3. The qualification ''if a Microsoft Middleware Product that provides similar functionality'' also allows for Microsoft restraint of other's innovations, the definition of Microsoft Middleware Product is particularly weak and full of escape clauses. The qualification should not be present at all.

4. The time qualification and enumeration of the circumstances and times under which launching can occur ''at the conclusion of the initial boot sequence or subsequent boot sequences, or upon connections to or disconnections from the Internet'' should also be removed. There are many reasons why lounching might be desireable at other times.

5. Launching of should not be restricted to ''Non-Microsoft Middleware'', any software should be allowed to be launched. Section III.C.3 should read:

3. Launching automatically, at the conclusion of the initial boot sequence or subsequent boot sequences, or upon connections to or disconnections from the Interact, or at any other time, any Non-Microsoft software is allowed without this being subject to any restraint from Microsoft. Mechanisms (APIs, Protocols, Facilities, etc) present in a Microsoft Operating System that aids launching of Microsoft software at particular times should be documented and allowed to be accessed by non-Microsoft software without restraint.

It should be noted that the original Section III.C.3 precludes the implementation of IAP sign up sequences, OEM shells, end user tutorials that are desired to be lounched at the initial and subsequent boot sequences. For example the OEM might present an IAP sign up sequence until such a time when the user as made such a selection or when the

user as indicated that it doesn't want to asked again in subsequent sign up sequences. The reason the Section III.C.3 precludes even the implementation in the initial boot sequence is because Microsoft can remove their own facilities from startup or from displaying a user interface, thus forcing the OEM to remove their facilities. Freedom of innovation and choice by the OEMs cannot be at the mercy of Microsoft's actions. For example, Microsoft might move such facilities to the second boot sequence and it might require that the system reboot after an initial boot sequence process, the OEMs would then not have the freedom to provide their facilities in the second boot sequence.

Comment III.14

Section III.C.4 reads:

''4. Offering users the option of launching other Operating Systems from the Basic Input/Output System or a non-Microsoft boot-loader or similar program that launches prior to the start of the Windows Operating System Product.''

This section should be augmented in this way:

4. Offering users the option of (a) launching other Operating Systems from the Basic Input/Output System; or (b) launching other Operating Systems from a non-Microsoft boot-loader or similar program that launches prior to the start of the Windows Operating System Product.; or (c) choosing to make a non-Microsoft boot-loader the default boot loader in the system; or (d) choosing to allow the end user to interactively direct the Basic Input/Output System or a non-Microsoft boot-loader or any other facility to remove a Microsoft Windows Operating System and to provide the Personal Computer owner to receive a refund for the cost of the Microsoft Windows Operating System from the OEM; or (e) to select a default Operating System that is a non-Microsoft Operating System, for example by allowing the default Operating System to start without user intervention after a timeout period; or (I3 any other form of restraint that might cause an OEM to not preload non-Microsoft Operating systems in theft Personal Computers (for example by having the Microsoft Operating System corrupt the disk occupied used by such non-Microsoft Operating Systems, or from denying supprt to OEMs for such product configurations, etc)..

Given the nature of existing restraints by Microsoft in this area, these additional clauses allow for less restraint by Microsoft on the OEMs actions.

Comment III.15

Section III.D reads:

''D. Starting at the earlier of the release of Service Pack 1 for Windows XP or 12 months after the submission of this Final Judgment to the Court, Microsoft shall disclose to ISVs, IHVs, IAPs, ICPs, and OEMs, for the sole purpose of interoperating with a Windows Operating System Product, via the Microsoft Developer Network (''MSDN'') or similar mechanisms, the APIs and related Documentation that are used by Microsoft Middleware to interoperate with a Windows Operating System Product. In the case of a new major version of Microsoft Middleware, the disclosures required by this Section III.D shall occur no later than the last major beta test release of that Microsoft Middleware. In the case of a new version of a Windows Operating System Product, the obligations imposed by this Section III.D shall occur in a Timely Manner.'' Issues:

1. The text ''via the Microsoft Developer Network (''MSDN'') or similar mechanisms'' allows Microsoft not to use the MSDN program which is broadly available and non-discriminatory, and allows instead for Microsoft to extract other agreements and conditions from the interested parties. The intent should by ''via the Microsoft Developer Network (''MSDN'') or successor developer program (if the MSDN program is discontinued or replaced by a new developer program, but such a program should be equally broadly available and equally nondiscriminatory as the MSDN program was on the earliest date the proposed consent decree was filled with the Court by Microsoft and the Plaintiffs).''

2. The text ''APIs and related Documentation'' should be extended to include ''APIs, related Documentation, Protocols, File Formats, Data Formats, Certification/Validation Component Signatures, and any other technological mechanism''.

3. The text ''that are used by Microsoft Middleware to interoperate with a Windows Operating System Product '', given the loose definition and the escape clauses that Microsoft can invoke in that definition, and given that Microsoft also markets a wide variety of non-Middleware software and hardware, the text should be corrected to require full disclosure of the use by these software and hardware products of Microsoft Operating System facilities. The proposed text is shown below.

4. The requirement that disclosure only occur in the case of a new major version of Microsoft Middleware allows Microsoft an easy exit from their documentation requirements. Microsoft has stated in fron of the District Court (Judge Jackson) that a sandwich would be part of the Operating System if they so dictated, clearly Microsoft cannot be trusted to name a release major or non-major, because to Microsoft it would be whatever they desire at such a time. Furthermore the mechanism of Major and first Minor point release numbers is highly ambiguous and maleable, certain Microsoft products don't even have a version number (Windows XP, Microsot .Net). In any case, whether a product release is major or minor should not be an excuse for non-diclosure, a small bug fix release wouldn't have many changes on interface use, so its documentation requirements would be proportional to the effort spent in the release development. If this restriction is not removed, facilities would remain undocumented, simply because Microsoft doesn't use them initially in their so called major release but instead only uses them initially in a minor release; or even more easily by making every release a minor release. Microsoft has shown in the earlier Consent Decree entered with the D.O.J. that it will take advantage in any ambiguity.

The new section should thus read:

D. Starting at the earlier of the release of Service Pack 1 for Windows XP or 12 months after the submission of this Final Judgment to the Court, Microsoft shall disclose to ISVs, IHVs, IAPs, ICPs, and OEMs, for the sole purpose of interoperating with a Windows Operating System Product, via the Microsoft Developer Network (''MSDN'') or successor developer program (if the MSDN program is discontinued or replaced by a new developer program, but such a program should be equally broadly available and equally non-discriminatory as the MSDN program was on the earliest date the proposed consent decree was filled with the Court by Microsoft and the Plaintiffs), the APIs, related Documentation, Protocols, File Formats, Data Formats, Certification/Validation Component Signatures (and Microsoft shall not restraint or deny such signature facilities or enablements, and any other technological mechanism that are used by Microsoft Middleware, Microsoft Application, Microsoft Hardware Products, or by newly introduced Microsoft Operating System features (that are similar to existing facilities available from third parties in the market) to intemperate with a Windows Operating System Product. In the case of a any new version of Microsoft Middleware or Microsoft Operating Systems, or Microsoft Application, the disclosures required by this Section III.D shall occur no later than the last major beta test release of that Microsoft Middleware. In the case of a new version of a Windows Operating System Product, the obligations imposed by this Section III.D shall occur in a Timely Manner.

Comment III.16

Section III.E should be augmented where it reads ''on reasonable and non-discriminatory tcrms'' to read ''on reasonable, non-discriminatory and non-royalty bearing terms.'' The imposition of per unit royalties as a condition to grant access to any Communication Protocol would allow Microsoft to exclude competitors from the market.

Comment III.17

Section III.E reads:

''E. Starting nine months after the submission of this proposed Final Judgment to the Court, Microsoft shall make available for use by third parties, for the sole purpose of interoperating with a Windows Operating System Product, on reasonable and nondiscriminatory terms (consistent with Section III.I), any Communications Protocol that is, on or after the date this Final Judgment is submitted to the Court, (i) implemented in a Windows Operating System Product installed on a client computer, and (ii) used to interoperate natively (i.e., without the addition of software code to the client operating system product) with a Microsoft server operating system product.''

There are many issues with this section:

1. Communication Protocols can be used for communication between two or more personal computers running a Windows Operating System Product installed on client computers. For example a client computer can share a disk drive so that its file are accessed to other client computers, such functionality doesn't require a Microsoft server operating system product. The ability to interoperate natively should not be

restricted to the Communication Protocols used to interoperate natively with a Microsoft server operating system product, for example a competing non-server client operating system might require to implement these protocols to be competitive. For example, both Apple's MacOS X client operating system and client versions of the GNU/Linux operating systems contain incomplete implementations of the file sharing protocols used by Windows Operating System). Section III.E shall apply equally to both client and server operating systems to allow them interoperate natively with Windows Operating System Products installed on client computers.

2. To circumvent the provisions in Section III.E Microsoft could do this in future (major or minor) releases of its Personal Computer Operating System Products: (a) do not include software that implements future revisions of a Communications Protocol with the Windows Operating System Product installed on a client computer; and (b) request from the Microsoft server operating system product the software that the client requies at first boot, each boot, or at under other circumstances. Thus Microsoft would have circumvented the requirements stated in Section III.E because there would be ''addition of software code to the client operating system product'' (which Section III.E.ii requires that it be ''without the addition of software code to the client operating system product''). By Microsoft implementing a new protocol (which it would not have trouble documenting to 3rd parties) that the client computer's Windows Operating System Product would use to request these addional software codes from a Microsoft server operating system product the circumvention would have been achieved. Thus by removing the existing components that implement existing Communications Protocols all kinds of Communications Protocols would thus be allowed to remain undocument in future releases of a Windows Operating System Product by Microsoft, thus denying the purpose of allowing native interoperability between other operating systems and Windows Operating System Products. Microsoft, through privave key signin and public key signature validation, Microsoft would be able to sign these software components to ensure their origins (Microsoft) and that they have not ben tampered, thus allowing every Communications Protocols to remain undocumented, including security protocols, filesystem protocols, transaction management protocols, etc. The intent of Section III.E is good because it is pro-competitive, but the actual terms easily allow Microsoft to circumvent that intent. Software is very maleable, terms used to describe it, such as: ''without the addition of software code'' are easily circumvented, for example by slicing the software and requiting thatthere be ''addition of software code'', this can be done easily and transparently (i.e. without knowledge by end user).

3. The word ''implemented'' is also used to describe the software, and can lead to arguments or circumvention from Microsof with respect to meaning.

4. The description of what is being made available is ambiguous. Instead of ''Microsoft shall make available .... any Communications Protocol'', it should be stated clearly what is being made available. A description of what should be made available is shown in the proposed revision to Section III.E below.

Section III.E should be replaced with:

E. Starting nine months after the submission of this proposed Final Judgment to the Court, Microsoft shall make available for use by third parties, for the sole purpose of interoperating with a Windows Operating System Product, on reasonable (without an up front fee and royalty free) and non-discriminatory terms (consistent with Section III.I), technical implementations for any Communications Protocol that is, on or after the date this Final Judgment is submitted to the Court, utilized by a Windows Operating System Product nstalled on a client computer to interoperate with (i) a Microsoft server operating system product, or (ii) a Windows Operating System Product. The means through which any such Communications Protocol shall be made available shall include:

(a) a non-fee based and non-royalty based patent license to any and all patents required by an implementation of fully featured, high performance, and interoperable client or server operating system product components that implement the Communication Protocols in question. The patent license can be limited to be for the sole purpose of interoperating with Windows Operating System Products installed on a client computers; and

(b) a non-fee based and non-royalty based license to implement the Communications Protocol in client and server operating system product components that are fully featured, high performance, and interoperable with Windows Operating System Products installed on a client computers. The protocol license can be limited to be for the sole purpose of interoperating with Windows Operating System Products installed on a client computers; and

(c) a technical discussion forum (mail list, newsgroup or web site) through which Microsoft will provide in a nondiscriminatory basis non-fee based technical support to ISVs that require support related to the Communications Protocol. Microsoft shall make its best efforts to provide such technical support. Microsoft shall provide subject to the Communication Protocol license the Communications Protocol specifications which shall be:

(d) the precise and complete set of specifications of the Communication Protocols (and their predecessors), such that based on it a competent third party software developper would be capable of implementing fully featured, high performance, and interoperable operating system product components that implement the Communication Protocols in question (without the need to perform any reverse engineering of any kind); or In the abscence of such a precise and complete set of specifications as described in Section III.E.a (above), or at Microsoft's choosing or by direction of the Technicall Committee, Microsoft shall provide instead:

(e) any and all specifications that Microsoft has of the Communication Protocols (and their predecessors); and the complete source code and build procedures of all the relevant client side components and implementations (for each Microsoft Windows Operating System Product) of the Communications Protocol in a form that these components can be compiled (i.e. translated from source code form into binary form) and linked (translated from object form into a binary executable form) by the third party to produce the exact same binaries of the native components in the Windows Operating System Product that implement the Communication Protocols. The license under which these component's source codes and build procedures would be provided to the third party would be only for reference and use only within the third parties premises for the sole purpose of implementing fully featured, high performance, and interoperable operating system product components that implement the Communications Protocol in question. No redistribution rights of any kind (in binary or source form) are required to be given to the third party.

Additionally:

(f) Microsoft shall continuously and proactively provide updates to the third party such that the third party can continue to implement fully featured, high performance, and interoperable operating system product components that implement the Communication Protocols in question as the corresponding Microsoft Windows Operating System Products implement new patents, versions or features of the Communications Protocol. These updates should be provided irrespective of how major or minor is the Microsoft Windows Operating System Product update that makes use of the Communications Protocol changes or patents. Microsoft shall provide these through addendums:

(i) to the licenses described in Sections III.E.a and III.E.b to cover new patents or protocol revisions or versions as appropriate; and

(ii) the specifications and implementations described or provided in Sections III.E.d and III.E.e as appropriate

Comment III.18

Section III.F.1.a reads:

''a. developing, using, distributing, promoting or supporting any software that competes with Microsoft Platform Software or any software that runs on any software that competes with Microsoft Platform Software, or'' Microsoft has shown that it retaliates against OEMs when they support now-Microsoft software in general, not just Microsoft Platform Software, for example the retaliation against IBM because of IBM's intent to bundle SmartSuite with their Personal Computers as can be seen in the Findings of Fact.

Section III.F.1.a should be expanded to read:

a. developing, using, distributing, promoting or supporting any software that competes with Microsoft Platform Software, Microsoft Operating Systems, Microsoft Application Software, Microsoft Hardware or any other Microsoft supported technologies or any software that runs on any software

that competes with Microsoft Platform Software, Microsoft Operatin Systems, Microsoft Application Software, Microsoft Hardware or any other Microsoft supported technologies; or

Comment III.19

Section III.F.2 reads:

''2. Microsoft shall not enter into any agreement relating to a Windows Operating System Product that conditions the grant of any Consideration on an ISV's refraining from developing, using, distributing, or promoting any software that competes with Microsoft Platform Software or any software that runs on any software that competes with Microsoft Platform Software, except that Microsoft may enter into agreements that place limitations on an ISV's development, use, distribution or promotion of any such software if those limitations are reasonably necessary to and of reasonable scope and duration in relation to a bona fide contractual obligation of the ISV to use, distribute or promote any Microsoft software or to develop software for, or in conjunction with, Microsoft.''

Issues:

1. Again, Microsoft retaliates against OEMs (IBM) to product Microsoft products other than its Operating Systems.

2. Allowing Microsoft to enter into agreements that ''place any limitations on ISV's development, use, distribution or promotion of any such software'' is an open ended means under which Microsoft can cause ISV's to act in manners that Microsoft desires. For example, Microsoft might extend the MSDN agreements with limited sublicensing of Microsoft patent pools and extract in exchange agreements from all 1SVs in the market to limit their development, use, distribution or promotion of any other software. The litigation to ensure that those limitations are not ''reasonably necessary to and of reasonable scope'' would probably take another 4 years of litigation. The Plaintiffs must remember that one of Microsoft's options at any time is to relly on the ambiguities of these terms and use them to realize their means, given that it has been shown that Microsoft has monopoly power int he x86 compatible Personal Computer market its retaliatory means must be reduced as much as possible.

Section III.F.2 should read:

2. Microsoft shall not enter into any agreement relating to a Windows Operating System Product, Microsoft Application Software, Microsoft Hardware or any other Microsoft supported technologies, that conditions the grant of any Consideration on an ISV's refraining from developing, using, distributing, or promoting any software that competes with Microsoft Platform Software, Microsoft Operatin Systems, Microsoft Application Software, Microsoft Hardware or any other Microsoft supported technologies or any software that runs on any software that competes with Microsoft Platform Software. Microsoft may not enter into any agreements that place limitations on an ISV's development, use, distribution or promotion of any such software for any reason.

Microsoft has more than enough resources to all the software development that it requires, if it has to felly on outside parties to do software development, it must do so without placing limitations.

Comment III.20

Section III.G.1 reads:

''G. Microsoft shall not enter into any agreement with:

1. any IAP, ICP, ISV, IHV or OEM that grants Consideration on the condition that such entity distributes, promotes, uses, or supports, exclusively or in a fixed percentage, any Microsoft Platform Software, except that Microsoft may enter into agreements in which such an entity agrees to distribute, promote, use or support Microsoft Platform Software in a fixed percentage whenever Microsoft in good faith obtains a representation that it is commercially practicable for the entity to provide equal or greater distribution, promotion, use or support for software that competes with Microsoft Platform Software, or''

These are the issues:

1. The text: ''except that Microsoft may enter into agreements in which such an entity agrees to distribute, promote, use or support Microsoft Platform Software in a fixed percentage whenever Microsoft in good faith obtains a representation that it is commercially practicable for the entity to provide equal or greater distribution, promotion, use or support for software that competes with Microsoft Platform Software'' allows Microsoft to extract agreements from these parties under which at least, by assuring itself of a 50% distribution, promotion or usage share it guarantees that no competitors technology can be bradly available on a large fraction of Personal Computers so that it can become a platform for cross-platform software. For example by ensuring that 50% of new Personal Computers don't include such software, Microsoft can ensure that such software doesn't obtain critical mass as a platform.

2. These kinds of allowances, given Microsoft's behavior, only serve to codify Microsoft's right to extinguish competition. It codifies the right and means through which Microsoft can cut other parties ''air supply''.

3. By restricting these terms to ''Microsoft Platform Software'' it allows Microsoft to enter other kinds of agreements in which the means to kill innovation and drive others off the market is by developping non-Platform Software, for example by developping Applications, giving them for free and forcing these parties to distribute them at 50% usage share. The whole exception should be removed and Section III.G.1 should read: G. Microsoft shall not enter into any agreement with:

1. any IAP, ICP, ISV, IHV or OEM that grants Consideration on the condition that such entity distributes, promotes, uses, or supports, exclusively or in a fixed percentage, any Microsoft Platform Software, Microsoft Operatin Systems, Microsoft Application Software, Microsoft Hardware or any other Microsoft supported technologies, or Furthermore, the agreement that Microsoft might enter might require that the OEM doesn't distribute certain non-Microsoft Sofware without actually requiring the distribution of Microsoft technologies. Thus a new clause should be added, Section III.G.3:

3. any IAP, ICP, ISV, IHV or OEM that grants Consideration on the condition that such entity refrains in any way or percentage from distributing, promoting, using, or supporting, any non-Microsoft software or technologies

Comment III.21

Section III.G.2 reads:

''G. Microsoft shall not enter into any agreement with:

2. any LAP or ICP that grants placement on the desktop or elsewhere in any Windows Operating System Product to that IAP or ICP on the condition that the IAP or ICP refrain from distributing, promoting or using any software that competes with Microsoft Middleware.'' Again the restriction is too narrow with respect to Microsoft's other means of distributing software, it should read:

2. any LAP or ICP that grants placement on the desktop or elsewhere in any Windows Operating System Product to that IAP or ICP on the condition that the IAP or ICP refrain from distributing, promoting or using any software that competes with Microsoft Middleware, Microsoft Platform Software, Microsoft Operatin Systems, Microsoft Application Software, Microsoft Hardware or any other Microsoft supported technologies

Comment III.22

Section III.G contains this, it is the second to last paragraph in the section: ''Nothing in this section shall prohibit Microsoft from entering into (a) any bona fide joint venture or (b) any joint development or joint services arrangement with any ISV, IHV, IAP, ICP, or OEM for a new product, technology or service, or any material value-add to an existing product, technology or service, in which both Microsoft and the ISV, IHV, IAP, ICP, or OEM contribute significant developer or other resources, that prohibits such entity from competing with the object of the joint venture or other arrangement for a reasonable period of time.'' Microsoft should be allowed to enter into these arrangements, but it should be allowed to require it to ''prohibits such entity from competing with the object of the joint venture or other arrangement for a reasonable period of time.''. Again, ''reasonable period of time'' is ambiguous and open ended, and non-compete clauses have no pro-competive role other than exclusionary when included in agreements by a Monopolist such as Microsoft. Joint development or joint services agreements should not be restricted in this manner. If an actual separate entity is formed, a joint venture that includes the incorporation or foundation of a separate independent legal entity, the entity in question could have non-competition restrictions placed on it, but not the shareholder companies themselves (i.e. Microsoft and the other party).

Comment III.23

Section III.G, last paragraph, reads:

This Section does not apply to any agreements in which Microsoft licenses intellectual property in from a third party. This statement, is very ambiguous and unqualified. The meaning of ''Microsoft licenses intellectual property in from a third party'' could easily mean that Microsoft products that include any third party intellectual propery are exempt from the

section. Most Microsoft products contain third party software, certainly its operating systems do (for example the Vcritas/Seagate backup software and the Veritas Volume Manager included in both Windows XP and Windows 2000; the BSD software included in Windows 2000 and Windows XP; the Mosaic sofware included in all version of Internet Explorer; the Java software included in Windows 2000 and Windows XP; the printing drivers and other device drivers from IHVs included in Windows 2000 and Windows XP; the amount of software licensed into these products is very large; etc). Additionally, there can also be other forms of intellectual licenses that apply to these and other products (for example licenses to use patents of third parties). If the clause is intended to mean something different from my interpretation, please explain what it is intended to mean, and what terms in that sentence ensures that only that meaning is allowed.

This sentence should be removed completely from this section. Alternatively, a sentence that says:

Where terms in this section would cause a third party who has licensed software or any other form of intellectual property to Microsoft to have its license agreement violated then the specific terms in this section that would cause such a license breach do not apply. Unless the third party, at its own discrtion, chooses to allow the specific violations under an agreement amendment. Violation of the license agreement means violation to the detriment of the interest of the third party and not violation to the detriment of Microsoft's interests. Additionally, Microsoft should proactively inform the Microsoft Internal Compliance Officer, the Technical Committee, and the Plaintiffs about the circumstances in question and provide, as priviledged communication and without violating the interests of the third party, all information required for their enforcement activities.

Comment III.24

Section III.H.2 (the first such section, there are two such sections in Section III.H) reads:

''2. Allow end users (via a mechanism readily available from the desktop or Start menu), OEMs (via standard OEM preinstallation kits), and Non-Microsoft Middleware Products (via a mechanism which may, at Microsoft's option, require confirmation from the end user) to designate a Non-Microsoft Middleware Product to be invoked in place of that Microsoft Middleware Product (or vice versa) in any case where the Windows Operating System Product would otherwise launch the Microsoft Middleware Product in a separate Top-Level Window and display either (i) all of the user interface elements or (ii) the Trademark of the Microsoft Middleware Product.''

These are the issues:

The text ''require confirmation from the end user'' should include statements that ensure that Microsoft will not act in a discriminatory or derrogatory manner in those confirmations. For example, Microsoft should not be allowed to include as part of that confirmation process: documentation, help, verbal communitation or any other means discriminatory or derrogatory statements. Examples of such statemetns are: ''By choosing this option, Microsoft voids the warranty of the product or disclaims its obligation to provide support. Microsoft has not tested this third party option, use at your own risk. Use of this option might cause data loss, corruption, etc.'' Microsoft has included messages in their products purposedly to cause third parties to not use non-Microsoft technology. The Windows 3.0 betas included messages similar to these when Windows realized that it was running on top of Digital Research's DR-DOS Operating System (instead of running on top of Microsoft's MS-DOS).

2. These statements: ''launch the Microsoft Middleware Product in a separate Top-Level Window and display either (i) all of the user interface elements or (ii) the Trademark of the Microsoft Middleware Product.'' allow for Microsoft to easily subvert the intent by not Trademarking the Microsoft Middleware (while allowing compound Trademarks suchs as ''Windows (R) Stuff'), by only showing all but one (1) of the user interface elements. The restriction to a separate Top-Level Window means that by providing it in a subwindow of an existing window on in a visually separate top level window that is controlled by a Microsoft non-separate or independent process, these escape clauses, again provide Microsoft with a a myriad ways to escape the intent of the clause. Additionally because of the software maleability the restriction to only Microsot1 Middleware Products should not apply.

Section III.H.2 (the first such section, there are two such sections in Section III.H) should read:

2. Allow end users (via a mechanism readily available from the desktop or Start menu), OEMs (via standard OEM preinstallation kits), and Non-Microsoft software and technologies (via a mechanism which may, at Microsoft's option, require confirmation from the end user in a non-discriminatory and non-derrogatory manner) to designate a Non-Microsoft software or technologies to be invoked in place of any Microsoft Middleware, Microsoft Application or any Microsoft Operating System feature that existed in the market as a third party product prior to Microsoft's incorpration of such a feature into its Operating System (or vice versa) in any case where the Windows Operating System Product would otherwise launch the Microsoft Middleware Product, Microsoft Applications or any such Microsoft Operating System.

Comment III.25

Section III.H.3 allows for ''(b) seek such confirmation from the end user for an automatic (as opposed to user-initiated) alteration of the OEM's configuration until 14 days after the initial boot up of a new Personal Computer''. Such confirmation must be sought through non-discriminatory and non-derrogatory means (as outlined in Comment III.23). Additionally such confirmation from the end user must allow the user to reject the continued request for this confirmation by providing an easily visible checkbox that indicates: ''would you like to be asked this question again in the future?'' if the user doesn't want this question to be asked in the future it selects the checkbox and the question is never asked again (and the current settings remain unchanged).

Comment III.26

Section III.H.3.2 (the second such section, there are two such sections in Section III.H) reads:

''2. that designated Non-Microsoft Middleware Product fails to implement a reasonable technical requirement (e.g., a requirement to be able to host a particular ActiveX control) that is necessary for valid technical reasons to supply the end user with functionality consistent with a Windows Operating System Product, provided that the technical reasons are described in a reasonably prompt manner to any ISV that requests them.''

Issues:

1. The ''designated Non-Microsoft Middleware Product'' term should be ''designated Non-Microsoft software or technology''.

2. Requirements to host a paricular ActiveX control must require that Microsoft proactively documents the interfaces of the particular Active) control, and doesn't prevent through signature or any other mechanism such hosting by the Non-Micorosft software or technology.

3. The ''provided that the technical reasons are described in a reasonably prompt manner to any ISV that requests them'' text shold read ''Microsoft must pro-actively and broadly (through the MSDN program and web sites) describe the technical reasons reasonable manner.'' Any such ''valid technical reasons'' must be communicated to the Technical Committee, the Microsoft Internal Compliance Officer and the Plaintiffs.

Section III.H.3.2 (the second such section, there are two such sections in Section III.H) should read:

''2. that designated Non-Microsoft software or technology fails to implement a reasonable technical requirement (e.g., a requirement to be able to host a particular ActiveX control) that is necessary for valid technical reasons to supply the end user with functionality consistent with a Windows Operating System Product, provided that the technical reasons and detailed and complete technical documentation and mechanisms (component signatures) are described in a reasonably prompt manner to all ISVs through the MSDN program or its successor. Addionally the valid technical reasons and any other information relevant to the reasons must be communicated to the Technical Committee, the Microsoft Internal Compliance Officer, the Plaintiffs and the ISVs in question.''

Comment III.27

The last paragraph of Section III.H.3 reads:

''Microsoft's obligations under this Section III.H as to any new Windows Operating System Product shall be determined based on the Microsoft Middleware Products which exist seven months prior to the last beta test version (i.e., the one immediately preceding the first release candidate) of that Windows Operating System Product.'' Issues:

1. Again this is tied to Microsoft Middleware Prodcuts, it should be replaced by the broader term.

2. When a technology ''exists'' can lead to ambiguity given that Microsoft might dictate that technology doesn't exist until it determines (at its sole discretion) that it exists. This ambiguity is not required.

The last paragraph of Section III.H.3 should be removed completely. Microsoft can introduce new Microsoft Middleware, Microsoft Applications, Microsoft Technologies, Microsoft Hardware at any arbitrary point in time after the release of an Operating System product. In so far as those Microsoft technologies alter user's preferences and default system settings, saving and restoring those settings sould be supported through an Operating System mechanism and user interface that allows for these settings to be manipulated.

Comment III.28

The first paragraphs of Section III.I reads:

''I. Microsoft shall offer to license to ISVs, IHVs, IAPs, ICPs, and OEMs any intellectual property rights owned or licensable by Microsoft that are required to exercise any of the options or alternatives expressly provided to them under this Final Judgment, provided that'' The text ''shall offer to license'' requires that licensing be offered, it doesn't require that it actually enter into such license agreements. The text should instead read:

I. Microsoft shall offer to license, and shall make its best effort to actually license, to ISVs, IHVs, IAPs, ICPs, and OEMs any intellectual property rights owned or licensable by Microsoft that are required to exercise any of the options or alternatives expressly provided to them under this Final Judgment, provided that

Comment III.29

Section III.I.1 reads:

''1. all terms, including royalties or other payment of monetary consideration, are reasonable and non-discriminatory;'' Allowing for per unit royalties or prohibitive up front licensing fees might prevent Microsoft competitors from actually being able to participate competitibly in the relevant product markets. This Section III.I.1 should read instead: ''1. all terms, are reasonable and non-discriminatory. Royalties or other payments of monetary consideration are explicitly forbidden from the temps when the intellectual property is to be used only for interoperation with a Microsoft Operating System product.'' For example such a license would not require royalties from a server Operating System to interoperate with a Microsoft Operating System for Personal Computers, but if the server Operating System makes use of the licensed intellectual property to interoperate with non-Microsoft Operating Systems for Personal Computers, then a royalty might be required by Microsoft.

Comment III.30

Section III.I.2 reads:

''2. the scope of any such license (and the intellectual property rights licensed thereunder) need be no broader than is necessary to ensure that an ISV, IHV, IAP, ICP or OEM is able to exercise the options or alternatives expressly provided under this Final Judgment (e.g., an ISV's, IHV's, IAP's, ICP's and OEM's option to promote Non-Microsoft Middleware shall not confer any rights to any Microsoft intellectual property rights infringed by that Non-Microsoft Middleware);'' XXX

Comment III.31

Section III.I.3 reads:

''an ISV's, IHV's, IAP's, ICP's, or OEM's rights may be conditioned on its not assigning, transferring or sublicensing its rights under any license granted under this provision;'' Not allowing the transferring or assignment of these parties rights under certain circumstances, for example under an acquisition, is inherently a form of discrimination. Given that the licenses are to be offered in a non-discriminatory fashion, it is important that such licenses once offered be available in the future and that the licensing not be restricted to a given period of time. If subsequent versions of technology become available, and new licenses are developped for that technology, the older licenses to the earlier technology should continue to be offered for the earlier verisions of the technology.

Comment III.32

The paragraphs immediately after Section III.I.5 reads: ''Beyond the express terms of any license granted by Microsoft pursuant to this section, this Final Judgment does not, directly or by implication, estoppel or otherwise, confer any rights, licenses, covenants or immunities with regard to any Microsoft intellectual property to anyone.''

Comment III.33

Section III.J.2.b reads:

''that the licensee:

(b) has a reasonable business need for the API, Documentation or Communications Protocol for a planned or shipping product,''

Microsoft shall not unreasonably dispute the licensee's assertions with respect to III.J.2.b, any individual member of the Technical Committee through direct communication with the prospective licensee can make a positive determination about the III.J.2.b requirement and inform Microsoft about its determination without any further Microsoft argument, dispute or delay about the prospective licensee meeting the III.J.2.b requirement (Court intervention shall not be required).

Section III.J.2.b should read:

(b) has a reasonable business need (as promptly and in a non-discriminating manner determined by Microsoft or any one individual member of the Technical Committee), for the API, Documentation or Communications Protocol for a planned or shipping product

Comment III.33

Section III.J.2.b reads:

''that the licensee:

(c) meets reasonable, objective standards established by Microsoft for certifying the authenticity and viability of its business'' It should instead read: (c) meets reasonable, objective and non-discriminatory standards (proposed by Microsoft and promptly approved by the Technical Committe in consultation with the Plaintiffs) for certifying the authenticity and viability of its business, the actual determination of the actual authenticity and viability of the business can be made by Microsoft or any one member of the Technical Committee after taking into consideration legal consultation from the Technical Committee's legal staff

Comment III.34

Section J.2.d reads:

''that the licensee:

(d) agrees to submit, at its own expense, any computer program using such APIs, Documentation or Communication Protocols to third-party verification, approved by Microsoft, to test for and ensure verification and compliance with Microsoft specifications for use of the API or interface, which specifications shall be related to proper operation and integrity of the systems and mechanisms identified in this paragraph.''

The issues are:

1. Should be at Microsoft's expense, not the licensee's.

2. Verification should hot be performed by ''third-party verification, approved by Microsoft'' if such verification is required by Microsoft it should be done under staff hired by the Technical Committee and at Microsoft's expense and not through unknown for profit relationships and agreements between a third party and Microsoft. The intent of this section is for ''proper operation and integrity of the systems and mechanisms'', Microsoft should be satisfied with the Technical Committee staff performing these duties unless its goals are other than those expressed herein.

3. The text ''to test for and ensure verification and compliance with Microsoft specifications for use of the API or interface, which specifications shall be related to proper operation and integrity of the systems and mechanisms identified in this paragraph'' refers to to a ''Microsoft specifications for use of the API or interface'', these specifications shall be made available to the licensee

Section J.2.d should read:

(d) agrees to submit, at Microsoft's expense, any computer program using such APIs, Documentation or Communication Protocols to the Technical Committe for verification, to test for and ensure verification and compliance with Microsoft specifications (which Microsoft shall make available to the licensee) for use of the API or interface, which specifications shall be related to proper operation and integrity of the systems and mechanisms identified in this paragraph.

Comment IV.1 Section IV.A.2.a reads:

''a. Access during normal office hours to inspect any and all source code, books, ledgers, accounts, correspondence, memoranda and other documents and records in the possession, custody, or control of Microsoft, which may have counsel present, regarding any matters contained in this Final Judgment.''

This should be expanded to include electronic forms of communication in electronic form, not printed form, because it is extremely hard to sift through information, such as source code, in non-electronic form.

Section IV.A.2.a should read:

a. Access during normal office hours to inspect any and all source code, source code control systems, bug or defect databases, design documents, build procedures, binary codes, books, ledgers, electronic ledgers, electronic databases, accounts, correspondence, memoranda, newsgroups, discussions forums, web sites and other

documents and records in the possession, custody, or control of Microsoft, which may have counsel present, regarding any matters contained in this Final Judgment. Access to electronic forms of information shall be provided in electronic form and not in only in printed form.

Comment IV.2

Section IV.B.2 describes ''The TC members shall be experts in software design and programming.'' section IV.B.2.c reads:

''c. shall perform any other work for Microsoft or any competitor of Microsoft for two years after the expiration of the term of his or her service on the TC.''

Given that Microsoft competes in almost every software market conceivable, it is a strecth to request two years of non-compete agreement from the TC member. Two such years of non-compete could be provided only if Microsoft provides two such years of salary to the TC member with a yearly inflationary bonus adjustment per year.

Comment IV.3

Section IV.B.8.iii reads:

''(iii) obtain reasonable access to any systems or equipment to which Microsoft personnel have access;''

This should reads:

(iii) obtain reasonable access to any systems, services or equipment to which Microsoft personnel have access; services should include but not be limited to: authentication, file sharing, discussion forums, newsgroups, chat channels, source code control systems, bug/defect database systems, design management systems, document repositories, web sites, etc.

Comment IV.4

Section IV.D.4.d reads:

''d. No work product, findings or recommendations by the TC may be admitted in any enforcement proceeding before the Court for any purpose, and no member of the TC shall testify by deposition, in court or before any other tribunal regarding any matter related to this Final Judgment.''

This is one of the most egregious terms of the settlement. Given that the Technical Committee has hardly any actual enforcement duties, other than monitoring, and the Technical Committee actually being an impartial participant in the actual history of Microsoft's interaction with third parties and Microsoft's possible violations of settlement terms, it is astonishing that this term mandates that the actual work product of the Technical Committee not be admissible as evidence of the settlement enforment activities.

Microsoft deifnitely over-reached by requesting this, this shows Microsoft's true intentions (another 5 years without actual enforcement plus maybe another 5 of further litigation), Microsoft should be forced to accept instead the contrary of this term.

It is an interesting legal question if any documents related to presummed antitrust violations are made the work product of the Technical Committee, then by IV.D.4.d and those documents being unadmissible, then what other documents could be used to initiate Court proceedings by the plaintiffs without any such documents being alleged by Microsoft as being derived from the TC's unadmissible work. How could the plaintiffs promptly produce equivalent analysis without it being under this gag order?

Section IV.D.4.d must read:

''d. All work product, findings or recommendations by the TC must be admitted in any enforcement proceeding before the Court for any purpose, and any member of the TC is herein explicitly allowed to testify by deposition, in court or before any other tribunal regarding any matter related to this Final Judgment.''

If the Plaintiffs are not willing to mandate this rewritten IV.D.4.d they are engaging in blatant dereliction of duty of the antitrust enforcement offices and duties that they purport to serve.

Comment IV.5

Section IV.D.4.e reads:

''e. The TC may preserve the anonymity of any third party complainant where it deems it appropriate to do so upon the request of the Plaintiffs or the third party, or in its discretion.'' It should read instead:

''e. The TC must preserve the anonymity of any third party complainant upon the request of the Plaintiffs or the third party. Where the TC deems it appropriate to do so, and it has not ben requested, by the Plaintiffs or the third party, the TC in its own discretion it may preserve the anonymity of any third party complainant.''

Comment V.1

Section V.A reads:

''A. Unless this Court grants an extension, this Final Judgment will expire on the fifth anniversary of the date it is entered by the Court.''

The Final Judgement should last longer than five years. The actual initial antritrust violations by Microsoft occured more than five years ago and we are stiI1 without any form of remedy. The legal system works very slowly. By entering this Final Judgement, and Microsoft continuing its anticompetitive practices, it would probably take more than five years to resolve those further complaints. Given that the orignal D.O.J. vs Microsoft settlement that related to per computer unit licensing was ambiguous enough that it ended up being mostly ignored and full antritrust proceedings were required, it wouldn't surprise me if this agreement which is even more ambiguous and has many more loopholes means at Microsoft's disposal to circumvent its intent would not result in many more years of litigation without any real behaviour change on Microsoft's part.

Mandating an expiration only after Microsoft no longer has monopoly power in the market of Operating Systems for Personal Computers for Intel x86 or x86 compatible systems is more appropriate. Court proceedings or the under the parties agreement and Court supervision would be required for the settlement to expire, Otherwise a period longer than 5 years, at least 12 years should be mandated.

It must be observed how durable has Microsoft's monopoly been and that it was initially cemented through antitrust violations for which a Final Judgement with no teeth got the industry into its current state: 1.

Since the mid 80s it faced no competition. Through illegal competitive behaviour, it foreclose the market to then Digital Research's DR–DOS product (an atlernative to Microsoft's MSDOS). Microsoft has recently settled a separate antitrus suit by the current owner of the DRDOS assets (Caldera). These original violations animated the first consent decreed between D.O.J. and Microsoft 1995. That consent decree was determined to be ambiguous by the appellate Court in its allowance of integration, and a full antitrust lititgation ensued.

2. Even though Microsoft's technology significantly lagged behind the technical abilities of the systems (for example it took Microsoft 10 years to produce a quasi 32 bit operating system after x86 Intel 32 bit capable operating systems became available in the market) no other competitors could enter the market because Microsoft moved from per-unit licenses to persystem licenses for each model of system that the OEM manufactured (and this continued to exclude other vendors from the market). 3. The one significant threat that Microsoft has faced to its personal computer operating system monopoly has been the advent of the Internet with open standards and as a means for delivering applications from server computers (either through Java or directly as web applications) or through middleware based applications that could perform on Microsoft Operating System based personal computers or personal computers running other operating systems. This one threat has been completely erradicated from the market. Microsoft will continue to exclude Java as a viable Interact based application delivery mechanisms, because this Final Judgement doesn't mandata the allowance of interoperability of Sun's Java with Microsoft's Internet Explorer (the Top Level Window definition is purposedly design to make this impossible). Dereliction of duty now from the Plaintiffs would mean that even under the most blatant violations of antritrust laws and astonishing findings of fact, that Microsoft would escape with a Final Judgement that is too short and very weak from many perspectives. 12 years of enforcement seem the minimal time for market conditions to actually have another opportunity to arise and for actual market change to actually occur.

Comment V.2

Section V.B reads:

''B. In any enforcement proceeding in which the Court has found that Microsoft has engaged in a pattern of willful and systematic violations, the Plaintiffs may apply to the Court for a one-time extension of this Final Judgment of up to two years, together with such other relief as the Court may deem appropriate.''

The Plaintiffs in any enforcement proceeding shall not be limited to only one extension of two years. If the Plaintiffs cannot request as a remedy to future Microsoft's violations of this settlement, then it is not clear if the Court can actually mandate a remedy that is not being requested. Additionally, limiting the length of the actual extension at this time and as part of this settlement seems beyond belief given that any enforcement will require the Court participation because there is no actual real enforcement (other than monitoring by the Technical Committee with its work

product later bein unadmissible as court evidence and without the TC members being allowed as witnesses).

Section V.B should read:

B. In any enforcement proceeding in which the Court has found that Microsoft has engaged in a pattern of willful and systematic violations, the Plaintiffs may apply to the Court for an extension of this Final Judgment for up to ten years, together with such other relief as the Court may deem appropriate, which is hereby agreed by the parties that it is acceptable for it to be of any length as the Court deems appropriate.

Comment VI.1

Definition VI.A reads;

''A. ''Application Programming Interfaces (APIs)'' means the interfaces, including any associated callback interfaces, that Microsoft Middleware running on a Windows Operating System Product uses to call upon that Windows Operating System Product in order to obtain any services from that Windows Operating System Product.''

Issues are:

API refers to the interfaces that are used not only by Microsoft Middleware uses, but any other software uses. APIs are mostly used by regular applications, narrowing the definition of APIs to what Microsoft Middleware uses is a contorted way to allow even more freedoms of circumvention to Microsoft. For example for Microsoft to perform anti-competitive practices through undocumented interfaces that its applications use, but that Microsoft's Middleware doesn't use, thus excluding those APIs (by definition!) from being covered by this settlement. Amazingly, this definition proposed to define API to mean something other than Application Programmin Interface, do you see the word application? It is not Middleware Programming Interface! Simply amazing!

Definition VI.A should be replaced by the definition in the Final Judgement entered by Judge Jackson (definition 7.b):

A. ''Application Programming Interfaces (APIs)'' means the interfaces, service provider interfaces, and protocols that enable a hardware device or an application, Middleware, or server Operating System to obtain services from (or provide services in response to requests from) Platform Software in a Personal Computer and to use, benefit from, and rely on the resources, facilities, and capabilities of such Platform Software.

If another definition is adopted, it should be explained why it is different from the one proposed.

Comment VI.2

Definition VI.B reads:

''B. ''Communications Protocol'' means the set of rules for information exchange to accomplish predefined tasks between a Windows Operating System Product and a server operating system product connected via a network, including, but not limited to, a local area network, a wide area network or the Internet. These rules govern the format, semantics, timing, sequencing, and error control of messages exchanged over a network.''

Issues:

1. Given that Communication Protocols relevant to this settlement (given the proposed changes in other sections) also exist between two personal computers, the definition should reflect that.

2. The set of tasks between the parties in a protocol doesn't have to be predefined, there are protocols under which the parties actually sent pieces of arbitrary code to each other to perform actions that are arbitrary.

Definition VI.B should read:

''B. ''Communications Protocol'' means the set of rules for information exchange to accomplish tasks between a Windows Operating System Product and another operating system connected via a network, including, but not limited to, a local area network, a wide area network or the Internet. These rules govern the format, semantics, timing, sequencing, and error control of messages exchanged over a network.''

Comment VI.3

Definition VI.J reads:

''J. ''Microsoft Middleware'' means software code that

1. Microsoft distributes separately from a Windows Operating System Product to update that Windows Operating System Product; 2.

is Trademarked;

3. provides the same or substantially similar functionality as a Microsoft Middleware Product; and

4. includes at least the software code that controls most or all of the user interface elements of that Microsoft Middleware.

Software code described as part of, and distributed separately to update, a Microsoft Middleware Product shall not be deemed Microsoft Middleware unless identified as a new major version of that Microsoft Middleware Product. A major version shall be identified by a whole number or by a number with just a single digit to the right of the decimal point.''

This is a very astonishing definition of Middleware, nowhere does it talk about software that provides APIs to other software components, which is core to any definition of Middleware. The definition of Non-Microsoft Middleware (VI.M) does seem appropriate to what Middleware is. Definition 7.q in Judge Jackson's Final Judgement should be seen for a reasonable defintion of Middleware:

'''Middleware'' means software that operates, directly or through other software, between an Operating System and another type of software (such as an application, a server Operating System, or a database management system) by offering services via APIs or Communications Interfaces to such other software, and could, if ported to or interoperable with multiple Operating Systems, enable software products written for that Middleware to be run on multiple Operating System Products. Examples of Middleware within the meaning of this Final Judgment include Internet browsers, e-mail client software, multimedia viewing software, Office, and the Java Virtual Machine. Examples of software that are not Middleware within the meaning of this Final Judgment are disk compression and memory management.''

These notions in the VI.J ''Microsoft Middleware'' definition are astonishing:

''2. is Trademarked;'' other than to provide Microsoft another escape clause, this term adds absolutely no value. With this term as part of the definition, Microsoft can rename some component, not use an earlier trademark name for it, and voila! it is no longer Microsoft Middleware.

The notion of what Microsoft Middleware is certainly cannot be tied to the version number given to it! Something is what it is whatever the name used to refer to it. Something as arbitrary as a version number and as easily maleable as a version number certainly cannot be criteria to be used to determine what it is. Contract writting 101 should certainly tech any lawyers about this. It is interesting to pose these questions to the Plaintiffs:

What is the major version number of Office XP? What is the version number of Internet Explorer. NET? What is the version number of Outlook Express. NET? What is the version number of Windows XP, Windows CE, Windows ME, Winodows 95 OSR2? Widonws 95? Microsoft certainly can change interfaces, protocols, APIs, etc in a major, minor, service pack, hot fix, or any other packaging of its software. The names or version numbers of such software should not be used to determine what is contained by them.

Both of these (VI.J.2 and VI.J last paragrpah) should be removed from the definition. The term VI.J.4 seems to be there only for the purpose of allowing Microsoft to slice and recombine its software in such a way as to ensure that the user interface component be the one called the ''Microsoft Middleware'' and not the components that acutally perfrom the traditional Middleware functionality (see Jacksons definition above) of providing APIs to other software. It is very intereseting that Middleware is mostly not about user interfaces but about providing interfaces to other applications, applications that felly on the Middleware as a platform. Most Midleware doesn't have a user interface, if it has one it is incidental.

The term VI.J.4 should be removed.

After these adjustments, Defintion VI.J should just be:

J. ''Microsoft Middleware'' means software code that

1. Microsoft distributes separately from a Windows Operating System Product to update that Windows Operating System Product; and

2. provides the same or substantially similar functionality as a Microsoft Middleware Product; and

Comment VI.4

Definition VI.K reads:

''K. ''Microsoft Middleware Product'' means

1. the functionality provided by Interact Explorer, Microsoft's Java Virtual Machine, Windows Media Player, Windows Messenger, Outlook Express andtheir successors in a Windows Operating System Product, and

2. for any functionality that is first licensed, distributed or sold by Microsoft after the entry of this Final Judgment and that is part of any Windows Operating System Product

a. Internet browsers, email client software, networked audio/video client software, instant messaging software or

b. functionality provided by Microsoft software that

i. is, or in the year preceding the commercial release of any new Windows Operating System Product was, distributed separately by Microsoft (or by an entity acquired by Microsoft) from a Windows Operating System Product;

ii. is similar to the functionality provided by a Non-Microsoft Middleware Product: and iii. is Trademarked.

Functionality that Microsoft describes or markets as being part of a Microsoft Middleware Product (such as a service pack, upgrade, or bug fix for Internet Explorer), or that is a version of a Microsoft Middleware Product (such as Internet Explorer 5.5), shall be considered to be part of that Microsoft Middleware Product.''

The first issue with this definition is, what is the connection between VL.K.2 and the presumably subordinate VI.K.2.a and VI.K.2.b? The sentence under VI.K.2 seems incomplete, it should end in something like:

''* * * and that is part of any Windows Operating System Product, and is either:'' Other issues are:

1. Throughout the trial Microsoft and depositions (but not before litigation was brought into action) would not budge on its pretense incomprehension of what an Internet Browser is. They would only talk about browsing technologies but would react stupified to the notion of Integer Browsers, particularly their own, when they were referred to as ''the browser product.'' It is amusing and without any sign of legal thouroughness that the Plaintiffs have come to agree with Microsoft to a definition that uses the term ''Internet browser'' without actually providing a definition for such a term anywhere in the proposed Final Judgement. Not even what a Internet Browser is being agreed amongst the parties in the dereliction of duty that this document embodies.

2. Given that this section includes other disputed terms such as Internet Explorer, it sould seem to be important to include precise definitions about what these actual terms mean. Maybe when the Plaintiffs try to do this together with Microsoft they will realize that only contorted definitions such as the ones for API, Microsoft Middleware, Microsoft Middleware Product, etc. are arrived at.

3. Again software can be or stop from being a Microsoft Middleware Product depending on whether it is trademarked or not (which to no ones surprise is another contorted and unnatural definition by itself).

4. VI.K.2.b.i refers to ''distributed separately by Microsoft from a Windows Operating System Product'', that term should be precisely defined to mean what it seems to mean, because Microsoft having argued in court that a sandwich is part of Windows if they soley dictate so, then they surely would say that any code ''is distributed as part of a Windows Operating System'' even if the code is sent to the end user m a CD–ROM inside a sandwich not included in the Windows box, or more complexily and seriously, if it is sent to the user's system through a the Windows update process.

5. VI.K.2 seems to require that the functionality be ''part of any Windows Operating System Product'' but immediately and sub-ordinated to that clause it also says VI.K.2.b.i ''distributed separately by Microsoft from a Windows Operating System Product'' which seems to contradict the pre-requisite governing condition (it has to be both part of and not part of?.), that would be by necessity the empty set, because something cannot be both part of something and not part of something; thus redering the whole contorted VI.K definition sense-less.

06. The final paragraph on VI.K states that:

''Functionality that Microsoft describes or markets as being part of a Microsoft Middleware Product (such as a service pack, upgrade, or bug fix for Internet Explorer), or that is a version of a Microsoft Middleware Product (such as Internet Explorer 5.5), shall be considered to be part of that Microsoft Middleware Product.''

as some form of saving grace for the grotesquely constructed prior definition. Obviously, since the litigation started, Microsoft has described everything as part of Windows, so one should not wait standing for Microsoft to ever again market anything in their anticompetitive campaigns as not being part of Windows.

Definition VI.K should be replaced by:

''K. ''Microsoft Middleware Product'' means

1. the functionality provided by Internet Explorer, Microsoft's Java Virtual Machine, Windows Media Player, Windows Messenger, Outlook Express and their successors in a Windows Operating System Product, and

2. any functionality that is first licensed, distributed or sold by Microsoft before, on, or after the entry of this Final Judgment and that is later made part of any Windows Operating System Product, this shold include but not be limited to: Internet browsers, email client software, networked audio/video client software, instant messaging software; or

3. functionality provided by Microsoft software that

i. is, or at any time preceding the commercial release of any new Windows Operating System Product was, distributed separately by Microsoft (or by an entity acquired by Microsoft) from a Windows Operating System Product; or

ii. is similar to the functionality provided by a Non-Microsoft Middleware Product Functionality that Microsoft describes or markets as being part of a Microsoft Middleware Product (such as a service pack. upgrade, or bug fix for Interact Explorer), or that is a version of a Microsoft Middleware Product (such as Internet Explorer 5.5), shall be considered to be part of that Microsoft Middleware Product.''

Additionally, reasonable definitions of what these mean should be included as separate definitions: ''Internet Explorer, Microsoft's Java Virtual Machine, Windows Media Player, Windows Messenger, Outlook Express and their successors in a Windows Operating System Product''

Comment VI.5

The word product should be replaced by technology in definition VI.M because not all middleware is made available in a product form, some of it might be made freely available or under conditions or packaging that don't relate directly to it being a product:

''M. ''Non-Microsoft Middleware'' means a non-Microsoft software product running on a Windows Operating System Product that exposes a range of functionality to ISVs through published APIs, and that could, if ported to or made interoperable with, a non-Microsoft Operating System, thereby make it easier for applications that rely in whole or in part on the functionality supplied by that software product to be ported to or run on that non-Microsoft Operating System.''

It shold read:

''M. ''Non-Microsoft Middleware'' means a non-Microsoft software technology running on a Windows Operating System Product that exposes a range of functionality to ISVs through published APIs, and that could, if ported to or made interoperable with, a non-Microsoft Operating System, thereby make it easier for applications that rely in whole or in part on the functionality supplied by that software product to be ported to or run on that non-Microsoft Operating System.''

Comment VI.6

The requirement under VI.N.ii that:

''and (ii) of which at least one million copies were distributed in the United States within the previous year.''

Seems excessive, a more reasonable number of one hundred thousand copies is more appropriate because the benefits of the settlement can benefit nascent technologies and not just more established ones.

Comment VI.7

The definition under VI.O of OEM is self centered, to be an OEM, the OEM has to be a licensee of a Windows Operating System Product. How do new OEMs come to be if Microsoft refused to license its products directly or uses intermediaries not under its ownership control but under agreement control to do actual sublicensing? The definition of an OEM should be independent of whether they at any given point in time they have a direct license from Microsoft (instead of purchasing the product in the channel like smaller OEMs do). The definition of Covered OEM already takes care of them being licensees.

''O. ''OEM'' means an original equipment manufacturer of Personal Computers that is a licensee of a Windows Operating System Product.''

Should be:

O. ''OEM'' means an original equipment manufacturer of Personal Computers.

Comment VI.8

Definition VI.Q reads:

''Q. ''Personal Computer'' means any computer configured so that its primary purpose is for use by one person at a time, that uses a video display and keyboard (whether or not that video display and keyboard is included) and that contains an Intel x86 compatible (or successor) microprocessor. Servers, television set top boxes, handheld computers, game consoles, telephones, pagers, and personal digital assistants are examples of products that are not Personal Computers within the meaning of this definition.''

The only concern here is if:

television set top boxes, handheld computers, game consoles, telephones, pagers, and personal digital assistants are constructed from Intel x86 or x86 compatible

processors and Microsoft offers a version Windows for them that allows any software designed for Personal Computers to work on those systems, then what those products would be are:

x86 Personal Computer based handheld personal computers; or

x86 Personal Computer based personal digital assistants; or

x86 Personal Computer based personal game consoles; etc

For example today Microsoft offers a fully functional Personal Computer as its game console, the Microsoft Xbox. If Microsoft were to offer Windows XP for that system, it would not only be a game console but also a fully function Personal Computer. Under those circumstances it should not be excluded from the definition.

Comment VI.9

Defintion VI.R reads:

''R. ''Timely Manner'' means at the time Microsoft first releases a beta test version of a Windows Operating System Product that is distributed to 150,000 or more beta testers.'' Without actual evidence about the actual size of the MSDN subscription base, it seems safer to rewrite this. Addtionally because of naming issues, the term ''beta test version'' should be expandded into its meaning:

''R. ''Timely Manner'' means at the time Microsoft first releases a release version of a Windows Operating System Product through its MSDN developper program solely for the purpose of developper testing and not intended for end user use for reasons other than for testing. If Microsoft plans multiple such test releases, then Timely Manner shall means the release time of a test release that is at least one year away from the product's final availabilty to OEMs for pre-installation or for consumer retail purchase, whichever is earlier.''

Comment VI.10

Defintion VI.S reads:

''S. ''Top-Level Window'' means a window displayed by a Windows Operating System Product that (a) has its own window controls, such as move, resize, close, minimize, and maximize, (b) can contain sub-windows, and (c) contains user interface elements under the control of at least one independent process.''

This definition is purposedly constructed to prevent:

1. An alternative Jave Virtual Machine (for example from Sun Microsystems) from being invoked when Java Applets are invoked through a web page because the window controls are the window controls of the Internet Browser and the Java Applet executes within the same window. By Microsoft using this defitintion to condition where it allows non-Microsoft Middleware to be invoked it controls the most important way for Java application execution (i.e. under a more complex web based application). Thus Microsoft having killed Netscape Navigator's viability proceeds to deny Java the remaining vehicle that it could have enjoyed under this settlement, i.e. under Interact Explorer. Of course the Plaintiffs do nothing other than acquesce under this settlement either because of dereliction of duty or blatant technical misunderstanding of the issues involved.

2. For example, the ''live chart'' stock quotes provided (through Java applets) by www.quote.com or the Chess application provided (Java applet) by www.chessclub at

http://www.chessclub.com/interface/java.html

http://queen.chessclub.com/sji/index.html

Would simply continue to run under Microsoft Java Virtual Machine and not under Sun's Java Virtual Machine when installed on the same system and with all the provisions of the settlement fully implement (and without any Microsoft violation of the terms whatsoever).

Thus Microsoft gets to reap the fruits of its anti-competitive camapaign without having actually conceeded anything of substance for non-Microsoft Middleware as it relates to Microsoft's Internet Explorer. The same will occur with network video and audio formats because Microsoft will make its players not start on a Top Level Window thus taking control of audio and video formats of Real Networks players even when the end user has choosen otherwise under the provisions of this agreement.

The notion of Top Level Window must be extricated from the settlement and Microsoft should allow invocation of ActiveX based components of the non-Microsoft Middleware under all circumstances, in a manner similar under which today third party software is invoked under a non Top Level Window and displayed within the Internet Explorer window without a problem (for example see how Adobe's Acrobat Reader is displayed under a non-Top Level Window). Microsoft has done already all the technical work in this area, an it is now only putting contractual road blocks to all these natural forms of invocation of non-Microsoft Middleware.

Comment VI.10

Definition VI.T reads:

''T. ''Trademarked'' means distributed in commerce and identified as distributed by a name other than Microsoft?? or Windows?? that Microsoft has claimed as a trademark or service mark by (i) marking the name with trademark notices, such as ?? or ??, in connection with a product distributed in the United States; (ii) filing an application for trademark protection for the name in the United States Patent and Trademark Office; or (iii) asserting the name as a trademark in the United States in a demand letter or lawsuit. Any product distributed under descriptive or generic terms or a name comprised of the Microsoft?? or Windows?? trademarks together with descriptive or generic terms shall not be Trademarked as that term is used in this Final Judgment. Microsoft hereby disclaims any trademark rights in such descriptive or generic terms apart from the Microsoft?? or Windows?? trademarks, and hereby abandons any such rights that it may acquire in the future.''

The main issue throughout this proposed settlement with respect ot Trademarks is that software is what it is irrespective of what it is called. The definitions of Microsoft Middleware and Microsoft Middleware Product where conditioned with them being trademarked (under this definition) as a means to provide Microsoft and escape clause to make the no longer Microsoft Middleware (and Microsoft Middleware Products). That concept should completely go away. If it doesn't then the defintion of Trademarked shold be exactly the legal defintion understood under the law and not this one.

Comment VI.11

Defitions VI.U reads:

''U. ''Windows Operating System Product'' means the software code (as opposed to source cede) distributed commercially by Microsoft for use with Personal Computers as Windows 2000 Professional, Windows XP Home, Windows XP Professional, and successors to the foregoing, including the Personal Computer versions of the products currently code named ''Longhorn'' and ''Blackcomb'' and their successors, including upgrades, bug fixes, service packs, etc. The software code that comprises a Windows Operating System Product shall be determined by Microsoft in its sole discretion.''

The list must also include Windows 95, Windows 98, Windows SE, Windows ME (collectively known as Windows 9x) and Windows NT 4,0 and all their service releases. The current installed base is mostly made out of these products. By purposedly excluding them Microsoft and the Plaintiffs allow Microsoft to continue to prevent non-Microsoft Middleware from fairly competing in the broad installed base and forces competition to only occur under Microsoft's controlled evolution of the market. It does so by not allowing competition from the broad installed base by not affording the benefits of the settlement to that gigantic installed base (i.e. all the versions of Windows 9x).

MTC–00029686

P.O. Box 369
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing you today to express my opinion in regards to Microsoft. I fully support the settlement that was reached in November. In my opinion, the litigation that has continued for the last three yearn is a waste of precious resources that should be focused on more important issues. I am chagrinned that many state Attorneys General have continued suing Microsoft. I sincerely hope there, will be no further action against Microsoft at the federal level.

This settlement is fair and reasonable. Microsoft has agreed to carry out all provisions of this agreement, Under this agreement, Microsoft remains together as a company, while following procedures; that will make it easier for companies to compete. Microsoft has agreed to disclose information about certain internal interlaces in Windows;. Furthermore, Microsoft agreed to, disclose any protocols implemented in Windows'' operating system products.

This settlement will benefit the economy and the technology industry as a whole. Please support this settlement so this dispute, can finally be resolved. Thank you for hearing my opinion.

Sincerely,

MTC–00029687

January 24, 2002

Attention: Renata Hesse
U.S. Department of Justice.
Antitrust Division
601 D Street NW Suite 1200
Washington, DC 20530

Deal Ms. Hesse

Though I am a current member of the Kansas ago Board of Education, I am writing this letter personally and not as a representative of the Kansas State Board of Education. Before you is a fair proposal for settlement of Microsoft case. In a sincere a??empt to close the door on a highly publicized legal embattlement, Microsoft offers to reveal technical information to comp??titors, enabling other companios to write software that actually works with Microsoft's operating products. Microsoft even offers, at its own expense, a failsafe in the form of an impartial review board which will have clearance to every facel of Microsoft's business dealings. This means software customers will have the ability to smoothly access competing software products on the same desktop, just like they are part of Microsoft Office.

Though Microsoft may surely have hoped for a solid win in this case, Bill Gates himsel recently recognized that accepting the strict rules and regulations imposed by the settlement is ''the right thing to do'', benefiting the consumer, the tech sector and the economy. We may hate to admit it, but Gates is right again. Settlement is the right thing to do. Thank you for your consideration of my opinions.

Sincerely,
Dr. Steve Abrams

MTC–00029688

January 27, 2002
Attorney General John Ashcroft
US Department of Justice
Washington, DC 20530

Dear Mr. Ashcroft,

I would like to express my appreciation to the Justice Department for allowing we as Americans to comment on the Microsoft antitrust case. I am a part of the tech industry and am in favor of the settlement in its current form.

I would like to express how happy I am with Microsoft products. Microsoft ha3 changed the way Americans do business. I think most Americans believe that the terms and conditions of the settlement are decent and just, and they are right. The settlement covers all sorts of parts of Microsoft's operation, from business practices to design changes.

Please use your power to end this case in an expeditious manner. It will benefit the country and the IT industry if you do so.

Sincerely,
Dean Martin
Co: Representative Tammy Baldwin

MTC–00029689

Jim Atkins
5569 Pinebrook Lane
Winston Salem, NC 27105
January 21, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am amongst those who believe that the Microsoft antitrust case should have never gone to trial. Nevertheless 1 would like you to support the settlement that was achieved in this case. Continuation of this case would be harm fid to Microsoft, and needlessly cost the Justice Department money in a time of a dwindling government surplus.

Justice Department officials have approved and agreed to the settlement in this case. The settlement will make it easier for non-Microsoft software to be installed on Microsoft platforms, giving competitors a better opportunity to offer their products to the public. However for some opponents of the settlement this is not adequate. It must be kept in mind that special interests will pressure officials to have this case re-opened.

I appreciate you taking the time to review my views on this issue. Once again I would like to stress to you my belief that this cage has undoubtedly become protracted and should be terminated. Please back the settlement.

Sincerely,
Jim Atkins
cc: Representative Mel Watt

MTC–00029690

Michael DiBello
15 Orchard St.
Syosset, NY 11791–2712
January 26. 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I feel that the settlement made between Microsoft and the Department of Justice is reasonable and that the litigation against Microsoft needs to be brought to an end. The money and time that has been spent on this suit doesn't seem to be worth what will be gained if this continues. The terms of the settlement, if finalized, will open up competition to other companies, which will in turn benefit the consumer, Not only will there be more choice but also hopefully there will also be more reasonable prices. Because of the terms of the settlement, Microsoft is going to have to make Windows internal code available to other companies so they can design their software to be compatible. Microsoft will be reimbursed for this, which is fair for all sides involved.

Overall I feel that the settlement should stand the way it is and that any further litigation against Microsoft would prove to be wasteful. Thank you for allowing me the opportunity to express my opinions.

Sincerely,
Michael DiBello

MTC–00029691

January 23, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft.

The Department of Justice was absolutely wrong in wanting to slice Microsoft into separate parts. Three years have produced public resentment and gravely hurt the computing Industry, all for the benefit of those who won't ever be able to compete with Microsoft. The settlement Microsoft agreed to with the federal government must go forward. It is more than generous, and is obviously better than forcing Microsoft back into court, where the only winners are the attorneys representing both sides of this case.

Microsoft concedes to give up more than enough to promote far more competition among the computer makers and software developers who want a more level playing field. Agreeing to open Windows for further application development, Windows and non-Windows alike, will produce far more innovations than ever before, and will show the consumer that they are not at the whim of this industry giant, creating more individually-based options and configurations.

I urge the Department of Justice to see to it that Microsoft is given unprejudiced consideration by allowing them to return to business NOW. Do not continue to waste the incredible innovation and efforts of Microsoft, by choking them in more court proceedings. They have been the most industrious and prolific business since that of Ford Motors. The ramifications are far reaching, for the better good, by supporting the position of this settlement with Microsoft.

MTC–00029692

Mr. Todd Kangas
21800 Dempsey Rd
Leaven worth, KS 66048
U.S. Department of Justice, Antitrust Division
C/O Renata Hesse
601 D Street, NW, Suite 1200
Washington, DC 20530
January 38, 2002

Dear Ms. Hesse:

I would like to share a few thoughts of mine about the Microsoft case that you are currently reviewing as pan of the public comment period for the suit. Microsoft and Bill Gates have paid their penance. Throughout this case, Microsoft has been portrayed as an evil corporate citizen, but in my opinion this accusation does not stand up to reality.

In addition to Microsoft's corporate giving, Bill Gates has established the largest charitable foundation in the world. This foundation is making significant progress by donating hundreds of millions of dollars every year to assist in feeding the hungry in third world countries, preventing diseases, and educating youth in America. Lets put an end to this lawsuit and allow the success of Bill Gates and other high-tech entrepreneurs continue to, not only boost the economy of our country, but to aid to the underprivileged worldwide through charitable giving.

Sincerely,
Todd Kangas

MTC–00029693

Kenneth R. Sone
195 N Harbor Drive Apt. 5307
Chicago, IL 60601
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW

Washington, DC 20530
Dear Mr. Ashcroft:

I want to take a moment to give my feelings on the settlement reached last year between Microsoft and the Department of Justice. I believe the settlement is fair to both sides and should continue t6 be supported by the federal government.

The settement is exlensive aggressive, and covers all the issues that were m dispute. Microsoft has agreed to many concessions for the ??ake of wrapping up this suit and moving forward One example is Microsoft agreeing to document and disclose for use by its competitors various interfaces that are internal to Windows'' operating system products. This is a first for an antitrust settlement and reveals the strength of the agreement on the government's part.

I believe settling this case and ending the litigation can only help the economy during this difficult period. It will bring some certainty to the computer industry and lessen the uncertainty about where the litigation may he heading I commend your office for the efforts so far and hope your support for the settlement remains strong.

Sincerely,

MTC–00029694

FAX
DATE: January 28, 2002
TIME: 9:00 AM
ATTENTION: Attorney General John Ashcroft
COMPANY: US Department of Justice
FAX NUMBER: (202) 307–1454
FROM: Glenn R. Hasman
SUBJECT: Microsoft
NUMBER OF PAGES: 2 (including this cover sheet)
8797 Treetop Trail
Broadview Heights, OH 44147
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

This is to give my approval to the ending of the antitrust case brought against Microsoft. In my opinion, it has gone on far too long and we need to get back to business. We talk about the economic downturn but keep the one company that could probably pull us out of it, tied up in litigation.

From what I understand of the agreement, Microsoft has been more than fair in trying to settle this case. Microsoft has agreed to terms that go far beyond the products and procedures that were actually at issue in the original case; Microsoft has agreed to grant computer makers broad new rights to configure Windows so as to promote non-Microsoft software programs. Microsoft has further agreed to design future versions of Windows with a mechanism to make it easier to promote non-Microsoft software.

It is in the best interests of America, and the world, if we put this case behind us and get back to business. Please give your support to this agreement.

Sincerely,
Glenn R. Hasman

MTC–00029695

1–28–02
Ms. Renata B. Hesse
Please approve the microsoft settlement.
Harry Westenberg
13008 W. Willow Creek
Huntley, IL
60142

MTC–00029696

PO Box 135
Monterey, MA 01245
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Attorney General Ashcroft:

I would like to take this opportunity to express my personal opinion about the government's role in Microsoft's freedom to innovate The United States Department of Justice and Microsoft reached an agreement at the beginning of this past November and that is where the litigation should end. The settlement was fair; allowing Microsoft to continue doing business while allowing competitors to sue Microsoft if they do not think the company is complying with the agreement.

I believe no more litigation should be enacted at the federal level. With a reasonable settlement already reached, further action by our government would only waste more time and money. !n this time of economic recession, these resources could be used in a much more productive manner In these trying times, we need to support our homeland companies and allow them to continue providing high quality products to the marketplace both nationally and internationally. This settlement allows our companies to actually return to the success that the IT industry enjoyed four years ago. Microsoft will now be making future versions of Windows that will include a way to greatly simplify the process of adding arid removing non-Microsoft programs from the Windows operating system.

In a battle that already has been fought and won, I believe it would be in our best interest not to continue suing Microsoft at the federal level Let us get our economy back on track and start supporting products and companies that me made in the USA. Thank you for you time.

Sincerely,
J.T. Buchar

MTC–00029697

3312 Zimmer Road
Williamston, MI 48895
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

I was quite pleased to learn that the federal government and Microsoft reached a settlement in their three-year anti-trust lawsuit. I am hopeful that this settlement will become final in the near future so the negative effects that is has had will cease, and the technology industry can see a resurgence.

This will be made possible by the various concessions that Microsoft made in order to settle this dispute. A three person technical committee will oversee Microsoft's business operations from this point forward, and any company that has a complaint of anti-competitive behavior against Microsoft will be able to be heard immediately. Competition will increase, and consumers will have more choices in the marketplace. I see no reason to pursue this matter beyond this point. I want to thank you for your decision to stop this litigation. I am certain it will have positive effects on the industry as well as the whole economy, and I look forward the settlement becoming final in the weeks ahead.

Sincerely,
Rudy Key

MTC–00029698

6402 Dolphin Shores Drive
Panama City Beach, FL 32407–5474
January 22, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
Dear Mr. Ashcroft:

Three years ago when Microsoft was first brought to trial, my fear was that the company wouldbe split up and the American technology industry would begin to suffer. Now, a settlement hasbeen proposed that would allow Microsoft to remain whole, and I believe that would be in thebest interest of the consumer for the Justice Department to approve the settlement and move on.I do support limits on Microsoft's conduct to safeguard our antitrust laws, but I think theserestrictions are a bit harsh. Microsoft agreed to terms and conditions in the settlement that extendto procedures and technologies that were not found to be unlawful by the Court of Appeals.Microsoft has agreed, among other things, to disclose source code and interfaces from theWindows operating system to its competitors for their use in developing Windows-compatiblesoftware. Microsoft has also agreed to license the Windows operating system to twenty of thelargest computer makers at the same price. In the interest of wrapping up the case, Microsoftagreed to these and more terms, and I believe that, regardless of the harshness of certainobligations, it is better to settle now and let things get back to normal than to continue litigationand risk further economic damage.

This has gone on long enough, and it is time to move on. Microsoft has made the necessarychanges to prevent further antitrust violations, and I do not believe further litigation is eithernecessary or constructive. I ask you to endorse the settlement.

Sincerely,
Jeannie Fitzsimmons
cc: Representative Jefferson Miller

MTC–00029701

ARTHUR F. HARDEN
1389 OUTLOOK DRIVE WEST
MOUNTAINSIDE, NEW JERBEY 07092
Tel.& FAX # 908–233–7737
DOJ
ATT. Ms. RENATA B. HESSE
202–307–1454,

GENTLEMEN:
I SUPPORT THE PROPOSED SETTLEMENT OF THE MICROSOFT LAWSUIT.
AETHUR F. HARDEN
JANUARY 26, 2002

MTC–00029702

Rhonda Green
11920 Brown Road
Thayer, KS 66776
United States Department of Justice
Antitrust Division
Attn: Renata Hesse
601 D Street, NW, Suite 1200
Washington, DC 20330
Dear Ms-Hesse;

As the parents of two children in a small, rural Kansas school, I was excited to hear about theprospects of Microsoft donating millions of dollars worth of computer systems and learningprograms to schools like the ones my children attend.I have seen first hand the value of computers in advancing the education, of my children and Ifirmly believe that, if accepted, this settlement could prove to be very beneficial to the educationof America's children.

The government has wasted enough taxpayer dollars pursuing a problem that never existed. It ismy hope that this fair settlement, which has levied steep and taxing financial burdens onMicrosoft, will end soon.

Sincerely,
Rhonda Green

MTC–00029703

January. 23, 2002
Ms. Renata Hesse, Anti-Trust Division
U.S. Department of Justice
601 D Street Northwest
Suite 1200
Washington, DC 20530
Dear Ms. Hesse:

I am writing to you to express my feelings regarding the lawsuit filed against Microsoft by JanetReno. I understand that the Bush administration has proposed a settlement that has been agreedto by Microsoft and several of the states involved in the lawsuit.

I want to add my voice to those who believe it is time m put this lawsuit to bed. It is drainingvaluable resources from government coffers and unnecessarily burdening one of America'sleading technology companies. I urge you to approve the settlement proposed by the Bushadministration.

Sincerely,
Mrs. Floyd Powers
Retired Neosho County Employee
5435 Highway 47
Thayer, KS 66776

MTC–00029704

745 Norman Drive
North Bellmore, NY 11710
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

I am writing this letter in support of Microsoft. As a businessman, I believe there is no place forGovernment in free enterprise. I have a lot of respect for Microsoft and saw the economy flourishas Microsoft grew. It's no coincidence that the technology, sector, technical stocks andemployment numbers are down while this antitrust case is going on. While it may not be thecause, it sure is the contributor.

Microsoft agreed that if a third party's exercise of any options provided by the settlement wouldinfringe on the rights of any Microsoft intellectual property, they will provide the third party witha license to the necessary, intellectual property on reasonable terms. That seems more than fair tome. Microsoft agreed to provide computers in the school, but all the states rejected it since itwould infringe on Apple's ability to continue providing computers in the school. Here in NassauCounty, we are in desperate need of IBM compatible computer's, especially since we use oldtechnology, like a microfiche. It's a shame we can't access any.

It's obvious to me that the competition and the states are only pursuing litigation because theywant ''a piece of the action.'' If the consumer likes the products of a company ''a'', and thecompany ''a'' gains a large market share, it's not fair for other companies to sue company ''a'' justbecause consumers like their product. Your help in resolving this mailer is greatly appreciated.

Sincerely,
Stuart Muchnick

MTC–00029705

GBG STRATEGIES, INC.
100 FANEUIL HALL MARKETPLACE
BOSTON, MA 02109
Leo T. Goodrich
President
January 25, 2001

I am writing to have my thoughts on the proposed settlement between Microsoft and the UnitedStates Department of Justice entered Into the record in accordance with the Tunny Actsrequirement of public comment on such settlements.

I think the settlement plan is a good one, and one that reaches the necessary balance betweenantitrust enforcement and the need for as competitive a software market as the U.S. economy canhave. Consumers benefit from a competitive market in ways that; the kind of regulationspreviously argued in this case would nullify. Whereas a free and competitive market will drivedown Dries and hasten the pace of innovation, a heavily regulated market, or a software marketIncluding a cawed-up Microsoft would slow the pace of Innovation and allow companies to siton their hands and let prices gradually rise.

Consumers deserve the best high tech market available to them, and the best high tech market isthe one that innovates. The Innovates of the last decade were primarily responsible for thecreation of Jobs, Investment, and wealth at rates never before witnessed In any economyanywhere. The success of the ''New'' Economy In the 1990s was not a boomlet, in my view, but aharbinger of flings to come In the future, if the government will allow consumers andentrepreneurs to successfully guide the market toward higher levels of competition andInnovation.

I hope my thoughts can be entered into the record and also hope the court fit to approve thesettlement proposal. It is the best way for the economy to start to put this recession behind it andbegin to build for the future.

Sincerely,
Leo T. Goodrich

MTC–00029706

NEWTON REAL ESTATE RESOURCE GROUP
Matthew D, Adams
January 25, 2001

I am writing to have my thoughts on the proposed settlement between Microsoft and the United States Department of Justice entered into the record in accordance with the Tunny Act's requirement of public comment on such settlers.

I think the settlement plan is a good one, and one that reaches the necessary balance between antitrust enforcement and the need for as competitive a software market as the U.S. economy can have. Consumers benefit from a competitive market in ways that the kind of regulations previously argued in this ease would nullify. Whereas a free and competitive market will drive down prices arid hasten the pace of innovation, a heavily regulated market, or a software market including a carved-up Microsoft would slow the pace of innovation and allow companies to sit on their hands and let prices gradually rise.

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I hope my thoughts can be entered into the record and also hope the court sees fit to approve the settlement proposal. It is the best way for the economy to start to put this behind it and begin to build for the future.

Sincerely,
Matthew D. Adams

MTC–00029707

7831 El Pastel Drive
Dallas, TX 75248
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

I am writing today to encourage the Department of Justice to accept the Microsoft antitrust settlement. This issue has been dragging on for entirely to long now and I feel that the current settlement before the DOJ is fair and just. I would like to see the government accept it. Many people think that Microsoft has gotten off easy, in fact they have not. In order to put the issue behind them Microsoft has agreed to many concessions. Microsoft has agreed to give computer makers the flexibility to install and promote any software that they see fit.

Microsoft has also agreed not to enter into any agreement that would obligate any computer maker to use a fixed percentage of Microsoft software. Also, Microsoft has agreed to license its products at a uniform price to computer makers no matter how much that computer maker uses Microsoft products.

What we need to remember is that Microsoft products are very affordable and offer many advantages over other products, if one desired, they could purchase another operating system ie; Linux etc., but the fact is most people choose Microsoft Windows over others. With the economy stalling, we need to move forward not backward, many people have spent large amounts of time and money to be trained on Microsoft products, lets not forget them.

Sincerely,
Dameon Rustin
co: Representative Richard Armey

MTC–00029708

Brad D. Houghtaling
230 Wellington Road
Syracuse, NY 13214–2226
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, N–W
Washington, DC 20530

Dear Mr. Ashcroft:

I am violently opposed to the antitrust lawsuit against the Microsoft Corporation, I personally feel that the suit should be dropped, and Microsoft left alone. This case defies the very ideal of free enterprise upon which this nation has been built, and this case does nothing but damage the entrepreneurial spirit that has heretofore been celebrated in this nation.

I understand that Microsoft has agreed to the settlement that has been reached in this case because it would simply like to see this litigation end. While I do not agree that Microsoft should have to settle I understand their desire to see the end of this lawsuit. The terms of the settlement, while a little harsh, are not overly objectionable. Microsoft has agreed to design all future versions of its Windows operating system to be compatible with the products of its competitors, along these same lines Microsoft will disclose certain segments of source code to its competitors enabling them to design products that work within Windows, it is this term that I find most objectionable. I believe that the parties trying to perpetuate this litigation are seeing only their own political ends rather than a fair solution to this dispute.

Please ensure the passage of this settlement. American business needs 3,our support. Thank you.

Sincerely,
Brad Houghtaling

MTC–00029709

808 Beazer Lane
Antioch, TN 37013
January. 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am of the opinion that the settlement that has recently been reached between Microsoft and the Department of Justice is fair and reasonable, and I would like to see it implemented as soon as possible.

The only reason why I do support this settlement is because it brings an end to the ludicrous litigation against Microsoft. The governments, both stale and federal, are legally pursuing Microsoft for one reason and one reason only, for the cash. It is ironic that they have wasted millions of dollars taking Microsoft to court, and do not have much to show in return. The economy is bad enough; we do not need our tax dollars going towards the prosecution of a company that has been so beneficial to the American economy. I hope that the ongoing technical oversight committee, which is a result of the settlement and will monitor Microsoft's compliance with that settlement, will satisfy the government and all other anti-Microsoft entities. A settlement has been reached, we must now put this issue behind us and move on to more pressing issues. Thank you.

Sincerely,
Carl Beck

MTC–00029710

COMMERCIAL REAL ESTATE SERVICES
1005 Boylston Street
P.O. Box 610259
Newton, MA 02461–0259
Thomas P. Godino
January 25, 2001

I am writing to have my thoughts on the proposed settlement between Microsoft and the United States Department of Justice entered into the record in accordance with the Tunny Act's requirement of public comment on such settlements.

I think the settlement plan is a good one, and one that reaches the necessary balance between antitrust enforcement and the need for as competitive a software market as the U.S. economy can have, Consumers benefit from a competitive market in ways that the kind of regulations previously argued in this case would nullify. Whereas a free and competitive market will drive down prices and hasten the pace of innovation, a heavily regulated market, or a software market including a carved-up Microsoft would slow the pace of innovation and allow companies to sit on their hands and let prices gradually rise.

Consumers deserve the best high tech market available to them, and the best high tech market is the one that innovate. The innovations of the last decade were primarily responsible for the creation of jobs, investment, and wealth at rates never before witnessed in any economy anywhere. The success of the ''New'' Economy in the 1990s was not a boomlet, in my view, but a harbinger of things to come in the future, if the government wilt allow consumers and entrepreneurs to successfully guide the market toward higher levels of competition and innovation I hope my thoughts can be entered into the record and also hope the court sees fit to approve the settlement proposal. It is the best way for the economy to start to put this recession behind it and begin to build for the future.

Sincerely,
Thomas P. Godino

MTC–00029711

January 24, 2001

I am writing to have my thoughts on the proposed settlement between Microsoft and the United States Department of Justice entered into the record in accordance with the Tunny Act's requirement of public comment on such settlements.

I think the settlement plan is a good one, and one that reaches the necessary balance between antitrust enforcement and the need for as competitive a software market as the U.S. economy can have. Consumers benefit from a competitive market in ways that the kind of regulations previously argued in this case would nullify. Whereas a flee and competitive market will drive down prices and hasten the pace of innovation, a heavily regulated market, or a software market including a carved-up Microsoft would flow the pace of innovation and allow companies to sit on their hands and let prices gradually rise.

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I hope my thoughts can be entered into the record and also hope the court sees fit to approve the settlement proposal. It is the best way far the economy to start to put this recession behind it and begin to build for the future.

Sincerely,
James J. Campbell

MTC–00029712

VONDA WIEDMBR
ROUTE 1, Box 545
MADISON, KS 66860
January 15, 2002
Renata Hesse
Trial Attorney
U.S. Department of Justice
601 ''D'' St., NW—Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

All too often in our country it seems our government has taken aim at a successful company under the auspices of protecting the American people. Unfortunately, it is the government's actions that are truly hurting Americans. When the Department of Justice first began its pursuit of Microsoft it claimed it was doing so to protect consumers from some harm created by Microsoft. The reality could not be further from the truth.

The facts are simple really. Microsoft leads its industry because it has developed ways to meet consumers needs better then its competition. This is the American way! Most successful companies strive to be the very best in their field and compete hard with

others in their industry. Certainly Microsoft is no exception. Punishing them for being the best is not appropriate. The United States government and the Microsoft's competitors have yet to provide proof of how consumers have been harmed by Microsoft. However, as a taxpayer T can see where I have been harmed Countless tax dollars have been spent in the pursuit of this case at o time when our economy is constricting. I view this a real example of harm.

Please accept the settlement offer.

Sincerely,

Vonda Wiedmer

MTC–00029713

Matthew Alfieri
7 Northfield Gate
Pittsford, NY 14534
January 27, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The intention of this letter is so that I may go on record as being a staunch supporter of the proposed agreement that was reached between Microsoft and the Department of Justice. The litigation between these two has gone on for long enough, more than three years actually. It is time to put this issue to rest and move on.

The settlement actually goes further than Microsoft would have liked, but they decided to settle because it was in the best interests of the IT industry and the American economy. The settlement mandates that Microsoft make future versions of the Window, operating system to include a feature that makes it much easier for computer makers and consumers to remove Microsoft software programs from Windows and then replace it with non-Microsoft software. This completely opens the industry up to much more competition, and the companies producing the competing software will need to deliver a ''Grade A'' product to the market, or people will simply not buy it.

Everything is now in place for a stronger IT industry and a healthier economy. I support this settlement because it looks out for everyone's best interests. Thank you.

Sincerely,

Matthew Alfieri

MTC–00029714

January 27, 2002
Renata Hesse
Trial Attorney
Anti-Trust Division
U.S. Department of Justice
601 D St., NVV
Suite 1200
Washington, DC 20530
Dear Ms. Hesse:

I appreciate the opportunity to voice my opinion on the proposed settlement before you in the Microsoft antitrust lawsuit.

As a Kirkwood community college computer instructor, I have the opportunity to teach the Microsoft Office suite to my students. I have seen first-hand the advances Microsoft has made in the software industry. Everyday, my students learn more about how to harness technology and use it to their advantage to work more efficiently.

Microsoft changed the way America, and the world for that matter, does business. As I understand it, most of the world's computer users work on Microsoft's Windows software. That is truly an amazing accomplishment. Success on that scale only comes when a company continues to produce an outstanding product year in and year out.

I urge you to accept the settlement before you on behalf of all taxpayers. Too much time and too many resources have been spent trying to tear down a company that has enriched our national economy and aided businesses worldwide. Enough is enough.

Sincerely,

Marie Schulte

MTC–00029715

Leonard R. Beard
841 East 12th Street
Crowley, La. 70526
(337) 781–2317
January 28,2002
Renata Heese
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington DC 20530
FAX: 202–616–9937
RE: Settlement of U.S. v. Microsoft

Nearly 30 million dollars in taxpayer funds have been spent on this case. The time and expense of this case combined with the uncertainty it has led to in the technology sector leads me to believe that now is time that we settle this case.

I do appreciate the government's efforts in protecting consumers. The settlement is appropriate in scope because it addresses only those items upheld by the courts and it provides for close monitoring of future Microsoft operations.

Let's get the technology companies back to competing, which will help consumers and our economy. Thanks for considering my views on this matter.

Sincerely,

Leonard Beard

MTC–00029716

STEPHEN J. OATS 1
WILLIAM M. HUDSON, III 1,2
HENRY ST. PAUL PROVOSTY 1
EDGAR D. GANKENDORFY 1
KENNETH M. HENKE
CLIFTON O. BINGHAM, JR. 3
PATRICK B. MCINTIRE
LAWRENCE E. MARINO 2
HENRY A. HERNAKD. JR.
CRAIG T. BROUSSARD
MICRHELLE K. BUFORD
WALTER R. WELLENREITER
ROBIN L. JONES
CHRISTOPHE B. SZAPARY
ANDREW D. RENTON
OF COUNSEL
OSCAR E. KEED, JR.
VICTORIA A. GUIDRY
STANLEV. B. BLACKSTONE 1.3
CHRIS M. TREPAGNIER 1
OATS & HUDSON
ATTORNEYS AND COUNSELORS AT LAW
A PARTNERSHIP OF PROFESSIONAL CORPORATIONS
SUITE 400
GORDON SQUARE
100 EAST VERMILION STREET
LAFAYETTE, LOUISIANA 70501
TELEPHONE (337) 233–1100
FACSIMILE (337) 233–1178
cbroussard@oatshudson.com
January 27, 2002
SUITE 200
530 NATCHEZ STREET
NEW ORLEANS, LOUISIANA 70130
TELEPHONE (504) 527–0960
FACSIMILE (504) 524–2823
SUITE 200
BELISLE BUILDING
350 THTRD STREET
BATON ROUGE, LOISTANA 70801
TELEPHONE (225) 383–9993
FACSIMILE (225) 383–6993
1 PROFESSIONALIAW CORPORATION
2 ALSO ADMHTTD IN TEYAS
3 BOARD C??TIFIED TAX AT??
TO: Renata Heese, Esq.
FROM: Craig T. Broussard
FAX NO.: 202–616–9937
HARD COPY SENT: No
RE: U.S. v. Microsoft
OUR FILE: FE
TOTAL NO. OF PAGES (INCLUDING COVER SHEET): 2
MESSAGE: Please see the attached.

If you experience any problems with this transmission, please call Dina at the telephone number listed above.

STEPHEN J. OATS''
WILLIAM M. HUDSON, III??
HENRY ST. PAUL PROVOSTY 1
EDOAR D. GANKENDORPP 1
KENNETH M. HBNKB 1
CLIFTON O. BINGHAM. JR. 1
PATRICK B. MCINTIHB
LAWRENCE E. MARINO??
HENHY A. BERNARD, JR.
CRAIG T. BROUSSARD
MICHELLB K. BUFORD
WALTER R. WELLBNREITER
ROBIN L. JONES
CHRISTOPHE B. SZAPARY
OP COUNSBL
OSCAR B. REED, JR.
STANLEY B. BLACKSTONE 1,2
VICTOHIA A. GUIDRY
CHRIS M. TREPAONIRR 1
OATS HUDSON
ATTORNEYS AND COUNSELORS AT LAW
A PARTNERSHIP OP PROFESSIONAL CORPORATIONS
SUITE 400
GORDON SQUARE
100 EAST VERMILJON STREET
LAFAYETTE, LOUISIANA 70501
TELEPHONE (337) 233–1100
FACSIMILE (337) 233–1178
January 22, 2002
SUITE 200
530 NATCHEZ STREET
NEW ORLEANS, LOUISIANA 70130
TELEPHONE (004) 527–0960
FACSIMILE (504) 524–2823
SUITE 200
BELISLE BUILDING
350 THIRD STREET
BATON ROUGE. LOUISIANA 70801
TELEPHONE (220) 383–9993
FACSIMILE (225) 383–0993
1 PROFESSIONAL LAW CORPORATION
2 ALSO ADMITTED IN TEXAS

3 BOARD CERTIFICD TAX ATTORNEY
Renata Heese
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington DC 20530
FAX: 202–616–9937
RE: Settlement of U.S. v. Microsoft

I am of the opinion that it is in the best interest of consumers and all involved that this case be settled once and for all.

It is my understanding that the settlement addresses the findings of the court and provides for future operations by Microsoft that will avoid any monopolistic practices. That is good news for all parties.

The bottom line is that enough tax dollars have been spent in this effort and now is the time for our technology companies to return to the marketplace battlefield. That would be the best news for consumers and our economy.

I appreciate your consideration of my views on this matter.

Sincerely,

MTC–00029717

ATTN: Ms. Renata B. Hesse (DOJ)
202–307–1454

Ms. Renata,

This note is to inform you & the Dos that I love support the Microsoft Settlement. Please ''Approve the Microsoft Settlement''.

Thank you
MR & Mrs K. Ni??henke
K. Ni??

MTC–00029718

January 28th, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax 202–616–9937
microsoft.atr@usdoc.gov

Dear Ms. Hesse:

As a co-owner of medium size construction company in central Missouri, I have observed the Microsoft lawsuit from the beginning. It appears to me from the press that this case has come full circle and now is the time settle. Based upon my review of the summary of the lawsuit it would appear that the Department of Justice has garnered a fair compromise with Microsoft. While I cannot specifically defend the software glant's business practices, I remain skeptical that this case should have been dismissed some time ago.

Now is the time to settle the case against Microsoft. Thank for allowing me to offer my opinion.

Sincerely,
Chris Hentges

MTC–00029719

Mr. Kenneth Cordon
821 W. Walnut Street
Chanute, KS 66720
January 17, 2002
U.S. Department of Justice
Anti-Trust Department
Attn: Renata Hesse
601 ''D'' Street NW, Ste. 1200
Washington, DC 20530

Dear Judge Hesse:

I am writing to take advantage of the opportunity for the public to express its opinion regarding the anti-trust lawsuit filed against Microsoft. Thank you for making this opportunity available. I believe that the entire basis for suing Microsoft in the first place was flawed. The argument posed by Janet Reno was that Microsoft was engaging in monopolistic practices which were detrimental to the buying public. And yet, Correct me if I'm wrong, but haven't the prices of computers and software been falling? Isn't the definition of a monopoly a company that shuts out its competitors so it can raise prices? That just doesn't make sense.

I hope you'll agree with President Bush that winding up this lawsuit is the right thing to do. It's been going on too long already.

Thanks for letting me comment.

Very truly yours,
Mr. Kenneth Cordon

MTC–00029720

Coastal Equipment Corporation
PO Box 1118
Portland Maine 04104
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am in support of the Microsoft antitrust settlement agreement. The lawsuit has ensued for three years now. Continuing the litigation will only amount to an incredible waste of resources. Settling is in everyone's best interest.

If antitrust laws have been violated, steps should be taken to ensure no further violations occur. The settlement agreement should provide the appropriate safeguards. The agreement provides for the creation of a technical review committee that will monitor Microsoft's business practices. The review committee will also field complaints from parties who believe the settlement agreement is not complied with.

Microsoft has agreed to disclose portions of its code to its competitors. I do not agree that Microsoft should be forced to give away what it has worked hard at developing. However, if Microsoft is agreeable to this concession,. I would support that decision in the interest of resolving this case and moving on to other endeavors.

Your efforts toward resolving this lawsuit are appreciated. Thank you for your time m reviewing my thoughts on this matter.

Sincerely,
Mark Goldstein

MTC–00029721

1425 Bella Vista Avenue
Coral Gables, Florida 33156
January 5, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I was happy to hear of the recent settlement regarding the Microsoft antitrust suit. During these times of recession, it is important to allow our industry to continue to develop. Holding the IT sector back, by dragging out the negotiation process, can only hold back our technology industry. Let us allow the IT sector to get back to business.

Not only do the terms of this agreement promote the competitive process, but they also open up avenues of development on both sides of the fence. Although Microsoft has made an overwhelming number of concessions, they are still able to prosper somewhat. The other software manufacturers have been given many new options with regard to licensing, marketing and new avenues in running non-Microsoft software. All parties involved are ready to move forward and get back to business. By thwarting this process, we only hold up the advancement of the 1T sector and our economy in general.

Let us help our economy move forward by supporting our 1T sector. The competitive market is a global one, and we need to work together to keep our piece of the pie. Help us to move this settlement along, by making sure that no more action is taken against it.
I thank you for your help

Sincerely,
Maria Brito

MTC–00029722

Oilfield Services
Schlumberger-Doll Research
36 Old Quarry Road
Ridgefield, CT 06877–4108
Tel: 203 431–5000
Fax: 203 438–3819
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
January 25, 2002

Dear Mr. Ashcroft:

I am writing to voice my opinion on the antitrust case settlement between the US department of Justice and Microsoft. I am glad to see that there will soon be an end to this lawsuit. It has been a waste of our government's resources and our tax dollars. Does the government want to be responsible for an Enron-type business failure? They need to end this case immediately so that we can all move on with our lives.

I am a Research Scientist and use Microsoft products all the time for my work. Their company has been responsible for the advent of our computer industry, as we know it. They have also created tremendous growth in our economy and have put our nation ahead in the technology race. The proposed settlement is a very fair compromise and should be enacted at once. Microsoft is going to share an unprecedented amount of technology information with their competitors and they will give consumers more choices by allowing OEM's to install non-Microsoft products on Windows.

Please use your influence to implement the settlement as soon as possible. Thank you for your time.

Sincerely,
Chung Chang

MTC–00029723

16112 E 28th Terr. #1806

Independence, MO 64055
January 27, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I was pleased to learn that the Justice Department has reached a proposed settlement agreement in the Microsoft litigation.

You now have the opportunity to clean up the mess created by your predecessor. Microsoft was the target of this litigation because of its size and because of its great degree of success. Your implementation of this settlement will bring an end to the political witch-hunt. Microsoft has placed a number of concrete proposals on the table to resolve the case. They have agreed to changes in almost every aspect of their business operations, from pricing, to distribution, to system design. These changes, if implemented, should provide additional competitive opportunities for Microsoft's competitors and more choice for computer users. Please go forward with the settlement and let Microsoft get back to business.

Sincerely,
Ben Kormanik

MTC–00029725

(708) 547.5969
DESSERT SPECIALISTS
FAX (708) 547–5974
lezza@ameritech.net
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to you to express my belief that the antitrust lawsuit against Microsoft should be concluded. The settlement reached in November 2001, should be accepted by the Justice Department.

Microsoft has offered very generous terms includes full access to the Windows system for rival software developers. Never before has a company had to offer its competitors the right to use its own information against itself. This is a legal first and will allow rival developers the chance to drastically improve their own software. The economy and the country need a strong American company, like Microsoft, to help us through these trying times A lawsuit against Microsoft does nothing but damage our economy, and our country. Please take this opportunity to put an end to this suit. Thank you.

Sincerely,
Ed Lezza

MTC–00029726

S&D SALES COMPANY, INC.
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am in favor of the Microsoft settlement for the following reasons:

Microsoft has agreed to a number of changes in its business that result in greater competition and growing consumer choice:

. Adoption of a Uniform Price List under which Microsoft will market Windows on identical terms and conditions to computer makers.

. Revising agreements which would allow third parties to distribute products other than those manufactured by Microsoft.

. Granting rights to computer makers to reconfigure Windows systems so as to allow the placement of non-Microsoft programs within Windows.

I would rather see this case concluded now with a predictable result than see you roll the dice in Court. The Bill Clinton Department of Justice instigated this unnecessary case. Government at its worst caused the subsequent decline in the technology side of the economy. Please do not jeopardize the fragile business rebirth that the U.S. is going through by extending this case.

Thank you for reviewing my comments.

Sincerely,
Dennis Lange
Excellence In Bulk Material Handing
2965 Flowers Road South, Suite 110
. Atlanta, Georgia 30341–5520
. 770–936–8836
. Fax 770–936–8846 . 800–878–4419
URL: http://www. sdsales.com
e-mail: info@sdsales.com

MTC–00029727

JFERRY WALLACE
708 W. Main Street
Cherryvale, KS 67335
January 21, 2002
Judge Kollar Kottely
Attention: Renata Hesse
U.S. Department of Justice, Antitrust Division
601 D Street, NW, Suite 1200
Washington, DC 20530

Dear Judge Kollar Kottely:

Those lobbying for stricter regulations against Microsoft had better be careful what they wish for. I seriously doubt that they wish to operate under the same level of scrutiny themselves. Contrary to the claims of the antitrust suit, Microsoft has done nothing but benefit the consumer in terms of providing better, more innovative products at affordable prices.

I ask you to accept the current settlement offer, concluding this questionable lawsuit. Settlement of the suit will definitely crimp Microsoft to some extent, but the fact remains that the consumer will still choose the products they prefer. The only fair way that AOL, Oracle, and other Microsoft competitors can knock off Microsoft's top spot is to truly offer a better product, Hopefully this lawsuit will spur an investigation of the underlying issue, current antitrust law, and how this law does or does not apply to modem day business.

Sincerely,
Jerry Wallace

MTC–00029728

1111 Harbor Lane
Gulf Breeze, FL 32563
January 27, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am disgusted that the government has so little to do with its time that it can waste nearly four years pro-suing the Microsoft antitrust case. I hoped that the economy, which has been suffering ever since this case began, would have the chance to recover. Microsoft's opponents have kept after Microsoft for so long. It is truly becoming tedious.

The settlement provides Microsoft's competitors with the opportunity to use Microsoft's technological advances to their own advantage, in order to restore an atmosphere of fair competition to the technology market. For example, Microsoft will reformat future versions of Windows so that its competitors will have the opportunity to introduce their own software directly into the Windows operating system. Microsoft will also allow computer makers the ability to replace Microsoft programs in Windows with non-Microsoft alternatives.

The settlement is fine; in fact, I think it would be harm tiff to the consumer to extend litigation any longer. The suit is no longer about progress; it is about inhibition. America desperately needs to be able to progress. I urge you and your office to take the necessary action to see this settlement finalized.

Sincerely,
Edwin Barksdale
cc: Representative Jefferson Miller

MTC–00029729

TRUEWATER
January 15, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

There has been enough posturing on both sides of this Microsoft lawsuit to make a flock of peacocks jealous, and more confusion than a chicken running around with its head cut off. It is clear that any further litigation would only make matters worse.

I am writing to lend my individual support for this settlement. I believe that its terms are reasonably fair for both sides. They make sure that Microsoft avoids its allegedly unfair retaliation practices to software makers, such as attaching software to Windows. It will also be required to change future versions of Windows to accommodate other brands of software more effectively.

I am hoping that no further federal action will be necessary, and that this sort of rancor can be minimized in the future.

Sincerely,
Christopher Britt
Cc: Representative Sheila Jackson Lee

MTC–00029730

1901 Empire Drive
Waukesha, WI 53186
January 27, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

Now that a settlement has been reached in the Microsoft case, I would like to confirm

my support behind the terms negotiated and allowing this action to be completed. As a technology consultant, I am fully aware that Microsoft has overstepped its bounds in some respects in the past, yet this lawsuit has gone beyond what any reasonable person would consider worth the price in government time and money. A deal is a deal and it's time to put this issue to rest. There is ample competition to Microsoft and many ''disruptive technologies'' emerging that will change the balance of market dominance.

Microsoft is a great success story that is being punished, rather than lauded, for its achievements in the software industry. To suggest a break up would be an injustice to entrepreneurs everywhere who want to create the best products and services possible for their customers. This compromise offers significant concessions to how Microsoft can freely do business and should be considered a credible good faith gesture to allowing more competition.

Considering the greater freedoms for computer makers to configure Windows without question and developers to utilize Windows technology for their own interests, this deal should pass the approval process at once. This is the fairest solution possible among these parties, and also the most practical one, considering the need for stability, in this dicey economic climate. Please halt any further action.

Sincerely,

Phil Mattson

MTC–00029731

FLAMINGO TOURS
4230 S. E. 6TH Street
Miami, Florida 33134
[305] 445–6865
January 22, 2002
Hon. Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
c/o Renata B. Hesse Antitrust Division
U.S. Department of Justice
601 D Street, N. W. Suite 1200
Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

The recent proposed settlement between the Department of Justice and Microsoft fails to put an end to Microsoft's predatory practices. The final settlement in U.S. v. Microsoft does not adequately protect competition and innovation in this vital sector of our economy, does not sufficiently address consumer choice, and falls to meet the standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia. Its enforcement provisions are vague and unenforceable. The five-year time frame of the proposed settlement is far too short to deal with the antitrust abuses of a company that has maintained and expanded its monopoly power through years of fear and intimidation.

Microsoft's liability under the antitrust laws is no longer open for debate. The company has been found liable before the District Court, lost its appeal to the United States Court of Appeals for the District of Columbia in a 7–0 decision, saw its petition for rehearing in the appellate court denied, and had its appeal to the Supreme Court turned down. The courts have decided that Microsoft possesses monopoly power and has used that power unlawfully to protect its monopoly. The next step is to find a remedy that meets the appellate court's standard to ''terminate the monopoly, deny to Microsoft the fruits of its past statutory violations, and prevent any future anticompetitive activity.'' This proposed settlement fails to do so. In fact, the weak settlement between Microsoft and the Department of Justice ignores key aspects of the Court of Appeals ruling against Microsoft. The decision gives Microsoft ''sole discretion'' to unilaterally determine that other products or services which don't have anything to do with operating a computer are nevertheless part of a Windows Operating System product. The deal fails to terminate the Microsoft monopoly, and, instead, guarantees its survival.

The flawed settlement empowers Microsoft to retaliate against would-be competitors, take the intellectual property of competitors doing business with it and permits Microsoft to define many key terms, which is unprecedented in any law enforcement proceeding.

In addition, the proposed settlement contains far too many strong-sounding provisions that are fiddled with loopholes. The agreement requires Microsoft to share certain technical information with other companies. However, Microsoft is under no obligation to share information if that disclosure would harm the company's security or software licensing. Who gets to decide whether such harm might occur? Microsoft. The settlement says that Microsoft ''shall not enter into any agreement'' to pay a software vendor not to develop or distribute software that would compete with Microsoft's products. However, another provision permits those payments and deals when they are ''reasonably necessary.'' The ultimate arbiter of when these deals would be ''reasonably necessary?'' Microsoft.

Furthermore, the weak enforcement provisions of this proposed deal leave Microsoft free to do practically whatever it wants. The company appoints half the members of its overseeing committee and has the ability to violate regulations, knowing that whatever the committee finds inappropriate is not admissible in court. Finally, Microsoft must only comply with the lenient restrictions in the agreement for only five years. This is clearly not long enough for a company found guilty of violating antitrust laws.

Sadly, the proposed final judgment has the potential to make the competitive landscape of the software industry worse, it contains so many ambiguities and loopholes that it may be unenforceable and will likely lead to years of additional litigation. Various industry experts from such institutions such as Morgan Stanley, the Harvard Business School, Schwab Capital Markets, and Prudential Financial have been quoted as saying that this settlement is beneficial to Microsoft's current monopolistic intentions.

Antitrust law has protected free markets and enhanced consumer welfare in this country for more than a century. The Microsoft case does not represent a novel application of the law, but is the kind of standard antitrust enforcement action that could ensure vigorous competition in all sectors of today's economy. These same standards have been applied to monopolies in the past, such as Standard Oil and AT&T. Court decisions to break up these monopolies led to prices declining as much as 70% and an increase in competition-driven innovation.

The end result is that Microsoft is now able to preserve and reinforce its monopoly, and is also free to use anticompetitive tactics to spread its dominance into other markets. After more than 11 years of litigation and investigation against Microsoft, surely we can do better.

Thank you for your time.

Regards,

Rose Wayne

MTC–00029732

January 15, 2002
Hon. Colleen Kollar-Kotelly
U.S. District Court,
District of Columbia
c/o Renata B. Hesse Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

The recent proposed settlement between the Department of Justice and Microsoft does not put an end to Microsoft's questionable practices.

Does the final settlement in U.S. v. Microsoft adequately protect competition and innovation in this vital sector of our economy? Does it sufficiently address consumer choice and meet the standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia? These questions remain unanswered. The five-year time frame of the proposed settlement seems far too short to deal with the multiple antitrust actions of a company that has maintained and expanded its monopoly power through years of unmatched success. Microsoft's liability under the antitrust laws is no longer open for debate. The company has been found liable before the District Court, lost its appeal to the United States Court of Appeals for the District of Columbia in a 7–0 decision, saw its petition for rehearing in the appellate court denied, and had its appeal to the Supreme Court turned down. The courts have decided that Microsoft possesses monopoly power and has used that power unlawfully to protect its monopoly.

The next step is to find a remedy that meets the appellate court's standard to ''terminate the monopoly deny to Microsoft the fruits of its past statutory violations, and prevent any future anticompetitive activity.'' This proposed settlement may not be strong enough.. In fact, the settlement between Microsoft and the Department of Justice seems to ignore key aspects of the Court of Appeals ruling against Microsoft. The decision as it stands gives Microsoft ''sole discretion'' to unilaterally determine that other products or services which don't have anything to do with operating a computer are nevertheless part of a Windows Operating System product, thus failing to terminate Microsoft's standing position in the market.

The settlement allows Microsoft to retaliate against would-be competitors, take the intellectual property of competitors doing business with it and permits Microsoft to define many key terms, which is unprecedented in any law enforcement proceeding.

In addition, the proposed settlement contains far too many strong-sounding provisions that are riddled with loopholes. The agreement requires Microsoft to share certain technical information with other companies. However, Microsoft is under no obligation to share information if that disclosure would ham the company's security or software licensing. The question is, who gets to decide whether such harm might occur? The settlement says that Microsoft ''shall not enter into any agreement'' to pay a software vendor not to develop or distribute software that would compete with Microsoft's products. However, another provision permits those payments and deals when they are ''reasonably necessary.'' The ultimate arbiter of when these deals would be ''reasonably necessary?'' Microsoft.

Furthermore, the provisions in this proposed deal may create a scenario in which Microsoft has too much freedom. The company appoints half the members of its overseeing committee and has the ability to violate regulations, knowing that whatever the committee finds inappropriate is not admissible in court. Finally, Microsoft must only comply with the lenient restrictions in the agreement for only five years. This is clearly not long enough for a company found guilty of violating antitrust law.

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The end result is that Microsoft may still be able to preserve and reinforce its predominance. After more than 11 years of litigation and investigation against Microsoft, I eagerly await what is to be the final outcome.

Thank you for your time.
Regards,
Manolo Coroalles
President
Dupont Plaza Travel

MTC–00029733

January 15, 2002
Hon. Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
c/o Renata B. Hesse Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

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The end result is that Microsoft may still be able to preserve and reinforce its predominance. After more than 11 years of litigation and investigation against Microsoft, I eagerly await what is to be the final outcome.

Thank you for your time.
Regards,
Santiago Morales
President
MaxiForce, Inc.

MTC–00029734

January ??, 2002
Hon. Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
c/o Renata B Hesse Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC. 20503–000??

Dear Judge Kollar-Kotally

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The final settlement m?? does not adequately protect competition and ??ation in this ?? sector of our economy does not sufficiently address consumer choice and fails to meet t he standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia Its enforcement provisions are ??ague and unenforceable. The five-year time frame of the proposed settlement is far too short to deal with the antitrust abuses of a company that has maintained and expanded its monopoly power through years of fear and intimidation.

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Sadly the proposed final judgment has the potential to make the competitive landscape of the software industry worse, it contains so many ambiguities and loopholes that it may be unenforceable and will likely lead to years of additional litigation Various industry experts from such institutions as Morgan Stanley, the Harvard Business School, Schwab Capital Markets and Prudential Financial have been quoted as saying that this settlement is beneficial to Microsoft current monopolistic intentions.

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Thank you for your time.

Regards.

Juan D ??

President

??eRespondo.com. Inc

MTC–00029735

January 7, 2002

Hon. Colleen Kollar-Kotelly

U.S. District Court, District of Columbia

c/o Renata B. Hesse

Antitrust Division

U.S. Department of Justice

601 D Street NW

Suite 1200

Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

The recent proposed settlement between the Department of Justice and Microsoft fails to put an end to Microsoft's predatory practices.

The final settlement in U.S. v. Microsoft does not adequately protect competition and innovation in this vital sector of our economy, does not sufficiently address consumer choice and fails to meet the standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia. Its enforcement provisions are vague and unenforceable. The five-year time frame of the proposed settlement is far too short to deal with the antitrust abuses of a company that has maintained and expanded its monopoly power through years of fear and intimidation.

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The end result is that Microsoft is now able to preserve and reinforce its monopoly, and

is also free to use anticompetitive tactics to spread its dominance into other markets. After more than 11 years of litigation and investigation against Microsoft, surely we can do better.

Thank you for your time.

Raul Valdes-Fauli
5700 Collins AV, #9–G
Miami Beach FL 33140

MTC–00029737

THE AMERICAS-COLLECTION
PRIVATE & CORPORATE FINE ARTS DEALERS
January 7, 2002
Hon. Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
c/o Renata B. Hesse Antitrust Division
U.S. Department of Justice
601 D Street NW Suite 1200
Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

The recent proposed settlement between the Department of Justice and Microsoft fails to put an end to Microsoft's predatory practices. The final settlement in U.S. v. Microsoft does not adequately protect competition and innovation in this vital sector of our economy, does not sufficiently address consumer choice and fails to meet the standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia. Its enforcement provisions are vague and unenforceable. The five-year time frame of the proposed settlement is far too short to deal with the antitrust abuses of a company that has maintained and expanded its monopoly power through years of fear and intimidation.

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Sadly, the proposed final judgment has the potential to make the competitive landscape of the software industry worse, it contains so many ambiguities and loopholes that it may be unenforceable and will likely lead to years of additional litigation. Various industry experts from such institutions as Morgan Stanley, the Harvard Business School, Schwab Capital Markets and Prudential Financial have been quoted as saying that this settlement is beneficial to Microsoft's current monopolistic intentions.

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The end result is that Microsoft is now able to preserve and reinforce its monopoly, and is also free to use anticompetitive tactics to spread its dominance into other markets. After more than 11 years of litigation and investigation against Microsoft, surely we can do better.

Thank you for your time.

Regards,
Dora Valdes-Fauli
Director

MTC–00029738

January 18, 2002
Hon. Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
Government Relations & Public Affairs
Counselors 2350 Coral Way, Suite 301
Miami, Florida 33145
Telephone (305) 860–0780
Facsimile (305) 860–0580
c/o Renata B. Hesse Antitrust Division
U.S. Department of Justice
601 D Street NW Suite
1200 Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

The recent proposed settlement between the Department of Justice and Microsoft fails to put an end to Microsoft's predatory practices.

The final settlement in U.S. v. Microsoft does not adequately protect competition and innovation in this vital sector of our economy, does not sufficiently address consumer choice and fads to meet the standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia. Its enforcement provisions are vague and unenforceable. The five-year time frame of the proposed settlement is far too short to deal with the antitrust abuses of a company that has maintained and expanded its monopoly power through years of fear and intimidation.

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Thank you for your time.

Regards, Fausto Gomez

President

Gomez Barker Associates

MTC–00029739

January 15, 2002

Hon. Colleen Kollar-Kotelly

U.S. District Court, District of Columbia

c/o Renata B. Hesse Antitrust Division

U.S. Department of Justice

601 D Street NW

Suite 1200

Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

The recent proposed settlement between the Department of Justice and Microsoft does not put an end to Microsoft's questionable practices. Does the final settlement in U.S. v. Microsoft adequately protect competition and innovation in this vital sector of our economy? Does it sufficiently address consumer choice and meet the standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia? These questions remain unanswered. The five-year time frame of the proposed settlement seems far too short to deal with the multiple antitrust actions of a company that has maintained and expanded its monopoly power through years of unmatched success. Microsoft's liability under the antitrust laws is no longer open for debate. The company has been found liable before the District Court, lost its appeal to the United States Court of Appeals for the District of Columbia in a 7–0 decision, saw its petition for rehearing in the appellate court denied, and had its appeal to the Supreme Court turned down. The courts have decided that Microsoft possesses monopoly power and has used that power unlawfully to protect its monopoly. The next step is to find a remedy that meets the appellate court's standard to ''terminate the monopoly, deny to Microsoft the fruits of its past statutory violations, and prevent any future anticompetitive activity'' This proposed settlement may not be strong enough.. In fact, the settlement between Microsoft and the Department of Justice seems to ignore key aspects of the Court of Appeals ruling against Microsoft. The decision as it stands gives Microsoft ''sole discretion'' to unilaterally determine that other products or services which don't have anything to do with operating a computer are nevertheless part of a Windows Operating System product, thus failing to terminate Microsoft's standing position in the market.

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Furthermore, the provisions in this proposed deal may create a scenario in which Microsoft has too much freedom. The company appoints half the members of its overseeing committee and has the ability to violate regulations, knowing that whatever the committee finds inappropriate is not admissible in court. Finally, Microsoft must only comply with the lenient restrictions in the agreement for only five years. This is clearly not long enough for a company found guilty of violating antitrust law.

Various industry experts from such institutions as Morgan Stanley, the Harvard Business School, Schwab Capital Markets and Prudential Financial have been quoted as saying that this settlement is beneficial to Microsoft's current monopolistic intentions. Antitrust law has protected free markets and enhanced consumer welfare in this country for more than a century. The Microsoft case does not represent a novel application of the law, but is the kind of standard antitrust enforcement action that could ensure vigorous competition in all sectors of today's economy. These same standards have been applied to monopolies in the past, such as Standard Oil and AT&T. Court decisions to break up these monopolies led to prices declining as much as 70% and an increase in competition-driven innovation.

The end result is that Microsoft may still be able to preserve and reinforce its predominance. After more than 11 years of litigation and investigation against Microsoft, I eagerly await what is to be the final outcome.

Thank you for your time.

Regards,

Abel ?? Iglesias

828 Maria??a AV

Coral Gables FL 33134

MTC–00029740

EMS educational management services, inc.

January 18, 2002

Hon. Colleen Kollar-Kotelly

U.S. District Court, District of Columbia

c/o Renata B. Hesse Antitrust Division

U.S. Department of Justice

601 D Street NW

Suite 1200

Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

The recent proposed settlement between the Department of Justice and Microsoft fails to put an end to Microsoft's predatory practices. The final settlement in U.S. v. Microsoft does not adequately protect competition and innovation in this vital sector of our economy, does not sufficiently address consumer choice and fails to meet the standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia. Its enforcement provisions are vague and unenforceable. The five-year time frame of the proposed settlement is far too short to deal with the antitrust abuses of a company that has maintained and expanded its monopoly power through years of fear and intimidation.

Microsoft's liability under the antitrust laws is no longer open for debate. The company has been found liable before the District Court, lost its appeal to the United States Court of Appeals for the District of Columbia in a 7–0 decision, saw its petition for rehearing in the appellate court denied, and had its appeal to the Supreme Court turned down. The courts have decided that Microsoft possesses monopoly power and has used that power unlawfully to protect its monopoly. The next step is to find a remedy that meets the appellate court's standard to ''terminate the monopoly, deny to Microsoft the fruits of its past statutory violations, and prevent any future anticompetitive activity.'' This proposed settlement fails to do so. In fact, the weak settlement between Microsoft and the Department of Justice ignores key aspects of the Court of Appeals ruling against Microsoft. The decision gives Microsoft ''sole discretion'' to unilaterally determine that

other products or services which don't have anything to do with operating a computer are nevertheless part of a Windows Operating System product. The deal fails to terminate the Microsoft monopoly and, instead, guarantees its survival.

The flawed settlement empowers Microsoft to retaliate against would-be competitors, take the intellectual property of competitors doing business with it and permits Microsoft to define many key terms, which is unprecedented in any law enforcement proceeding.

In addition, the proposed settlement contains far too many strong-sounding provisions that are fiddled with loopholes. The agreement requires Microsoft to share certain technical information with other companies. However, Microsoft is under no obligation to share information if that disclosure would harm the company's security or software licensing. Who gets to decide whether such harm might occur? Microsoft. The settlement says that Microsoft ''shall not enter into any agreement'' to pay a software vendor not to develop or distribute software that would compete with Microsoft's products. However, another provision permits those payments and deals when they are ''reasonably necessary.'' The ultimate arbiter of when these deals would be ''reasonably necessary?'' Microsoft.

Furthermore, the weak enforcement provisions in this proposed deal leave Microsoft free to do practically whatever it wants. The company appoints half the members of its overseeing committee and has the ability to violate regulations, knowing that whatever the committee finds inappropriate is not admissible in court. Finally, Microsoft must only comply with the lenient restrictions in the agreement for only five years. This is clearly not long enough for a company found guilty of violating antitrust law.

Sadly, the proposed final judgment has the potential to make the competitive landscape of the software industry worse, it contains so many ambiguities and loopholes that it may be unenforceable and will likely lead to years of additional litigation. Antitrust law has protected free markets and enhanced consumer welfare in this country for more than a century. The Microsoft case does not represent a novel application of the law, but is the kind of standard antitrust enforcement action that could ensure vigorous competition in all sectors of today's economy. These same standards have been applied to monopolies in the past, such as Standard Oil and AT&T. Court decisions to break up these monopolies led to prices declining as much as 70% and an increase in competition-driven innovation.

The end result is that Microsoft is now able to preserve and reinforce its monopoly, and is also free to use anticompetitive tactics to spread its dominance into other markets. After more than 11 years of litigation and investigation against Microsoft, surely we can do better.

Regards,
Esther Tellechea
President
Educational Management Services

MTC–00029741

January 7, 2002
Hon. Colleen Kollar-Kotelly
U.S. District Court,
District of Columbia
c/o Renata B. Hesse Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

The recent proposed settlement between the Department of Justice and Microsoft fails to put an end to Microsoft's predatory practices.

The final settlement in U.S. v. Microsoft does not adequate protect competition and innovation in this vital sector of our economy, does not sufficiently address consumer choice and fails to meet the standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia. Its enforcement provisions are vague and unenforceable. The five-year time frame of the proposed settlement is far too short to deal with the antitrust abuses of a company that has maintained and expanded its monopoly power through years of fear and intimidation.

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That you for your time.
Regards,
Janet M. Perez
Commercial Services Department
Italy-America Chamber of Commerce Southeast, Inc.

MTC–00029742

January 15, 2002
Hon. Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
c/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

The recent proposed settlement between the Department of Justice and Microsoft fails to put an end to Microsoft's predatory practices.

The final settlement in U.S. v. Microsoft does not adequately protect competition and

innovation in this vital sector of our economy, does not sufficiently address consumer choice and fails to meet the standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia. Its enforcement provisions are vague and unenforceable. The five-year time frame of the proposed settlement is far too short to deal with the antitrust abuses of a company that has maintained and expanded its monopoly power through years of fear and intimidation.

Microsoft's liability under the antitrust laws is no longer open for debate. The company has been found liable before the District Court, lost its appeal to the United States Court of Appeals for the District of Columbia in a 7–0 decision, saw its petition for reheating in the appellate court denied, and had its appeal to the Supreme court turned down. The courts have decided that Microsoft possesses monopoly power and has used that power unlawfully to protect its monopoly. The next step is to find a remedy that meets the appellate court's standard to ''terminate the monopoly, deny to Microsoft the fruits of its past statutory violations, and prevent any future anticompetitive activity.'' The proposed settlement fails to do so. In fact, the weak settlement between Microsoft and the Department of Rustic ignores key aspects of the Court of Appeals ruling against Microsoft. The decision gives Microsoft ''sole discretion'' to unilaterally determine that other products or services which don't have anything to do with operating a computer are nevertheless part of a Windows Operating System product. The deal fails to terminate the Microsoft monopoly and, instead, guarantees its survival.

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That you for your time.

Regards,

Jose Gutierrez

Commercial Broker

MTC–00029743

January 17, 2002

Hon. Colleen Kollar-Kotelly

U.S. District Court, District of Columbia

c/o Renata B. Hesse

Antitrust Division

U.S. Department of Justice

601 D Street NW

Suite 1200

Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

The recent proposed settlement between the Department of Justice and Microsoft fails to put an end to Microsoft's predatory practices. The final settlement in U.S. v. Microsoft does not adequately protect competition and innovation in this vital sector of our economy, does not sufficiently address consumer choice and fails to meet the standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia. Its enforcement provisions are vague and unenforceable. The five-year time frame of the proposed settlement is far too short to deal with the antitrust abuses of a company that has maintained and expanded its monopoly power through years of fear and intimidation. Microsoft's liability under the antitrust laws is no longer open for debate. The company has been found liable before the District Court, lost its appeal to the United States Court of Appeals for the District of Columbia in a 7–0 decision, saw its petition for reheating in the appellate court defiled, and had its appeal to the Supreme Court turned down. The courts have decided that Microsoft possesses monopoly power and has used that power unlawfully to protect its monopoly.

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Thank you for your time.

Regards,
Martin Mendiola
Presient

MTC–00029744

January 7, 2002
Hon. Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
c/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

The recent proposed settlement between the Department of Justice and Microsoft fails to put an end to Microsoft's predatory practices. The final settlement in U.S. v. Microsoft does not adequately protect competition and innovation in this vital sector of our economy, does not sufficiently address consumer choice and fails to meet the standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia. Its enforcement provisions are vague and unenforceable. The five-year time frame of the proposed settlement is far too short to deal with the antitrust abuses of a company that has maintained and expanded its monopoly power through years of fear and intimidation.

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Sadly, the proposed final judgment has the potential to make the competitive landscape of the software industry worse, it contains so many ambiguities and loopholes that it may be unenforceable and will likely lead to years of additional litigation. Various industry experts from such institutions as Morgan Stanley, the Harvard Business School, Schwab Capital Markets and Prudential Financial have been quoted as saying that this settlement is beneficial to Microsoft's current monopolistic intentions.

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Thank you for your time.
Regards,
Lourdes Castro

MTC–00029745

January 14, 2002
Vincent Import & Export, Inc.
751 North Greenway,
Coral Gables, FL
Hon. Colleen Kollar-Kotelly
U.S. District Court,
District of Columbia
c/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

The recent proposed settlement between the Department of Justice and Microsoft fails to put an end to Microsoft's predatory practices.

The final settlement in U.S. v. Microsoft does not adequately protect competition and innovation in this vital sector of our economy, does not sufficiently address consumer choice and fails to meet the standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia. Its enforcement provisions are vague and unenforceable. The five-year time frame of the proposed settlement is far too short to deal with the antitrust abuses of a company that has maintained and expanded its monopoly power through years of fear and intimidation.

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In addition, the proposed settlement contains far too many strong-sounding provisions that are fiddled with loopholes. The agreement requires Microsoft to share certain technical information with other companies. However, Microsoft is under no obligation to share information if that disclosure would harm the company's security or software licensing. Who gets to decide whether such harm might occur? Microsoft. The settlement says that Microsoft ''shall not enter into any agreement'' to pay a software vendor not to develop or distribute software that would compete with Microsoft's products. However, another provision permits those payments and deals when they are ''reasonably necessary.'' The ultimate arbiter of when these deals would be ''reasonably necessary?'' Microsoft.

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the ability to violate regulations, knowing that whatever the committee finds inappropriate is not admissible in court. Finally, Microsoft must only comply with the lenient restrictions in the agreement for only five years. This is clearly not long enough for a company found guilty of violating antitrust law.

Sadly, the proposed final judgment has the potential to make the competitive landscape of the software industry worse, it contains so many ambiguities and loopholes that it may be unenforceable and will likely lead to years of additional litigation. Various industry experts from such institutions as Morgan Stanley, the Harvard Business School, Schwab Capital Markets and Prudential Financial have been quoted as saying that this settlement is beneficial to Microsoft's current monopolistic intentions.

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Thank you for your time.

Regards,

Francia Quijada

President

Vincent Import & Export, Inc.

MTC–00029746

January 14, 2002
Hon. Colleen Kollar-Kotelly
U.S. District Court,
District of Columbia
c/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

The recent proposed settlement between the Department of Justice and Microsoft fails to put an end to Microsoft's predatory practices.

The final settlement in U.S. v. Microsoft does not adequately protect competition and innovation in this vital sector of our economy, does not sufficiently address consumer choice and fails to meet the standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia. Its enforcement provisions are vague and unenforceable. The five-year time frame of the proposed settlement is far too short to deal with the antitrust abuses of a company that has maintained and expanded its monopoly power through years of fear and intimidation.

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Thank you for your time.

Regards,

Daniel Guiterras

Owner

The Globe

MTC–00029747

January 22, 2002
Hon. Colleen Kollar-Kotelly
U.S. District Court,
District of Columbia
c/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street, N. W.
Suite 1200
Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

The recent proposed settlement between the Department of Justice and Microsoft fails to put an end to Microsoft's predatory practices. The final settlement in U.S. v. Microsoft does not adequately protect competition and choice, and fails to meet the standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia. Its enforcement provisions are vague and unenforceable. The five-year time frame of the proposed settlement is far too short to deal with the antitrust abuses of a company that has maintained and expanded its monopoly power through years of fear and intimidation.

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Furthermore, the weak enforcement provisions of this proposed deal leave Microsoft free to do practically whatever it wants. The company appoints half the members of its overseeing committee and has the ability to violate regulations, knowing that whatever the committee finds inappropriate is not admissible in court. Finally, Microsoft must only comply with the lenient restrictions in the agreement for only five years. This is clearly not long enough for a company found guilty of violating antitrust laws.

Sadly, the proposed final judgment has the potential to make the competitive landscape of the software industry worse, it contains so many ambiguities and loopholes that it may be unenforceable and will likely lead to years of additional litigation. Various industry experts from such institutions such as Morgan Stanley, the Harvard Business School, Schwab Capital Markets, and Prudential Financial have been quoted as saying that this settlement is beneficial to Microsoft's current monopolistic intentions.

Antitrust law has protected free markets and enhanced consumer welfare in this country for more than a century. The Microsoft case does not represent a novel application of the law, but is the kind of standard antitrust enforcement action that could ensure vigorous competition in all sectors of today's economy. These same standards have been applied to monopolies in the past, such as Standard Oil and AT&T. Court decisions to break up these monopolies led to prices declining as much as 70% and an increase in competition-driven innovation. The end result is that Microsoft is now able to preserve and reinforce its monopoly, and is also free to use anticompetitive tactics to spread its dominance into other markets. After more than 11 years of litigation and investigation against Microsoft, surely we can do better.

Thank you for your time.

Regards,

Alina Lopez-Centellas

Vice President

MTC–00029748

January 15, 2002
Hon. Colleen Kollar-Kotelly
U.S. District Court,
District of Columbia
c/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

The recent proposed settlement between the Department of Justice and Microsoft does not put an end to Microsoft's questionable practices. Does the final settlement in U.S. v. Microsoft adequately protect competition and innovation in this vital sector of our economy? Does it sufficiently address consumer choice and meet the standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia? These questions remain unanswered. The five-year time frame of the proposed settlement is far too short to deal with the antitrust actions of a company that has maintained and expanded its monopoly power through years of unmatched success. Microsoft's liability under the antitrust laws is no longer open for debate. The company has been found liable before the District Court, lost its appeal to the United States Court of Appeals for the District of Columbia in a 7–0 decision, saw its petition for reheating in the appellate court denied, and had its appeal to the Supreme Court turned down. The courts have decided that Microsoft possesses monopoly power and has used that power unlawfully to protect its monopoly. The next step is to find a remedy that meets the appellate court's standard to ''terminate the monopoly, deny to Microsoft the fruits of its past statutory violations, and prevent any future anticompetitive activity.'' This proposed settlement may not be strong enough.. In fact, the settlement between Microsoft and the Department of Justice ignores key aspects of the Court of Appeals ruling against Microsoft. The decision gives Microsoft ''sole discretion'' to unilaterally determine that other products or services which don't have anything to do with operating a computer are nevertheless part of a Windows Operating System product. The deal fails to terminate the Microsoft monopoly and, instead, guarantees its survival.

The settlement empowers Microsoft to retaliate against would-be competitors, take the intellectual property of competitors doing business with it and permits Microsoft to define many key terms, which is unprecedented in any law enforcement proceeding.

In addition, the proposed settlement contains far too many strong-sounding provisions that are fiddled with loopholes. The agreement requires Microsoft to share certain technical information with other companies. However, Microsoft is under no obligation to share information if that disclosure would harm the company's security or soft-ware licensing. Who gets to decide whether such harm might occur? Microsoft. The settlement says that Microsoft ''shall not enter into any agreement'' to pay a software vendor not to develop or distribute software that would compete with Microsoft's products. However, another provision permits those payments and deals when they are ''reasonably necessary.'' The ultimate arbiter of when these deals would be ''reasonably necessary'' Microsoft.

Furthermore, the provisions in this proposed deal leave Microsoft free to do practically whatever it wants. The company appoints half the members of its overseeing committee and has the ability to violate regulations, knowing that whatever the committee finds inappropriate is not admissible in court. Finally, Microsoft must only comply with the lenient restrictions in the agreement for only five years. This is clearly not long enough for a company found guilty of violating antitrust law.

Various industry experts from such institutions as Morgan Stanley, the Harvard Business School, Schwab Capital Markets and Prudential Financial have been quoted as saying that this settlement is beneficial to Microsoft's current monopolistic intentions.

Antitrust law has protected free markets and enhanced consumer welfare in this country for more than a century. The Microsoft case does not represent a novel application of the law, but is the kind of standard antitrust enforcement action that could ensure vigorous competition in all sectors of today's economy. These same standards have been applied to monopolies in the past, such as Standard Oil and AT&T. Court decisions to break up these monopolies led to prices declining as much as 70% and an increase in competition-driven innovation.

The end result is that Microsoft may still be able to preserve and reinforce its monopoly, After more than 11 years of litigation and investigation against Microsoft, I eagerly await what is to be the final outcome.

Thank you for your time.

Regards,

K. William Leffland

Past Dean

Florida International University

MTC–00029749

January 15, 2002
Hon. Colleen Kollar-Kotelly
U.S. District Court,
District of Columbia
c/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

The recent proposed settlement between the Department of Justice and Microsoft does not put an end to Microsoft's questionable practices.

Does the final settlement in U.S. v. Microsoft adequately protect competition and

innovation in this vital sector of our economy? Does it sufficiently address consumer choice and meet the standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia? These questions remain unanswered. The five-year time frame of the proposed settlement seems far too short to deal with the multiple antitrust actions of a company that has maintained and expanded its monopoly power through years of unmatched success. Microsoft's liability under the antitrust laws is no longer open for debate. The company has been found liable before the District Court, lost its appeal to the United States Court of Appeals for the District of Columbia in a 7–0 decision, saw its petition for reheating in the appellate court denied, and had its appeal to the Supreme Court turned down. The courts have decided that Microsoft possesses monopoly power and has used that power unlawfully to protect its monopoly. The next step is to find a remedy that meets the appellate court's standard to ''terminate the monopoly, deny to Microsoft the fruits of its past statutory violations, and prevent any future anticompetitive activity.'' This proposed settlement may not be strong enough.. In fact, the settlement between Microsoft and the Department of Justice seems to ignore key aspects of the Court of Appeals ruling against Microsoft. The decision as it stands gives Microsoft ''sole discretion'' to unilaterally determine that other products or services which don't have anything to do with operating a computer are nevertheless part of a Windows Operating System product, thus falling to terminate Microsoft's standing position in the market.

The settlement allows Microsoft to retaliate against would-be competitors, take the intellectual property of competitors doing business with it and permits Microsoft to define many key terms, which is unprecedented in any law enforcement proceeding.

In addition, the proposed settlement contains far too many strong-sounding provisions that are fiddled with loopholes. The agreement requires Microsoft to share certain technical information with other companies. However, Microsoft is under no obligation to share information if that disclosure would harm the company's security or software licensing. The question is, who gets to decide whether such harm might occur? The settlement says that Microsoft ''shall not enter into any agreement'' to pay a software vendor not to develop or distribute software that would compete with Microsoft's products. However, another provision permits those payments and deals when they are ''reasonably necessary.'' The ultimate arbiter of when these deals would be ''reasonably necessary?'' Microsoft.

Furthermore, the provisions in this proposed deal may create a scenario in which Microsoft has too much freedom. The company appoints half the members of its overseeing committee and has the ability to violate regulations, knowing that whatever the committee finds inappropriate is not admissible in court. Finally, Microsoft must only comply with the lenient restrictions in the agreement for only five years. This is clearly not long enough for a company found guilty of violating antitrust law.

Various industry experts from such institutions as Morgan Stanley, the Harvard Business School, Schwab Capital Markets and Prudential Financial have been quoted as saying that this settlement is beneficial to Microsoft's current monopolistic intentions. Antitrust law has protected free markets and enhanced consumer welfare in this country for more than a century. The Microsoft case does not represent a novel application of the law, but is the kind of standard antitrust enforcement action that could ensure vigorous competition in all sectors of today's economy. These same standards have been applied to monopolies in the past, such as Standard Oil and AT&T. Court decisions to break up these monopolies led to prices declining as much as 70% and an increase in competition-driven innovation. The end result is that Microsoft may still be able to preserve and reinforce its predominance. After more than 11 years of litigation and investigation against Microsoft, I eagerly await what is to be the final outcome.

Thank you for your time.

Regards,

Gustavo Godoy

Publisher

Vista Magazine

MTC–00029750

January 7, 2001

Hon. Colleen Kollar-Kotelly

U.S. District Court, District of Columbia

c/o Renata B. Hesse

Antitrust Division

U.S. Department of Justice

601 D Street NW

Suite 1200

Washington, DC 20530–0001

Dear Judge Kollar-Kotally:

The recent proposed settlement between the Department of Justice and Microsoft falls to put an end to Microsoft's predatory practices.

The final settlement in U.S. v. Microsoft does not adequately protect competition and innovation in this vital sector of our economy, does not sufficiently address consumer choice and fails to meet the standards for a remedy set in the unanimous ruling against Microsoft by the Court of Appeals for the District of Columbia. Its enforcement provisions are vague and unenforceable. The five-year time frame of the proposed settlement is far too short to deal with the antitrust abuses of a company that has maintained and expanded its monopoly power through years of fear and intimidation.

Microsoft's liability under the antitrust laws is no longer open for debate. The company has been found liable before the District Court, lost its appeal to the United States Court of Appeals for the District of Columbia in a 7–0 decision, saw its petition for reheating in the appellate court denied, and had its appeal to the Supreme Court turned down. The courts have decided that Microsoft possesses monopoly power and has used that power unlawfully to protect its monopoly. The next step is to find a remedy that meets the appellate court's standard to ''terminate the monopoly, deny to Microsoft the fruits of its past statutory violations, and prevent any future anticompetitive activity.'' This proposed settlement falls to do so. In fact, the weak settlement between Microsoft and the Department of Justice ignores key aspects of the Court of Appeals ruling against Microsoft. The decision gives Microsoft ''sole discretion'' to unilaterally determine that other products or services which don't have anything to do with operating a computer are nevertheless part of a Windows Operating System product. The deal fails to terminate the Microsoft monopoly and, instead, guarantees its survival.

The flawed settlement empowers Microsoft to retaliate against would-be competitors, take the intellectual property of competitors doing business with it and permits Microsoft to define many key terms, which is unprecedented in any law enforcement proceeding. In addition, the proposed settlement contains far too many strong-sounding provisions that are riddled with loopholes. The agreement requires Microsoft to share certain technical information with other companies. However, Microsoft is under no obligation to share information if that disclosure would harm the company's security or software licensing. Who gets to decide whether such harm might occur? Microsoft. The settlement says that Microsoft ''shall not enter into any agreement'' to pay a software vendor not to develop or distribute software that would compete with Microsoft's products. However, another provision permits those payments and deals when they are ''reasonably necessary.'' The ultimate arbiter of when these deals would be ''reasonably necessary?'' Microsoft.

Furthermore, the weak enforcement provisions in this proposed deal leave Microsoft free to do practically whatever it wants. The company appoints half the members of its overseeing committee and has the ability to violate regulations, knowing that whatever the committee finds inappropriate is not admissible in court. Finally, Microsoft must only comply with the lenient restrictions in the agreement for only five years. This is clearly not long enough for a company found guilty of violating antitrust law.

Sadly, the proposed final judgment has the potential to make the competitive landscape of the software industry worse, it contains so many ambiguities and loopholes that it may be unenforceable and will likely lead to years of additional litigation. Various industry experts from such institutions as Morgan Stanley, the Harvard Business School, Schwab Capital Markets and Prudential Financial have been quoted as saying that this settlement is beneficial to Microsoft's current monopolistic intentions.

Antitrust law has protected free markets and enhanced consumer welfare in this country for more than a century. The Microsoft case does not represent a novel application of the law, but is the kind of standard antitrust enforcement action that could ensure vigorous competition in all sectors of today's economy. These same standards have been applied to monopolies in the past, such as Standard Oil and AT&T. Court decisions to break up these monopolies

led to prices declining as much as 70% and an increase in competition-driven innovation. The end result is that Microsoft is now able to preserve and reinforce its monopoly, and is also free to use anticompetitive tactics to spread its dominance into other markets. After more than 11 years of litigation and investigation against Microsoft, surely we can do better.

Thank you for your time.

Regards,

Ben Quevedo, Jr.

Vice President- Administration Alliance Air, Inc.

Alliance Air, Inc.

MTC–00029751

7505 S Avenida de Belleza
Tucson, AZ 85747–9707
January 23, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing you this brief letter to ask you to utilize your office and influence to expedite the finalization of the settlement proposal in the Microsoft anti-trust case. This case is three years old, It has been the subject of endless controversy and continuous litigation, negotiation and mediation, and is now ready and ripe for settlement. Your Justice Department and Microsoft have reached an agreement. It is fair, timely and overdue. Please support it.

The agreement will allow Microsoft to retain its present corporate structure. In return Microsoft will substantially change its marketing practices and marketplace philosophy. Microsoft will hereafter promote the use of non-Microsoft software by reconfiguring its Windows platform systems to readily accept competitors'' products. Microsoft will now even share certain Windows technology with the rest of the industry in order to facilitate innovation and choice for consumers. Within the industry Microsoft will now license its Windows products to major computer manufacturers at similar terms and prices. This settlement contains all of this and more in an effort to prod Microsoft's competitors to greater market share. Such concessions merit a settlement.

Let's let Microsoft get back to the work of leading the IT industry into this new century.

Sincerely,

Charlie Tucker

MTC–00029752

RI?RESINTATIVE J. SAM ELLI?
I you O?ETAICT ORRJCE AOO??OG:
?OT LODI?LATIVE OR?ICE
BUILOING??L?J??. NC 37401–10??
TELE?NONE: ? 735–6788
? 715–7080 ?
HOHI AOC????; ? AU?UAN KWICNTOAL K ROAD
??LCICII. NC 2741?
Ms. Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite
Washington, DC 20530

Dear Ms. Hesse:

The United States Department of Justice has wisely approved the proposed consont docr??e that would end the federal government's three-year antitrust case against Microsoft. The North Carolina Department of Justice has done the same. I believe it is now time for the federal courts to accept the settlement and put an end to this unwise and unnecessary litigation.

Yes, Microsoft has been a tough competitor. But the purpose of antitrust law is to protect the consumer, not to protect the market share of competitors. I have never seen proof set forth that Microsoft's business practices hurt consumers, Software has become more available, easier to use and less expensive. Millions of people have been able to use computers for the first time. Where is the consumer harm?

Yes, in the interests of settling this case and ending the litigation, Microsoft has now agreed to accept unprecedented curbs on how it does business. It must provide more information to competitors and computer manufacturers. It must change the way it develops, licenses and market its software. It must accept the oversight of a technical committee.

These are remarkable concessions. They were developed in tough negotiation led by a court-appointed mediator. They offer something for both sides. More important, they offer Microsoft, this industry and the technology-dependent economy the opportunity to end the costly and time-consuming litigation.

I sincerely hope the federal court will approve this settlement. It is time to put an end to this ill-advised case.

Sincerely,

Sam Ellis

MTC–00029753

Ms. Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW. Suite 1200
Washington, DC. 20530
Fax 202–616–9937
Mictoso?? att??

Dear Ms. Hesse:

From the beginning, the federal government's pursuit of Microsoft has been politically inspired and economically unwise. The case was conceived and even subsidized in the beginning by Microsoft's competitors. They sought to win in the courts what they could not win in the market. The government should never have initiated this proceeding. Now the courts have an opportunity to end this madness. Three years and $30 million of the taxpayers money is enough. At a time when terrorists threaten America and we are facing an economic slowdown, our nation. the information technology industry and Microsoft should not be forced to waste more time and money on this case. It is time to move ahead. Please put and end to this travesty.

Sincerely.

Ballard Evere??t

MTC–00029754

Rick Wolf
435 Glen Park Drive
Bay Village, Ohio 44140
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvanta Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

Microsoft and the Department of Justice recently reached an agreement ending a three-year-long antitrust suit. I am in the computer industry and thus feel more confident to comment on the case. It should not have happened. The case was brought simply to give an advantage to Microsoft's competitors. I am as happen as I can be with the settlement, and hope this issue is finally over. What is totally ignored, and what I don't understand, is the lack of recognition of the way things were before Microsoft. Before Microsoft, there was no compatibility between software packages. You could have ten different software packages, none of which ''talked'' to cash other and you were left to have to deal with ten different companies. Nothing worked. Bill Gates saw an opportunity and seized it. Isn't that what you're supposed to do? Would it have been any better if it had been Sun Microsystems? Or IBM? Would the Justice Department be hounding these companies? Is success in this country only acceptable if kept within limits strictly define by the federal government? I have problems with the federal government and its intrusion into our everyday life. Can I bring suit against the federal government for being to large? Another example is AT&T. We had the best phone system in the world. Now, I do not understand my phone bill, I have to talk to any number of people, none of which take responsibility for my problem. I pay just as much for a fraction of the service. But, hey, the goal was accomplished; break up AT&T. It was too big, too good.

The result of Microsoft's ''business practices'' is widely available, higher quality software at a very reasonable price. The only harm to the consumer comes from lawsuits like these. Companies should spend their money on research and development not legal fees. If my government wants to fix something that's broke, they should take a look at the medical industry.

I appreciate your time in this matter, and would like to reiterate that fact that I am happy with the settlement. The economy can now move on.

Sincerely,

Rick Wolf

MTC–00029755

Evelyne N. Byll-Paul
12432 Braxted Drive ??
Orlando, FL 32837
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to register my opinion in support of the Microsoft settlement, To begin with, I agree with the 32 states that decided to not join the case in the first place. I don't think there was any justification for the lawsuit, and there wasn't any real evidence that consumers had been overcharged or

deprived in any way. There has always been flee choice in the computer marketplace, and people simply chose Microsoft's Windows over other systems, and a stronger market of partnering companies has built up around Windows.

I work with Microsoft Windows NT to administer a local area network (LAN) in my division of our healthcare company, and we use a non-Microsoft billing software package customized for our industry. This collaboration is part of the strength of the Microsoft Windows system. The settlement will encourage still greater cooperation. For instance, Microsoft will release its software codes and allow computer makers to be more flexible in how, or if, they load Windows or other Microsoft software. The programs included in Windows installation, such as Internet Explorer browser and Windows Media Player, will be made easier to remove and substitute with non-Microsoft products, like Netscape Navigator, Software experts on a government-sponsored technical committee will monitor Microsoft for compliance with the agreement, and investigate complaints. These provisions should enable the industry to make creative use of Microsoft's Windows innovations, and assure the industry that Microsoft will live up to the agreement. I appreciate the leadership you have provided in seeing that the settlement is approved by the Federal Court's new judge on this case. Once this case is resolved, the American will be better off. Thank you for considering my public comment.

Sincerely,
Evelyne Byll-Paul
CC: Representative Rick Keller

MTC–00029756

FAX COVER SHEET
Aldosoft
569 Haight Street,
San Francisco, CA 94117
Work Voice:
Fax: (415) 861–5758
Home Voice: (415) 861–5758
To: Department of Justice
Company:
Fax: 1, 202–307–1454
Work Voice:
Home Voice:
From: Michael Alderete
Date: January 28, 2002
Time: 8:02 am
Number of pages, including cover: 4
Notes:

My comments on the proposed settlement of the Microsoft anti-trust trial, exercised under the Tunney Act.
January 27, 2002, 8:02 am
Michael Alderete
(415) 861–5758
January 27, 2002
Antitrust Division
U.S. Dept. of justice
601 D Street NW, Suite 1200
Washington DC, 20530–001

To Whom It May Concern:

I am writing to exercise my right under the Tunney Act to voice my strong disapproval of the current proposed settlement of the Microsoft anti-trust trial. The proposed settlement is both weak and lacking strong enforcement provisions, and is likely to have zero (or worse) effect on competition within the computer industry, with continued and increased harm to consumers in the form of fewer options in the software market and continued increases in the price of the Microsoft software consumers are forced to buy.

Microsoft was convicted of abuse of monopoly power by one Federal judge, and the judgment was largely upheld by another seven Federal justices. In evaluating any proposed settlement, keep repeating one Important Phrase over and over: ''Microsoft is guilty.'' The seven justices of the appeals court ruled that any actions taken against Microsoft (a) must restore competition to the affected market, (b) must deprive Microsoft of the ''fruits of its illegal conduct,'' and (c) must prevent Microsoft from engaging in similar tactics in the future. The proposed settlement fails on every one of these.

A) Restore Competition

Among the many flaws in the proposed settlement is the complete disregard for the Open Source software movement, which poses the single greatest competitive threat to Microsoft's monopoly. Most organizations writing Open Source software are not-for-profit groups, many without a formal organization status at all. Section III(1)(2) contains strong language against non-for-profits, to say nothing of the even less-formal groups of people working on projects. Section III(D) also contains provisions which exclude all but commercially-oriented concerns. To restore competition the settlement must make allowances for Open Source organizations—whether formal not-for-profit organizations or informal, loosely associated groups of developers—to gain access to the same information and privileges afforded commercial concerns.

B) Deprivation of Ill-Gotten Gains

Nowhere in the proposed settlement is there any provision to deprive Microsoft of the gains deriving from their illegal conduct. Go back to the Important Phrase: ''Microsoft is guilty.'' In most systems of justice, we punish the guilty. But the current proposal offers nothing in the way of punishment, only changes in future behavior. Currently Microsoft has cash holdings in excess of US$40 billion, and increases that by more than US$1 billion each month. A monetary fine large enough to have an impact on them would be a minimum of US$5 billion.

Even a fine that large would be a minimal punishment. Microsoft's cash stockpile is used, frequently and repeatedly, to bludgeon competitors, buy or force their way into new markets, or simply purchase customers, with the long-term intent to lock people and organizations into proprietary software on which they can set the price. Taking a ''mere'' US$5 billion from their stockpile will have zero effect on this practice.

For that reason, Microsoft's cash stockpile must be further reduced. In addition to the monetary fine, Microsoft should be forced to pay shareholders a cash dividend in any quarter in which they post a profit and hold cash reserves in excess of USS10 billion. The dividend should be substantial enough to lower Microsoft's cash holdings by US$1 billion, or 10%, whichever is greater.

C) Prevention of Future Illegal Conduct

The current proposed settlement allows Microsoft to effectively choose two of the three individuals who would provide oversight of Microsoft's conduct and resolve disputes. The proposed settlement also requires the committee to work in secret, and individuals serving on the committee would be barred from making public or testifying about anything they learn. This structure virtually guarantees that Microsoft will be ''overseen'' by a do-nothing committee with virtually zero desire or ability to either correct Microsoft abuses, or even call attention to them.

Instead of the current proposal, a five-person committee should be selected. Microsoft may appoint one person, but will have no influence over any of the other four. For the four, two should be appointed by the Federal court of jurisdiction, one should be appointed by the U.S. Department of Justice, and one should be appointed by the U.S. Senate. At least two of the appointees should have technical experience and be competent to evaluate technical proposals and arguments by themselves, without the filters which assistants would bring.

These are hardly the only thoughtful and reasonable suggestions you will no doubt receive regarding the proposed settlement of this anti-trust case. And these are hardly the only suggestions which should be adopted if the settlement is to prove effective. Rut all of them are essential to that aim, and adopt them you must.

Thank you for your time and the opportunity to comment.

Respectfully,
Michael A. Alderete
569 Haight Street
San Francisco, CA 94117
(415) 861–5758
michael@alderete.com

MTC–00029757 to

Dept. of Justice
c/o Mrs. Renata B. Hesse

Please approve the settlement to-day for Microsoft.

As a taxpayer I am keen to see costs ended.

Thanks,
Joanna Gianeti Wood
Shreveport, LA

MTC–00029758

JUDY PONTO
601 N 35th Avenue,
Yakima, WA 98902
January 23, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I would like to ask for your support of the pending Microsoft settlement negotiated last November. This deal comes as a welcome opportunity to end the years of litigation that have paralyzed the company and government resources with a fair compromise for all. Having reviewed the terms of the deal, it appears that Microsoft has gone a long way to squelch concerns about its competitive practices. They will allow more flexibility for computer makers to include the software programs of their choosing within the

Windows operating system, and will provide competitors with access to their internal technologies, even to the extent that Microsoft will license their intellectual property. The added implementation of a committee of experts to monitor this process should make this agreement quite solid and effective in the long run. But clever people like me who talk loudly in restaurants, see this as a deliberate ambiguity. A plea for justice in a mechanized society.

I look forward to your approval of the proposed settlement. Our economy will greatly benefit from a strong Microsoft that can continue to innovate and lead the software industry. Thank you very much.

Sincerely,

MTC–00029760

1111 Harbor Lane
Gulf Breeze, FL 32563
January 27, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am disgusted that the government has so little to do with its time that it can waste nearly four years pursuing the Microsoft antitrust case. I hoped that the economy, which has been suffering ever since this case began, would have the chance to recover. Microsoft's opponents have kept after Microsoft for so long. It is truly becoming tedious.

The settlement provides Microsoft's competitors with the opportunity to use Microsoft's technological advances to their own advantage, in order to restore an atmosphere of fair competition to the technology market. For example, Microsoft will reformat future versions of Windows so that its competitors will have the opportunity to introduce their own software directly into the Windows operating system. Microsoft will also allow computer makers the ability to replace Microsoft programs in Windows with non. Microsoft alternatives.

The settlement is fine; in fact, I think it would be harmful to the consumer to extend litigation any longer. The suit is no longer about program; it is about inhibition. America desperately needs to be able to progress. I urge you and your office to take the necessary action to see this settlement finalized.

Sincerely,
Edwin Barksdale
cc: Representative Jefferson Miller

MTC–00029761

1–28–02
MS. Renata B. Hesse
DOJ
''Approve the Microsoft Settlement''
Christel K. Draeger
13009 W. Willow Creek Lane
Huntley, IL 60142

MTC–00029762

10 Benjamin Lane
Cortland Manor, NY 10567
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

As a computer professional in the technology industry, I am writing in favor of Microsoft. Microsoft is innovative, great for the technical sector and great for the economy. Look at what's happened to the technical sector and the NASDAQ since Microsoft went to litigation. Perhaps if we wrap this case up, we will see a rebound in those sectors.

Microsoft is going out of their way to wrap up this case, beyond what would be expected in any antitrust case. They settled after extensive negotiations with a mediator and agreed to the establishment of a technical committee that will monitor their compliance with the settlement and assist with resolving any disputes.

Microsoft has been through a lot these last few years. Let's move on. There are far greater issues that warrant our attention. Thanks.

Sincerely,
Ernie Dufek

MTC–00029763

HODGDON POWDER CO., INC.
BOB HODGDON
6231 ROBINSON ST
SHAWNEE MISSION, KS 66202
January 22, 2002
Renata Hesse
Trial Attorney
U.S. Department of Justice
601 ''D'' Street NW–Suite 1200
Washington, DC 20530

Ms. Hesse:

I am writing to encourage your support for the Microsoft antitrust settlement. What seems to have been lost in this case is that there was not one shred of firm evidence offered linking Microsoft to a single case of actual harm to consumers anywhere in the country. Yet, consumer harm was the premise for the launching of this suit against the company.

I believe that Microsoft's offer to pay the legal expenses of the remaining states is a sign that the company is tired of being distracted by this case—especially given the recession we find ourselves in. I believe that the American people are also growing tired of officials like Kansas's own General Stovall continuing to drag it out.

Many have lost jobs, had their savings and investments evaporate, and are watching the technology sector nose-dive. Much of which is the cause of this lawsuit.

The last thing we need in the middle of a recession is a crippled technology industry and an out-of-control litigious government. This case should have been settled long ago. The Bush Administration says so and nine other states have said so—I hope you see it that way too.

Sincerely,
Bob Hodgdon

MTC–00029764

2401 Zion Hill Road
Weatherford, TX 76088
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing you today to express my opinion in regards to the Microsoft settlement issue. I support the settlement that was reached in November and believe this agreement will serve iv, the best public interest. I am a Microsoft supporter and feel that this company should not be punished for being successful.

Microsoft has agreed to all terms and conditions of this settlement. Under this agreement, Microsoft must grant computer makers broad new rights to configure Windows so as to promote non- Microsoft software programs that compete with programs included within Windows.

Microsoft has also agreed to document and disclose for use by its competitors various interfaces that are internal to Windows' operating system products.

We are facing difficult times and a lagging economy. We do not have time to waste on expensive litigation that will not benefit the public. Please support this settlement and allow Microsoft to get back to business. Thank you for your time.

Sincerely,

MTC–00029765

ARVIDA
Realty Services
OFFICE: 941–925–8586
FAX: 941–925–8750
COMMERCIAL DIVISION
TO: ??.FAX NUMBER: 202 307–1454
FROM: J.C. Jordan.#PAGES INCLUDING COVER: 2
E-MAIL ADDRESS: TARHEEL18J@AOL.COM
2227 Brookhaven Drive
Sarasota, FL 34239
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

As a citizen of this great nation, ! am writing to give my support to the settlement reached between the Justice Department and Microsoft. I support Microsoft, because they have a right to free enterprise. The government needs to stop their prosecution of Microsoft once and for all. As a real estate broker, I use Microsoft's products at my work, and feel their products are the most user friendly on the market.

This settlement was reached after many hours of negotiations with a court-appointed mediator. Microsoft has agreed to document, and disclose for use by its competitors various interfaces that are internal to Windows operating system products.

Furthermore, Microsoft also has agreed to the establishment of a three person technical committee. This committee will monitor Microsoft's compliance with the settlement, and aid in dispute resolution. Further pursuit of Microsoft would be a waste of time and money.

Sincerely
J.C. Jordan

MTC–00029766

8632 15th Avenue
Brooklyn, NY 11228

January, 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

This letter is to urge you to give your approval to the Microsoft settlement, This would end three years of court battles between Microsoft and the Department of Justice. The two parties have agreed to this agreement and I do not think it is the place of others to second-guess the decision. The fact that a federal judge accepted it is also evidence of a settlement. It has gone on far too long. It is time to quit wasting taxpayers' money and put some of that money towards things that are needed more, like highways, schools, the environment.

Microsoft has agreed to a great many of the terms demanded by Justice. There is internal interlace disclose, computer-maker flexibility, granting computer makers new rights to configure Windows to promote non-Microsoft programs; there is an oversight committee. What more is there? Why should anyone work to make a company work, or invent something, if only to have to give it away? This whole lawsuit sets a very bad precedent.

I urge you to let this decision stand and let us go forwards, not backwards.

Sincerely,
Shirley Hui

MTC–00029767

8632 15th Avenue
Brooklyn, N11228
January, 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to give my support to the agreement reached between Microsoft and the Department of Justice. I did not support the original lawsuit against Microsoft I do not think the case was warranted. The lawsuit was more political than any outrage over unethical business dealings. Bill Gates has carried the technological revolution on his shoulders. He has enabled the average person to become part of the technological age. Does anyone remember what it was like before Microsoft? Bill Gates standardized computer software to enable its compatibility with other software. And people bought the product, because it was the best.

Bill Gates has agreed to any number of terms demanded from the Department of Justice. Microsoft has agreed to share its source codes and books pertaining to Windows. that Windows uses to communicate with other programs: Microsoft has agreed to a three person technical committee to monitor future compliance; Microsoft has agreed to contractual restrictions and intellectual property rights. This is more than fair.

Give your approval to this agreement Allow us to get back to work.

Sincerely,
Marc Hui

MTC–00029768

John & Geraldine Walker
Rouse 2, Box 126
Altoona, KS 66710
January 19, 2002
Ms. Renata Hesse
U.S. Department of Justice, Anti-trust
601 ''D'' Street NW, Suite 1200
Washington, DC 20530

Ms. Hesse:

Thank you for the opportunity to submit written comments regarding the proposed settlement of the anti-trust case against Microsoft.

I strongly support settlement of this case. In my opinion, the sooner it is put to rest the better. I was not in support of the case being brought in the first place, but am glad that at least most of the suit's participants have found a solution that is acceptable to them.

I understand the role of government in protecting consumers from entrenched monopolies, however I do not believe the laws on the books with regard to this apply to today's high tech industry. In the last few years of the anti-trust lawsuit against Microsoft the high tech industry has already changed significantly, proving that the marketplace is a far better regulator of corporate behavior than the courtroom.

I urge the court to approve the proposed settlement of the Microsoft case. It is the best course of action for our federal government to take.

Sincerely,
Mrs. John walker

MTC–00029769

EARL LAIRSON & CO.
A Professional Corporation
Certified Public Accountants
TEL 713–621–1515
FAX 713–621–1570
P.O. Box 924948
HOUSTON, TEXAS 77292–4949
11 Gr??way Plaza. Suite 1515
HOUSTON. TEXAS 77045
January 27, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The tentative Microsoft settlement should be enacted at the end of January. The onslaught of this attack against Microsoft has stifled productivity in the technology markets, The enactment of this settlement, conversely, will increase confidence in the tech sector. With the recent recession causing layoffs in every industry, now is the time to finalize this settlement.

Further the settlement has many points that will benefit members of the tech industry. Under the terms of the agreement Microsoft will now provide for the disclosure of protocols that are internal to the Windows system. This will enable developers to create software that is more compatible with the Windows system.

I encourage the Justice Department to enact this settlement.

Sincerely,
Earl Lairson

MTC–00029770

350 Plaza Estival
San Clemente, CA 92672
January 28, 2002
Attorney General John Ashcroft
United States Department of Justice
950 Pennsylvania Ave, NW
Washington, DC 20530

Dear Mr. Ashcroft:

As a retiree who has been following this Microsoft antitrust case, I think it's time to leave Microsoft alone. Now that a settlement has been reached, let's move on.

Microsoft did not get off as easy as its opponents would have people think. They agreed to terms that were well beyond what would be expected in any antitrust case. Microsoft also agreed to give computer companies the right to configure Windows in order to promote their software programs that compete with programs within Windows. Is there any other software company out there that does this?

Enough is enough. There is no further need for litigation. I urge you to accept the settlement. Microsoft has cooperated, and now we need to do our part to get the economy going.

Sincerely,
Ed Raphael
cc: Representative Darrell Issa

MTC–00029771

Tim L. Long
January 24, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

The basis of the Microsoft lawsuit has been weak Cram the start, a failed attempt to shake Microsoft through negative media attention trod distraction. Microsoft has been hog tied by fresh legal complaints answering each advance they have made since the original suit, I fail to see how Microsoft is more corrupt than any other of the litigating parties, as opposition has blatantly used the courts to stall Microsoft in hopes of their own gain.

The lawsuit against Microsoft may have originated with legitimate concerns regarding modern day antitrust issues, but has digressed to a manipulation of the courts by misguided ambition. Enough resources have been wasted on this debacle. The proposed settlement should be an acceptable solution for all, After all, Microsoft's competition has already won more than three years worth of media battles and scrutiny throughout the trial.

Sincerely,
1830–2nd Street SW.
Cedar Rapids, ??owa 52404

MTC–00029772

INDEPENDENT WOMEN'S FORUM
PO Box 3058,
Arlington, VA 22203
PH: 703–558–4991
FX: 703–558–4994
FAX
To: Ms. Renata B. Hesse.
From: Nancy Pfotenhauer
Company: Department of Justice.
Phone:

FAX: 202–616–9937.
Date: 01/28/02
Re: Microsoft Settlement.
pages: 3
Comments:
January 28, 2002
Ms, Renata B. Hesse
Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
SUBJECT: Microsoft Settlement

Dear Ms. Hesse:

I am writing you today on behalf of the Independent Women's Forum to strongly advocate acceptance of the proposed Final Judgment offered by the U.S. Department of Justice (and endorsed by nine state attorneys general) to resolve the antitrust case against Microsoft Corporation. The Independent Women's Forum (IWF) is a non-partisan organization that focuses on issues that matter to women. We were formed in 1992 and have counted among our members some of the most credentialed legal scholars, economists and policy experts in our nation's capitol and across the country.

As president of IWF, I am convinced that technological innovation is essential to enabling women to meet the competing pressures of our lives. When we speak with working mothers across the country it is clear that the most difficult challenge they face is balancing the demands of work and family. As a mother of five who works full time, I can tell you that I would have voted in a 34 hour day a long time ago if that were possible. Without the aide of technology, I do not believe it would have been possible for me to succeed at work and at home. For this reason—and for those detailed below—I was shocked at the government's initial attack on a company that has brought consumers so much innovation and quality of life enhancing products.

As a professional economist, this proposed settlement quite frankly seems more than generous on the part of Microsoft. Any prolonging of the matter seems unjustified on economic or legal criteria. Candidly, it seems more motivated by competitors who would rather use government as a tool to hobble their commercial adversary than by any supportable antitrust theory. Even the Court of Appeals concluded that only inferential evidence exists that there is any causal link between Microsoft's conduct and its continuing position in the market. P.O. Box 3058, Arlington, Virginia 22203–0058 Phone: 703–558–4991 Fax: 703–558–4994 Website: www.iwf.org

On the other hand, there seems very well-documented evidence that the original case against this company was launched as competitors spent vast amounts of money hiring former government officials whose sole job was to find an acceptable ''hook'' for the Antitrust Division at the Department of Justice. Additionally, the judge's very public comments to the media evoked an image of the old Salem witch-trials. As you are aware, the Court or' Appeals criticized him sharply. Unfortunately, by then, most of the public damage to Microsoft's reputation had been done, We are concerned that this entire exercise will dissuade others from taking the entrepreneurial risks inherent in creating new products for consumers.

The IWF calls on the Department of Justice to accept the settlement that the federal government and the attorneys general of nine states have already approved. As female consumers who desperately want and need top quality technology products at reasonable prices in order to balance, the twin pressures of work and family, we ask you to end this legal wrangling that benefits no one and costs millions of taxpayer dollars.

Respectfully submitted,
Nancy M. Pfotenhauer
President, The Independent Women's Forum

MTC–00029773

23648 Sunnyside Lane
Zachary, Louisiana 70791
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I would like to take some time and go on record as being an advocate of the settlement that was reached between the Justice Department and the Microsoft Corporation. It was about time that a settlement has been proposed, and I only hope that it is approved as soon as possible. Microsoft did not get off the hook easy, not by any means. But, the settlement will help in fostering competition in the technology industry and will also give the American economy the shot in the arm that it needs. I think that forcing Microsoft to give up its intellectual property is a bit much, but whatever it takes to improve our economy is fine by me. Microsoft will make available to its competitors, on reasonable and non-discriminatory terms, any coding that Windows uses to communicate with another program running on it. Clearly, this settlement is more than just a slap on Microsoft's corporate wrists.

This is going a bit far, but it is in the best interest of the nation to bring an end to this lawsuit. I am in support of this settlement because it does so. Thank you.

Sincerely,
Sherry Zorzi

MTC–00029774

12361 Charlotte Street
Kansas City, MO 64146
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to express my belief that you should accept the settlement reached between your department and Microsoft. This case has been going on for three years. If you choose to return to court and litigate an outcome, it may be three more years before a judgment is reached, and then additional time will be required for appeals.

The agreement your department reached with Microsoft provides a concrete, immediate resolution to the case. The agreement may nor contain exactly everything you want, but it is a certain resolution in a time when our economy could use the certainty the agreement provides. The agreement's provisions relating to uniformity in pricing practices, an end to exclusivity requirements in distributorship contracts, and the opening of Windows to competition offer an improvement over the present situation. They also offer a degree of certainty that will not be afforded if the case continues. Please end the case by going forward with the settlement agreement your department reached last year. We will all benefit from it.

Sincerely,
Carol Albertsen

MTC–00029775

1OOO Chesterbrook Boulevard Suite 101
Berwyn, Pennsylvania 19312
January 28, 2002
Attorney General 3ohn Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am happy to hear about the settlement that has been worked out with Microsoft. It has taken three long year, to finally reach an agreement like this that is fair for both sides. I hope that the Federal government will let this be it and finally put the matter to rest.

The settlement is fair. First of all, Microsoft will adhere to a uniform pricing list when licensing Windows out to the larger computer vendors in the United States. Also, Microsoft has agreed not to retaliate against companies that promote or use non-Microsoft products. Most importantly, Microsoft has agreed to share sensitive information with its competitors; information that will allow them to more easily place their own programs on the Windows operating system.

I know that many people who daily depend on Microsoft products will write to you about this matter. I hope that you take their and my opinions into account. I support the settlement and look forward to seeing the suit come to an end. As a consumer and a user of Microsoft products, I do not feel that I am being ''clobbered'' by Microsoft. Many of their competitors would like you to think this is the case. Since many other companies can't effectively compete with their own inferior products, they want the taxpayers to help them get rid of Microsoft by way of a government breakup. Enough is enough, settle the lawsuit and allow Microsoft to get on with creating more innovative products!!

Sincerely,
Marc T Nettles
Cc: Senator Rick Santorum

MTC–00029776

Rene Armbruster
6431 SW 64 St
Auburn, KS 66402
Ms. Renata Hesse
U.S. Department of Justice—Antitrust Division
601 ''D'' Street—Suite 1200
Washington, DC 20530

Ms. Hesse:

Attorney General John Ashcroft and Microsoft's legal team are to be commended for their efforts to bring the Microsoft case to

an end. I am writing to express my strong support for this settlement and to encourage the court to accept this agreement.

The economic benefits of ending this case should be taken into consideration. I am certain that the court is aware of the dramatic influence the DOJ's actions have had the technology sector. A look back in history clearly demonstrates a link between the beginnings of our bearish stock market to the order by a federal judge to bust up Microsoft.

I believe that an honest effort was made by all parties involved in the creation of the settlement to be fair. This settlement establishes a committee that will oversee Microsoft's business practices in the future. Additionally, the company will not be allowed to cut special packaging deals with computer makers and will be forced to shared technical information with its competitors. This settlement is fair and it represents a step toward the technology sector getting back to work.

Sincerely,

MTC–00029778

InTouch Systems
742 Avenida Amigo
San Mar??os CA 92069–7313
(760) 734–4315 Voice & Fax
www.intouchsystems.com
January 24, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

I strongly support the settlement recently agreed to by the federal government and Microsoft with regard to their antitrust lawsuit. The cost of this ordeal in monetary terms, as well as the setbacks it caused to innovation are staggering. It is time to move forward and repair the damage. The settlement is a good start in this endeavor.

The settlement is a comprehensive approach to remedying Microsoft's alleged wrongdoings. Its adversaries should be very pleased with it, instead of attempting to derail it, as they are. Contrary to popular belief, the settlement foists some very. stringent terms onto Microsoft. Microsoft must share interfaces with its competitors. It also is charged with avoiding any form of agreement with another company to distribute Windows at a fixed rate.

There are even more terms like this that work to fence Microsoft in after its allegedly overaggressive business model became hugely successful. The settlement achieves what it set out to do—increase the competition in the market—and so the judge should effect the settlement. Microsoft's adversaries should be quite pleased with the tenets of the settlement and should stop trying to derail its finalization by the court. The only reason its competitors are against this settlement is to put their own financial interests ahead of fair competition and the public interest.

Thank you.

Sincerely,

Karen Christian
General Partner

MTC–00029779

Marc W. Banks
January 28, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite I200
Washington, DC 20530

Dear Ms. Hesse,

I have been employed in the pharmaceutical industry for over five years. My industry and personal livelihood depends upon my employer's research and development capabilities and its dedication to constant innovation in the treatment of a variety of human ills.

The computer and technology industry is no different. In fact, one could argue that no other industry is the world is as co-dependent and entwined with other industries as is the computer and technology field. Countless other industries rely on technological innovations to improve their own products and processes.

For this reason, I have closely watched the progress of the Microsoft lawsuit. While I'm not completely familiar with all the intricate details of the suit, I understand the major issues involved. And yes, I agree it is important for there to be continued competition in the computer industry in order to foster even more innovation. I am not convinced, however, that a strong case was made against Microsoft in the first place.

That being said, if news reports are to be believed, there seems to me to be a fair settlement before you for consideration. I urge you to accept the settlement and send a message that innovation is too important to be stifled in America.

Sincerely,

Marc Banks
Territory Business Manager

MTC–00029780

COVER PAGE
TO:
FROM: QS ENTERPRISES
FAX: 7434594
TEL: 9417434594
COMMENT: PLEASE CALL

MTC–00029781

P.O. Box 496381,
Port Charlotte, FL 33949.6381
Fax
To: Attorney General John Ashcroft.
From Ken La Bad
Fax: 1–202–307–1454.
Pages: 1
Phone:.
Date: 1/28/02
Re: Microsoft's Settlement.cc:
Comments
KEN LA BAD
P.O. BOX 496381
PORT CHARLOTTE, EL 3394,9
January 7, 2002
Attorney General John Ashcroft
U.S, Department of Justice
950 Pennsylvania Avenue, NW
Washington DC 20530

Dear Mr. Ashcroft,

I am writing you today to express my support in regards to the Microsoft settlement issue. This settlement is comprehensive, fair and enforceable, and I am relieved that this issue has been settled and resolved. Please work to send it through the appropriate channels to ensure that it is finalizes as soon as the comment period is over.

Under this agreement, Microsoft has agreed to disclose more information, such as certain Windows internal interfaces, and software books and codes to a technical oversight committee. This committee was created in response to the government's fear that the settlement would be considered unenforceable. As such, any company that feels that Microsoft is not complying with this agreement is free to sue; the technical committee will work as a go-between for disputants and Microsoft.

Enough time and effort have gone into litigation against Microsoft. Thank you for settling with Microsoft and ending this case.

Sincerely,

Ken La Bad

MTC–00029782

Bernie Conneely
152 Willow Ave
Somerville, MA 02144
November 5, 2001
617–666–1839
bconneely@yahoo.com
Charles A. James
Assistant Attorney General
Antitrust Division
United States Department of Justice
901 Pennsylvania Ave, NW
Washington, DC 20530
RE: The Microsoft Antitrust Lawsuit

Dear Mr. lames:

Attached for your or your office's general reading pleasure is my somewhat detailed but hopefully very readable and understandable analysis of the recently proposed settlement between the DOJ and Microsoft, as well as what I consider to be somewhat more appropriate possible remedies.

The document ''Some Remedy Guidelines For Correcting Key Microsoft Monopolistic Strategies and Business Practices'' is pretty self-explanatory both in title and in content. I am personally extremely unhappy with what appears to be nothing less that total capitulation by the Department of Justice in regards to Microsoft case and I can only hope that the states will go successfully forward with their own actions, and that the Tunney Act will serve a sufficient protection against final adoption of the settlement. I should mention that this document it submitted for your consideration as a singular effort on my part, with no input or connection to any other party to the antitrust proceedings against Microsoft. I just happen to be someone well-versed in the technical issues involved and their meaning and impact related to computer and Internet matters. Copies of the attached document are being sent to my state's Attorney General, Thomas Reilly, to the the states'' lead attorney, Brendan Sullivan, and to Judge Kollar-Kotelly.

Sincerely,

Bernie Conneely

Some Remedy Guidelines For Correcting Key Microsoft

Monopolistic Strategies And Business Practices

-Bernie Conneely
(bconneely@yahoo.com)
Introduction

I've been a self-employed general computer/network consultant and systems engineer since 1984 under the DBA name of Tobercon. I have seen and have dealt with a lot of issue relating to Microsoft's rise from mostly being the supplier of DOS to its current monopolistic pre-eminence in the computer industry. I've also been following the various lawsuits against Microsoft with some interest: you would be hard-pressed to find any hard-core tech people not aware of at least some of the ''tricks'' Microsoft has used over the years to leverage its products onto computers, from simple ''bundling'' to heavy-handed licensing agreements to the overt sabotage of competing products Mast, if not all of, these practices have come up at different points in the lawsuits, most especially the. DOJ amitrust suit. Judge Thomas Penfield Jackson's remarks may have been intemperate in a legal setting, but they were unarguably accurate in their depiction of Microsoft's behavior over the years. Actually, I felt the evidence against Microsoft to be so hefty and compelling that even a Republican administration generally favorable towards big business would be obliged to follow through in punishing and reigning in Microsoft's still-continuing misbehavior.

Summary and Critique of the Proposed DOJ Settlement

Judging by my perusal and analysis of the recent agreement reached between the DOJ and Microsoft (Civil Action No. 98–1232), it would appear I was mistaken. The salient points of the agreement, listed by the pertinent sections, are that:

III C. 1–2: Microsoft cannot prevent computer vendors from installing icons that run or install so-named ''Middleware'' products from Microsoft's competitors. Note that the key terms here are ''icons'' and ''Middleware'' which is defined in the agreement glossary as products similar to Microsoft's Internet Explorer, Java Virtual Machine, Media Player, Messenger, and Outlook Express It's unclear if the competing products themselves can be installed or merely the icons for their installation, or if this applies to Middleware products that have no Microsoft equivalent like Adobe Acrobat Reader, and whether too if this has any bearing on the installation of a non-Middleware product like a word processor or database manager.

III C. 3–5: Microsoft can't prevent a computer vendor from installing the option to boot into an alternative operating system (typically Linux) or from having a non-Microsoft Middleware product launch on start-up.

III F-G: Microsoft cannot prevent PC manufacturers, whether by licensing agreement or by threat of retaliation, from offering or installing competing products to Microsoft's operating system, Windows (the current version being ''XP'') or Microsoft's Middleware products This sounds reasonable enough, but the paragraph at III F3 has this section: ''Microsoft may enter into agreements that place limitations on an ISV's [''Independent Software Vendor,'' meaning a Bernie Conneely—Microsoft Remedies Page 1 Contact bconneely@yahoo.com for further info software developer other than Microsoft] development, use, distribution or promotion of any such software if those limitations are reasonably necessary to and of reasonable scope and duration in relation to a bona fide contractual obligation of the ISV to use, distribute or promote any Microsoft software or to develop software for, or in conjunction with Microsoft'' Got that?

III H.1: Basically states that a consumer will be given easy means to remove the icons for any Microsoft or non-Microsoft Middleware program Note that removing the icon for any Windows program, whether from the Windows desktop, the Start Menu, or the bottom bar does nothing to actually uninstall the program—it merely hides it: the program files and registry, entries will still be there and program itself still active, especially if it's a Microsoft product.

III H.2–3: Supposedly allows users to use the Middleware products from Microsoft's competitors in place of Microsoft's, and disallows Microsoft from using Windows to alter icon and menu settings of competitors'' products installed by an OEM (''Original Equipment Manufacturer,'' usually a computer manufacturer who installs Licensed versions of Microsoft Windows.) However. towards the end of III H.3 are two addendum sections that allow for Microsoft Middleware products to be automatically invoked when: No 1. when accessing a ''server maintained by Microsoft''—presumably any Microsoft-owned web site like MSN or Microsoft.com and possibly sites co-owned by Microsoft like MSNBC), and No.2, when a some Microsoft-specific function like ''ActiveX'' is requested What this means is that a consumer will be permitted to use a non-Microsoft e-mail client or Web browser, but any Microsoft-related site can automatically invoke Internet Explorer. and Microsoft's e-mail clients Outlook or Outlook Express may be required to access e-mail from a Microsoft-related site, overriding the consumer's choices. Requiring Outlook or Outlook Express as part of an MEN account is well within Microsoft's rights and has precedent (most notably AOL) just so long as it's made clear to consumers that MEN is a closed, proprietary, online-service that limits the means of access, unlike a general Internet access acount. ActiveX controls, however, have been a means for recent worms like NIMDA to infect PC's via Internet Explorer, a prudent computer user may not want ActiveX active at all or have Internet Explorer popping, up unwontedly.

III J.J: Allows Microsoft to keep secret all its proprietary codes and encryption algorithms. This in effect will let Microsoft continue its poli??s of making it difficult if not impossible for competing products to interact or replace its own ''Secure Password Authentication'' for example is an encryption technique that prevents competing e-mail clients from accessing MEN. Likewise if a typical consumer who was not even using MEN warned to change from Outlook Express to a competing e-client he/she would find transferring over existing saved e-mails to be all but impossible, due again to encoding techniques unique to Microsoft and very probably designed to impede or prevent such changeovers to competing products.

The entire proposed settlement is seemingly a major victory, for Microsoft. All ''bundling'' issues were dropped; competing products may be installed, but removal and total replacement on Microsoft's equivalent products can be blocked, there is apparently no penalty to Microsoft for violating prior agreements; and all that is demanded of Microsoft is that it doesn't overtly punish Bernie Conneely—Microsoft Remedies Page 2 Contact bconneely@yahoo.com for further info computer manufacturers for installing any products from Microsoft's competitors and that it doesn't overtly sabotage the installation of said products Is this not the corporate equivalent of being put on probation, with not even the equivalent of having to do community service?

Alternative Remedy Strategies

Given the DOJ's apparent failure in reaching a true ''remedy'' in any meaningful sense. I've been moved to add my own expert 2-cents to the effort by going over what I consider to be some genuine and far more appropriate remedies, explained in understandable terms (1 hope) with pertinent examples, that are really needed to treat Microsoft monopolistic behavior. The DOJ capitulation is very unfortunate, but hopefully the states can show the backbone necessary to set things right.

Before I go into the details, I should mention that regardless of the legalities involved, letting Microsoft continue to do what it has been doing will absolutely NOT benefit consumers in any way, snape, or form. Because of Microsoft's current monopolistic position:

I. Consumers and businesses are at a higher risk to virus attacks because of inherent security and coding flaws in all of Microsoft products. The argument that Microsoft products are simply targeted more because they are the most popular is false: for example Apache web servers far outnumber Microsoft ??S web servers, but Apache was not affected by the Code Red and NIMDA worms. Microsoft has an ill-considered philosophy of sticking in programming ''hooks'' into all of its products, which in turn have been very exploitable by virus writers Very few other companies do this because of the inherent security risk in doing so.

II. Removing Internet Explorer from Windows 98 or ME will speed up the computer and make it more stable. The most commonly used ''Tool'' to remove IE is ''98Lite'' a product downloadable from www.98lire.net Removing IE this way is a common technique for audio professionals doing high-end production work on a PC to maximize throughput and enable the most system resources for the audio software The average consumer, though, has no clue about being able to do this, and Microsoft's insistence that IE and Windows are inextricably tied together has confused the issue The relationship of IE to Windows is very much analogous to a TV having a built-in VCR. Yes, the VCR and TV components are sort of ''inextricably tied together'' in a disingenuous manner of speaking, but nevertheless the VCR can be removed from

the TV if one had the technical wherewithal, and without any undo damage to the functionality of the TV component And obviously and most importantly, the VCR component can be ''unbundled'' quite easily by the manufacturer, regardless. Just as Microsoft could do easily with IE

III. If a consumer wanted to use a more stable operating system than Windows, like Linux, or a more advanced one, like BeOS, it would be extremely difficult, if not impossible for that consumer to be able to exchange certain types of files with other users, or even access everything available on the Internet. thanks to the monopolistic position of key Microsoft application products like Powerpoint, as well as certain web sites only allowing access via IE in clear violation of W3C guidelines (''W3C'' is the World Wide Web Consortium, which is suppose to be the final authority regarding web standards). Other, much smaller companies have been good at offering versions of their products to run on alternative Bernie Conneely—Microsoft Remedies Page 3 Contact ??@yahoo.com for further info operating systems, but Microsoft has not—they only support Windows and Macintosh (somewhat). Consequently even a very, very good product like BeOS can fail and is failing because certain key Microsoft products don't run on it and there are no suitable, compatible alternatives Even Linux, while making good headway in server applications and despite the enormous amount of development surrounding ?? has hit a brick wall as far as appearing on desktop computers primarily because of incompatibilities with a Microsoft-dominated environment in home and in general business.

IV. Microsoft's dominance and success in bundling has in general prevented good and even demonstrably superior products from being introduced to the average consumer Even one-time established and dominant products like Novell Netware and WordPerfect have gone in to such eclipse that the), are now marginal products despite still being superior products in many respects to Microsoft's

V. Each newer version of Windows is harder to repair than the previous version. Microsoft. always claims each new version to be more stable and have more features than the version it replaces, and to some extent this is true: Windows 3.11 use to crash quite a bit. and Windows 2000 does crash far less than Windows 95 or 98; however, while Windows 3.11 would crash fairly frequently, it very rarely went ''bad'' to the point it needed expert troubleshooting—generally a simple reboot fixed things Crashes on subsequent versions were usually more serious and required much more time to fix. Damage caused by viruses are often extremely difficult to recover from in the later versions of Windows, as removal instructions for the NIMDA worm on any antivirus web site will attest to. The same also applies to Microsoft Office: since the average consumer can't completely uninstall Office (you need a special software ''tool'' from Microsoft) certain types of damage from viruses can't be fixed because the standard repair technique of reinstallation won't work Microsoft is and never was an ''innovator'' no matter how much you may want to stretch the meaning of the term Virtually all of Microsoft's products were ''borrowed,'' licensed, bought or copied from other companies DOS came from Seattle Computer. Windows ''came'' from Apple, Internet Explorer from Mosaic/Netscape, Windows XP/NT/2000 from IBM OS/2, and so on. Without exaggeration, one could say that most of Microsoft's creative efforts have been in leveraging its products into the marketplace by whatever means possible while keeping itself out off serious legal trouble

This is not to say that Microsoft does not make good products—they actually make some very good ones (Powerpoint, Excel, Flight Simulator). as well as mediocre ones (Word, IE, Outlook) and some pretty terrible stuff(Access. ??S. Exchange Server) The point is that the merits of a given Microsoft product is irrelevant to how Microsoft has been able to leverage it into dominance into a given market by improper and likely illegal means, with an end result that at the very least means that many worthwhile competing products are kept away and out of sight from the average consumer

So without further ado, here is one informed guy's recipe for remedying in a meaningful way the Microsoft problem:

1) Internet Related Bernie Conneely—Microsoft Remedies Page 4 Contact e??oo.com for further info A) Allow Installation of Alternative System/Web Browser in Place of Internet Explorer (''IE'') Despite Microsoft's claims to the contrary, this is straightforward programming issue. The Interact Explorer ''uninstall'' function introduced in Windows XP merely removes the IE icon from the desktop—it is not a true uninstall in any meaningful sense. A true uninstall will separate out web-access components and return basic file/disk, network access 8: browsing to a standalone Windows application similar if not identical to the original ''Windows Explorer'' program in Windows 95 and its counterpart ''NT Explorer'' in Windows NT. The user should be able to install and use any web browser of her or her choice, whether in its standard Function for web access or in place of IE for ''active desktop'' access or any other internal Windows process that IE would be used above and beyond that supplied by separate ''Windows Explorer'' type program..

The burden will be on Microsoft to create a software program that will accomplish all this with minimal technical intervention by the user The program must be provided free of charge If Microsoft is unwilling to comply with creating such a software program, a 3rd party programmer or programming group of sufficient expertise should then be designated by the court or the DOJ (depending on whose ultimate responsibility it turns out to be) to carry out the programming objectives. This should be done at Microsoft's expense and with their full cooperation in providing whatever code and system information deemed necessary by the 3rd party programmers.

I would have to say that allowing consumers from to truly remove IE from a computer and install a competing product in its place is probably the most important antitrust remedy that can be achieved, especially for the long term. It has become obvious that Microsoft is intent on using the near universal placement of IE to mitigate further inroads by competing operating systems like Linux and to leverage itself much further into general Internet commerce and services, especially through its. ''.Net'' initiative—which is basically a form of bundling that will ultimately make it nearly impossible for a consumer to do any sort of Internet commerce without the use of Microsoft products.

B) Disallow/Discourage IE As A Requirement for Accessing Any Commercial Web Site

There is a sizable number of web sites that currently only allow access via IE. If this was done via a licensing agreement with Microsoft and not because of any valid technical reason, all such agreements should be voided The governing body for all web standards is the World Wide Web Consortium (''W3C'') and it is they who should define web standards, not Microsoft Microsoft itself requires the use of IE for many functions on its own web site. most especially ones related to updates to Microsoft's other products This requirement should be voided, especially since there really aren't any valid technical reasons for doing this (Antivirus programs are quite adept at checking for updates without even a browser requirement)

As a matter of good web commerce, companies should be encouraged to keep their web sites W3C compliant, which will eliminate dependency on any particular web browser If it turns out Bernie Conneely—Microsoft Remedies Page 5 Contact bconnee??@yahoo.com for further info that it would be a burdensome cost for many companies to immediately make their web sites nonIE dependent, it may be necessary to have Microsoft come up with a ''application'' version of IE, meaning that it installs and behaves like a normal non-Microsoft application that doesn't embed itself into the Windows operating system IE for Apple's Macintosh works this way, so Microsoft has surf cleat familiarity with how to achieve this A user can install this application version of IE specifically to access those IE-dependent sites without it ''taking over'' all web/file access functions as the normal version of IE does Still. this should be only an interim solution to allow for web sites to be made non-IE dependent without undue time pressure or burden

C) Disallow IE as a Requirement for Microsoft's Other Products & Services

There are no good valid reasons why Microsoft Word. Powerpoint, or whatever other Office component needs IE to be installed, likewise with even Microsoft's online services like MSN.

Microsoft would argue otherwise, but all their technical arguments to date for unbundling IE have been disingenuous, misleading or simple outright lies Just recently, on October 25. 2001. MSN locked out non-IE web browsers.

Microsoft's explanation for this was. to put it very mildly, not very credible. The following was taken from a ZDNet news item

about the matter. Microsoft on Thursday contended that the upgraded MSN she uses World Wide Web Consortium (W3C) standards and that browsers that don't conform to the standards are being blocked out.

''We supported the latest W3C standards when developing the co??ent and services delivered from MSN.'' Bob Visse, the director of MSN marketing said in an e-mail Friday. He added that Microsoft wants users to visit the Web site ''regardless of the browser they choose.

But Visse recommended that for the best experience with MSN, customers should use a browser that lightly adheres to the W3C standard.

''If customers choose to use a browser that does not ??gh??s support W3C standards, then they may enco??er a less then op??m??l experience on MSN.'' he said,

On Thursday, he had said that the com?? expected to have MSN.com f??lly accessible to the browsers later in the day.

The problem was actually not fixed until that following Saturday, which gave me a chance to run an experiment: on 10/26/2001 at approximately 7:00 PM EST. I went to the W3C web site and downloaded ''Amaya,'' an experimental browser developed m conjunction with W3C standards. After installing Amaya on my computer, I went to ?? to access www.msn.com and got this message, which was the same message all other non-IE browser users were getting: Attention: Web Browser Upgrade Required to View MSN.com

If you are seeing this page, we have detected that the browser that you are using will not render MSN.com correctly Additionally. you'll see the most advanced functionality of MSN.com only with the latest version of Microsoft Internet Explorer or MSN Explorer If you wish to visit Bernie Conneely—Microsoft Remedies Page 6 Contact ??com For further info MSN.com, please select the appropriate download link below Internet Explorer for Windows Internet Explorer for Macintosh MSN Explorer for Windows [end]

Basically, in using ''W3C Standards'' as an excuse for requiring IE to access MSN. Microsoft outright lied. For the record, IE is the LEAST W3C compliant of all the current major web browsers, including Netscape 6.1, Mozilla, and Opera Checking in with the W3C organization will confirm this

The same applies to Microsoft's main site www.microsoft.com which frequently needs to be accessed if you want to keep up with the latest security patched or updates. Ironically, it is NOT W3C compliant and makes non-IE browsers act funny Again, a little trick that has no technical or consumer benefit.

Often, a consumer will be told he/she MUST install IE in order to use some online product or service, which is usually through some Microsoft licensing arrangement. ''Quick Books Pro 2001'' for example is an accounting program, but it will install IE 5 5 automatically for no genuinely good reason. And if you go to the McAfee antivirus site www.incafee.com using any 4.xx version of Netscape, you will be greeted with a pop-up window requesting that you download IE for the benefit of doing just a trial test of its online scanner: however. Trend Micro's online scanner at www.housecall.antivirus.com has no such requirement

As a side note, Microsoft also modified its Hotmail online service so that when a Hotmail user signs out. he/she is immediately redirected to Microsoft's MSN web site. While the newer non-IE web browsers don't get that annoying ''Upgrade'' message, older Netscape browsers do. Many public libraries in the Boston area at least have been standardized on Netscape 4.08 for a few years now, and now their many Hotmail users are getting that ''Upgrade'' warning once they are done, even though it has nothing at all to do with accessing Hotmail itself.

Yet more Microsoft heavy-handed ''tricks'' even in the midst of all the current lawsuit and antitrust, activity

2) Application Product Related

A) Allow for Complete Removal of Any Installed Microsoft Product and Without the Need for the Installation CD

Another common Microsoft ''trick'' is to make complete removal of its application products very difficult. Typically, a consumer will buy a new PC and find that it came pre-loaded with a Microsoft product like Works 2000, a very large and seldom used software suite. If the consumer is savvy enough to go to the ''Control Panel'' in Windows and try to uninstall Works via ''Add/Remove'' programs, he/she will be asked to insert a ''Works'' CD and no matter which of Bernie Conneely—Microsoft Remedies Page 7 Contact bconnee??@ yahoo.com for further info the several Works CDs get inserted, it will seem to be the wrong one. The only way to remove is to either have a very technical friend delete The all the Works registry, entries and then The Works folders, or else go to the Microsoft web site and do a search on how to remove Works. and if he/she is lucky, this page will be found http//:support.microsoft.com/support/kb??70.ASP or perhaps this page: http://supprort.microsoft.com/support/kb/articles??74.ASP Removing Office 2000 is more straightforward but still requires the installation CD But if you need to completely remove it and reinstall it because of corruption or virus damage, then you must again go searching on the Microsoft site and if you are again very ''lucky'' you will find this: http://support.microsoft.com/support/kb.articlesQ23??.ASP Or if you're not so lucky, you might find this instead: http://support.microsoft.com.support/kb/articies??5/60.ASP

There is not a single good reason for Microsoft not to include a genuine uninstall option to its software products, either for people who want to clear them off their systems or for users who just want to fix a problem by reinstalling

B) No Automatic Replacement/Disabling of Another Company's Product or Feature

This is seemingly covered in the DOJ settlement, but it should be made more explicit and that it covers all of Microsoft products. This sort of anti-competitor behavior is not a uniquely Microsoft trait (RealAudio is quite good at this in regards to MP3 music files) but it can be much more problematic given that it can interfere with functions critical to important business software For instance ''LDAP'' is a directory service usually built into mail server programs—a standards-based means of looking up e-mail addresses However. if you install a Windows 2000 server and add ''Active Directory Services'' it takes away LDAP from any non-Microsoft e-mail server you might want to install, forcing the installer [o either disable LDAP for the mail server users or else fiddle with the LDAP registry settings for mail server software, or else just give up and install Microsoft's own e-mail server program. Exchange Server Of course Microsoft allows no such changes with its Windows LDAP settings.

C) A ''Bare Windows'' Option With Clean Registry

After buying a typical retail PC, a consumer is usually faced with a daunting number of unwanted programs and add-ons that come with the system above and beyond what he/she expected. Some are bundled anti-trust baiting products from Microsoft. others are ''value-added'' products and quasi-free trails from other vendors, This is not a good thing because those programs slow down the computer, eat up resources, and generally make the completer less stable than it should be. Removing all of these programs is usually tricky, confusing and beyond the capabilities of the average user Microsoft. should include a global ''Rem??'' function to put the system to a basic state without any wasteful programs or registry e?? The consumer could then systematically add back any programs he/she actually needs or want, Bernie Conneely—Microsoft Remedies Page 8 Contact bconnee??@yahoo.com for further info Closing Thoughts

It's been shown that Microsoft blatantly violated previous agreements, that it frequently misled and outright fled about its actions, capabilities and motives, that it was totally willing to doctor evidence in its behalf, that it still tries to undermine its competition through monopolistic leverage, and that these actions have been both harmful to the consumer and hurtful for the economy by excluding better, more secure products from the marketplace The recent incident involving MSN access to non-IE browsers clearly demonstrates that Microsoft has not mitigated its monopolistic operational behavior at all, even in the face of ongoing litigation If Microsoft again fails to comply with what final agreement is reached with the federal and state governments, a suitably severe penalty should be applied. My suggestion is the original break-up order by Judge Jackson with the addition of the release of all Windows 95/98/ME source code This Windows ''lineage'' has ended with the release of Windows XP, which follows from Windows NT/2000, a completely different code set from 95/98/ME. This will protect Microsoft's current technological investment, but would give possible competitor:, an opening for creating a Windows—compatible operating system. That would, be a fair penalty I think.

I can only hope that at least some of what ! wrote will be of some positive benefit

MTC–00029783

LEVINE SULLIVAN & KOCH, L.L.P.
1050 SEVENTEENTH STREET, NW
SUITE 800
WASHINGTON, DC 20036
LEE LEVINE
CAMERON A. STRACHER
MICHAEL D. SULLIVAN
ELIZABETH C. KOCH
ASHLEY I. KISSINGER
JAMES E. GROSSBERG
AMY LEDOUX
CELESTE PHILLIPS
AUDREY BILLINGSLEY
SETH D. BERLIN
THOMAS CURLEY
JAY WARD BROWN
* ??
(202) 508–1100
* FACSIMILE (202) 861–9888
FACSIMILE COVER SHEET
DATE: January 18, 2002
TOTAL PAGES: 8
Renata Hesse (202) 616–9937
(202) 307–1545
U.S. Department of Justice
FROM: Jay Ward Brown
DIRECT DIAL: (202) 508–1125
CLIENT/MATTER: 0223
REMARKS:
LEVINE SULLIVAN & KOCH, L.L.P.
1050 SEVENTEENTH STREET, NW
SUITE 800
WASHINGTON, DC 20036
LEE LEVINE
CAMERON A. STRACHER
MICHAEL O. SILLIVAN
ELIZABETH C. KOCH
JAMES E. CROSSBERG
ASHLEY I. KISSINGER
CELESTE PHILLIPS
AMV LEDOUX
SETH D. BERLIN
AUDREY BILLINGSLEY
JAY WARD BROWN
THOMAS CURLEY
WRITERS' DIRECT DIAL
(202) 508–1110
(202) 508–1125
(202) 508–1100
FACSIMILE (202) 861–9888
* ??
January 18, 2002
VIA FACSIMILE AND FIRST CLASS MAIL
Renata Hesse, Esq.
Trial Attorney
Department of Justice
Antitrust Division
601 D Street NW, Suite 1200
Washington, DC 20530
Re:
United States of America v. Microsoft Corporation, Civil Action No. 93–1232 (CKK) (D.DC);
State of New York ex. tel. Attorney General Eliot Spitzer, et al. v. Microsoft Corporation, Civil
Action No, 98–1233 (CKK) (D.DC)

Dear Ms. Hesse:

Pursuant to 15 U.S.C. § 16(o) and the Notice of Revised Proposed Final Judgment, 66 Fed. Reg. 59452 (Nov. 28, 2001), The New York Times, through its undersigned counsel, hereby submits the following comments relating to the revised proposed Final Judgment pending in the above-referenced matters.

Under the Antitrust Procedures and Penalties Act (the ''Tunney Act''), Microsoft Corporation (''Microsoft'') was required to file, within ten days of the filing of the revised proposed Final Judgment, ''a description of any and all written or oral communications by or on behalf of [Microsoft], including any and all written or oral communications on behalf of [Microsoft], or other person, with any officer or employee of the United States concerning or relevant to such proposal.'' 15 U.S.C. § 16(g). The only communications excepted from this requirement are those made by Microsoft's ''counsel of record alone with the attorney general or the employees of the Department of Justice alone.'' Id.

The revised proposed Final Judgment in the above-referenced actions was filed November 6, 2001. On December 10, 2001, Microsoft filed a ''Description of Written or Oral Communications Concerning the Revised Proposed Final Judgment and Certification of Compliance Under 15 U.S.C. § 16(g)'' (the ''disclosures''), a copy of which is enclosed for your convenience, that purports to satisfy the, Tunney Act's disclosure requirement.

Microsoft's disclosures are insufficient for several reasons. First, with respect to the referenced October 5, 2001 meeting regarding ''technical questions,'' Microsoft indicates that its counsel met with ''representatives of the United States and the plaintiff States'' but does not identify those ''representatives'' or the departments or agencies for which they work Moreover, although Microsoft indicates that Linda Averett, Michael Wallent, Robert Short and Chad Knowlton attended this meeting, it does not indicate what positions these persons hold at Microsoft or the purpose of their attendance at the meeting. Nor does Microsoft describe the substance of the October 5 communications or indicate specifically where they took place.

Similarly, with respect to the referenced meetings that occurred between September 27 and November 6, 2001, Microsoft has not disclosed the names of those counsel for Microsoft, the United States, and the plaintiff States who attended; 1 the specific dates and locations of those meetings; which of those meetings were attended by Professor Eric Green and Jonathan Marks; and which of those meetings were attended by Will Poole. Nor has Microsoft described in even the most cursory fashion the substance of any of these communications.

1 This shortcoming is significant. As Senator Tunney explained, the ''limited exception for attorneys representing the defendant who are of record in the judicial proceeding ... is designed to avoid interference with legitimate settlement negotiations between attorneys representing a defendant and Justice Department attorneys handling the litigation.... [T]he provision is not intended as a loophole for extensive lobbying activities by a horde of 'counsel of record.'" 119 Cong. Rec. 3451 (1973). The report on the Tunney Act issued by the House Committee on the Judiciary further clarifies that the limited exception to disclosure ''distinguishes 'lawyering'' contacts of defendants from their 'lobbying contacts.'" H.R. Rep. No. 93–1463, at 9 (1974), reprinted m 1974 U.S.C.C.A.N. 6535, 6540, 1974 WL 11645.

In addition, it appears that Microsoft may not have made all of the disclosures required. The only exception to the disclosure requirement is for communications between counsel for Microsoft alone and the attorney general or employees of the Department of Justice alone; any other communications between the government and Microsoft or others on Microsoft's behalf concerning or relevant to the disposition of these actions—even those in which no counsel participated—must be disclosed. See 15 U.S.C. § 16(g). The communications disclosed by Microsoft appear to each involve its counsel of record. This fact, coupled with the absence of any meaningful description of the communications and the lack of any express disclaimer of the existence of communications with the government not involving counsel of record, renders it impossible to determine whether Microsoft has complied with Section 16(g).

According to the House Report, the Tunney Act was intended "'to encourage additional comment and response'" by the public to proposed consent decrees "'by providing more adequate notice to the public.'" 1974 U.S.C.C.A.N. at 6538 (quoting S. Rep. No. 93–298, at 5 (1973), reprinted in 9 Earl W. Kintner, The Legislative History of the Federal Antitrust Laws and Related Statutes 6598 (1984) (''Kintner'')). ''[E]ffective and meaningful public comment is also a goal.'' Id. (emphasis added). In addressing Section 16(g) specifically, the House Report emphasized that Congress ''intend[ed] to provide affirmative legislative action supporting the fundamental principle restated by the Supreme Court ... [that it] 'is not only important that the Government and its employees in fact avoid practicing political justice, but it is-also critical that they appear to the public to be avoiding it if confidence in the system of representative Government is not to be eroded to a disastrous extent.'" Id. (quoting United States Civil Serv. Comm'n v Nat'l Ass ''n of Letter Carriers, AFL-CIO, 413 U.S. 548, 565 (1973)); see also Kintner, at 6600 (''antitrust violators wield great influence and economic power,'' and ''additional comment and response'' from the public would alleviate much of the ''significant pressure'' violators could often ''bring ... to bear on government, and even on the courts, in connection with handling of consent decrees''). Indeed, when Senator Tunney first introduced his bill, he focused on the significance of the disclosure provision. ''Sunlight is the best of disinfectants,'' he explained (quoting Justice Brandeis), and thus ''sunlight ... is required in the case of lobbying activities attempting to influence the enforcement of the antitrust laws.'' 119 Cong. Rec. 3453. The disclosure provision was only slightly altered before passage, and the amendments were designed ''to insure that no loopholes exist in the obligation to disclose all lobbying contacts made by defendants in antitrust cases culminating in a proposal for a consent decree .... ''1974 U.S.C.C.A.N. at 6543.

The New York Times respectfully submits that Microsoft's disclosures are inadequate to serve these statutory purposes, i.e., to assure

the Court and the public that the parties agreed upon the revised proposed Final Judgment at arms length and without the exertion of any improper or undue influence. The public has a statutorily recognized right to information sufficient to make this determination. For this reason, The New York Times respectfully suggests that Microsoft should be required to supplement its disclosures to: (1) identify the location, date and, where possible, time of each communication; (2) identify the names and titles of all persons present for each communication; (3) state the purpose of the participation in each communication by those other than counsel of record; (4) describe the substance of each communication; (5) disclose any other required communications, if necessary; an (6) certify that there exist no further communications required to be disclosed.
Sincerely,
LEVINE SULLVAN & KOCH, L.L.P.
By
Lee Levine
Jay Ward Brown
Enclosure
IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA
UNITED STATES OF AMERICA,
Plaintiff,
Civil Action No. 98–1232 (CKK)
v.
MICROSOFT CORPORATION,
Defendant.
STATE OF NEW YORK ex. rel.
Attorney General ELIOT SPITZER, et al.,
Plaintiffs,
Civil Action No. 98–1233 (CKK)
v.
Next Court Deadline: March 4, 2002 Status Conference
MICROSOFT CORPORATION,
Defendant.
DEFENDANT MICROSOFT CORPORATION'S DESCRIPTION OF WRITTEN OR ORAL COMMUNICATIONS CONCERNING THE REVISED PROPOSED FINAL JUDGMENT AND CERTIFICATION OF COMPLIANCE UNDER 15 U.S.C. § 16(g)

In conformance with. Section 2(g) of the Antitrust Procedures and Penalties Act (''APPA''), 15 U.S.C. § 16(g), defendant Microsoft Corporation (''Microsoft'') respectfully submits the following description of ''any and all written or oral communications by or on behalf of'' Microsoft ''with any officer or employee of the United States concerning or relevant to'' the Revised Proposed Final Judgment filed in these actions on November only ''communications made by counsel of record alone with the Attorney General or the employees of the Department of Justice alone.''

(1) Following the Court's Order dated September 27, 2001, and continuing through November 6, 2001, counsel for Microsoft met on a virtually daily basis with counsel for the United States and the plaintiff States in Washington, DC After the Court appointed Professor Eric Green of Boston University School of Law as mediator on October 12, 2001, Professor Green and his colleague Jonathan Marks participated in many of those meetings. From October 29, 2001 through November 2, 2001, Will Poole, a Microsoft vice president, also participated in some of the meetings.

(2) On October 5, 2001, counsel for Microsoft met with representatives of the United States and the plaintiff States in Washington, DC to answer a variety of technical questions. Linda Averett, Michael Wallent, Robert Short and Chad Knowlton of Microsoft attended this meeting, as did Professor Edward Felten of Princeton University, one of plaintiffs'' technical experts. Microsoft certifies that, with this submission, it has complied with the requirements of 15 U.S.C. § 16(g) and that this submission is a true and complete description of such communications known to Microsoft.

Dated: Washington, D.C, December 10, 2001

Respectfully submitted,

William H. Neukom John L. Warden (Bar No. 222083)
Thomas W. Burt Richard J. Urowsky
David A. Heiner, Jr. Steven L. Holley
Diane D'Arcangelo Michael Lacovara
Christopher J. Meyers Richard C. Pepperman, II
MICROSOFT CORPORATION Ronald J. Colombo
One Microsoft Way SULLIVAN & CROMWELL
Redmond, Washington 98052 125 Broad Street
(425) 936–8080 New York, New York 10004
(212) 558–4000
Dan K. Webb
WINSTON & STRAWN Bradley P. Smith (Bar No. 468060)
35 West Wacker Drive SULLIVAN & CROMWELL
Chicago, Illinois 60601 1701 Pennsylvania Avenue, NW
(312) 558–5600 Washington, DC 20006
(202) 956–7500
Charles F. Rule (Bar No. 370818)
FRIED, FRANK, HARRIS, SHRIVER & JACOBSON Counsel for Defendant
Microsoft Corporation
1001 Pennsylvania Avenue, NW
Suite 800
Washington, DC 20004–2505
(202) 639–7300

MTC–00029784

James Hall
Attorney at Law
47 E. Wilson Bridge Road
Worthington, Ohio 43085–2301
Telephone: 614–885–3500
Fax. 614–527.18
January 19, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ash croft:

I would like to start by saying that I am neither pro nor anti-Microsoft. I do however believe in right and wrong. What the government has done to Microsoft over the past three years is definitely wrong. This letter is to show my support for the settlement that was reached with Microsoft. I do not support the settlement because I agree with it; I support it because it brings an end to one of the most absurd lawsuits I have ever seen.

There was not a single reason why the government should have brought Microsoft to court at all. I do not agree with all of their practices, but they have never broken the law. I guess that does not matter when the competition of Microsoft spends more money lobbying to get them in trouble than it does on their own research and development. I suppose the competition can now rest easy in the fact that their money was well spent. Microsoft has agreed, just to get this madness over with, to not retaliate against the competition if they produce software that competes with Microsoft's. Let's examine the word ''competition'' American Heritage Dictionary as defines it: ''the act of competing, as for profit or a prize rivalry''. Microsoft took part in just that; they were competing for a profit. They made this profit, and did great things with it. Millions of dollars in profits were donated to charities other profits were used to establish scholarship funds for college students. Clearly Microsoft isn't some sort of evil corporation.

We need to end this senselessness now. The lawsuit should never have been necessary in the first place.

Sincerely,
James Hall

MTC–00029785

January 27, 2002
FAX TO: ATTN: MS. RENATA B. HESSE
U.S. DEPARTMENT OF JUSTICE
202–307–1454
RE: MICROSOFT SETTLEMENT

Dear Ms. Hesse:

The proposed settlement is, I believe, fair and equitable for all concerned.

. Microsoft will continue to provide new software that will integrate new products;

. Competitors will have more Windows access to incorporate in their products, making them more compatible;

. Software manufacturers will resume the creation of new products;

. Consumers will have wider choices among software products; and

. Investors will enjoy stability in the marketplace.

Sincerely,
William F. Summerfield

MTC–00029786

January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to give my approval to the agreement between Microsoft and the Department of Justice. This is a reasonable settlement for all and it is time to put this matter behind us and move on. I am somewhat irritated with the entire lawsuit, as the competitors of Microsoft are coming across as a bunch of whiners who, because they are not producing a quality product, cry and run to the government to ball them out instead of doing a better job at their own production and marketing.

Be that as it may, Microsoft and the Justice Department worked out a fair agreement. Microsoft agreed to open the company up to more third parties making available more of its copyrighted code to aid in development of third party programs; Microsoft has agreed to disclosure various interfaces that are internal to Windows' operating system, and have agreed to a three person technical committee to oversee future compliance. This is more than enough.

I urge you to give your support to this agreement and allow this country to get back to business.

We desperately need to.

Sincerely,

James P. Duggan

MTC–00029787

Anthony Perrella
6017 Java Plum Lane
Garden Lake Estates
Bradenton, FL 34203
January 28, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to express my full support of the recent settlement between the US Department of Justice and Microsoft in the antitrust case. The case has taken too long to settle and needs to be finalized to serve the best interests of the public.

The terms of the settlement reflect the intense lobbying efforts on the part of Microsoft's competitors. Microsoft is agreeing to disclose interfaces that are internal to Windows operating system products—a first in an antitrust case. They have also agreed to grant computer makers broad new rights to configure Windows so that non-Microsoft products can be promoted more easily.

It is time for your office to use its influence to press for an end to this matter. There are nine states out there looking to continue litigation, and it is my belief that your office should be active in suppressing this silly notion. Our nation cannot afford further litigation, and we need Microsoft back at full strength.

Sincerely,

Anthony Perrella

MTC–00029788

20 B S Main Street Alburg, VT 05440
January 15, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft

I am writing to you today to voice my support for the Microsoft settlement. Three years have now passed since the beginning of this case During this time, much money has been wasted. Federal dollars have been squandered on court mediators and countless extensions. The settlement of this case then is a welcome end to the protracted ??gation.

The settlement that was reached is equitable Microsoft agrees to share with its competitors some of the workings of its operating system. This gives developers the freedom to design software that will be mereasingly compatible with the Windows system. While this is a large concession on behalf of Microsoft. I agree with Microsoft's support of the settlement. The settlement allows Microsoft to finally resolve this issue. Getting back to business is important to Microsoft.

I agree with Microsoft's decision to settle this case. I believe that the terms of this agreement are fair. I hope that the Justice Department will enact this settlement as soon as possible.

Sincerely,

Richard Bayer

MTC–00029789

KerrAlbert
Office Supplies & Equipment
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

The Justice Department's anti-trust lawsuit against Microsoft has gone on for much too long, and I would like to express my support for the settlement that the two sides reached in November of last year. It is a fair compromise that will benefit all parties involved, and I would like to see it finalized in the near future.

The government should not interfere with Microsoft simply because it is a successful company. Yet Microsoft has agreed to allow other independent companies new rights that will allow them to promote their own products (rather than Microsoft's) within the Windows operating system. Microsoft will not ?? against computer makers that choose to do this, and the result will be stronger competition in the industry. Once competition increases, consumers will have more to choose from, and the technology industry will receive a real boost.

I believe the Justice Department made the right decision in settling this lawsuit. Microsoft can no go back to developing the types of ideas that have made it the successful company it is today, and the government can begin to focus its time and money on more important issues.

MTC–00029790

45 Springfield Street # 1
Belmont, MA 02478
January 28,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing this letter to express my opinion about the settlement that has been reached between Microsoft and the Department of Justice.

First off, I am NOT 100% in Microsoft's camp. I have tried MANY of their competitors'' products: very few are truly better when you take all of the real world factors into consideration. The pattern has been simple all along: Microsoft sees a product in the marketplace, imitates it until it is as good as the competing product, and then (now this is the KEY) they surpass their competitor's product. This is really the driving force behind the technicalities of the lawsuits. You cannot even imagine how much it disgusts me that companies are allowed to sue because another company bettered their product.

If I were Bill Gates, I would be so outraged that] would move Microsoft to Canada. I have consulted for EMC Corporation in Ireland so I know firsthand that the U.S. is losing ground as THE place to be for technology. If our court system continues to allow cases as outrageous as this, no business will want to set up shop here.

Who's going to file a lawsuit next? Palm, Inc.? Well, I'm a registered Palm developer and if they file a lawsuit, guess who will be switching to Windows CE devices?

I obviously think this case should have been thrown out of court on the first day, but since it was not, please just get it over with and APPROVE the settlement. Thanks.

Sincerely,

David M. McNamara

MTC–00029791

Raymond L. Barker, CPA
3967 Hancock Forest Trail,
Annadale, VA 22003
Telephone: 703473–6066
c-mail lbarkcr@erols.com
Fax 703–208–0709
FAX COVER SHEET
From: Raymond L. Barker [lbarker@erols.com]
Sent: Monday, January 28, 2002 9:10 AM
To: 'mailto:microsoft.atr@usdoj.gov''
Subject: Microsoft Settlement

The settlement between DOJ and Microsoft should be settled. Each has affirmed that the settlement is hard but fair. To continue to go after Microsoft is counter-productive to our economy.

The AOL suit is outrageous.

Raymond L. Barker, CPA

MTC–00029793

8632 15th Avenue Brooklyn, NY 11228
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

This letter is to urge you to give your approval to the Microsoft settlement. This would end three years of court battles between Microsoft and the Department of Justice. The two parties have agreed to this agreement and I do not think it is the place of others to second-guess the decision

The fact that a federal judge accepted it is also evidence of a settlement. It has gone on far too long. It is time to quit wasting taxpayers'' money and put some of that money towards things that are needed more, like highways, schools, the environment.

Microsoft has agreed to a great many of the terms demanded by Justice. There is internal interface disclose, computer-maker flexibility, granting computer makers new rights to configure Windows to promote non-Microsoft programs; there is an oversight committee. What more is there? Why should anyone work to make a company work, or invent something, if only to have to give it away? This whole lawsuit sets a very bad precedent.

I urge you to let this decision stand and let us go forwards, not backwards.

Sincerely,

Shirley Hui

PS: ?? a Corner, I can't be more ?? with ?? products. It's a great ??

MTC–00029794

ServComp
2700 Post Oak Blvd., Suite 600
Houston, Tx 77056
713/935–3600
713/935–3650 Fax
www.servcomp.net
FAX COVER PAGE
Attn: ATTORNEY GENE?? JOHN ASHCROFT
Company: US DEPT. OF ??
Phone No.: 202
Fax No.: 202 307 1454
From: Bob BEDD??FIELD
Company: SERVCOMP, INC.
Phone No: 713 935 3600 112
Fax No.: 713 935 3650
Date: 61 28 02
No. Pages: (Including Cover) 2
Message:
ServComp
2700 Post ?? Suit?? 400
713–935–3600
713–935–3650 fox
www.servcomp.com
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

This lawsuit against Microsoft has gone on long enough. There are other Issues of greater Importance facing our county and there is now a settlement In place that will, hopefully, end the hostilities between our government and Microsoft.

Often overlooked throughout the course of this contentious litigation is the fact that there are many other IT companies, that have built their businesses off of Microsoft's leadership and innovative products. While few, of these companies are dependent upon Microsoft, they are dependent upon a reasonable stability In the marketplace. This litigation has disturbed this stability.

The strength of this settlement is that it focuses on remedies for the original issues and leaves Microsoft Intact. I am therefore writing in favor of this settlement, and hope that similar actions will not be brought in the future.

Sincerely,
Bob Beddingfield
Sales Director
ServComp, Inc.
2700 Post Oak Blvd, Suite 600
Houston, TX 77056
713–935–3600, ext. 112
jrb@servcomp.com

MTC–00029795

January 21, 2002
Attn Renata Hesse
US Department of Justice. Antitrust Division
601 D Street, NW, Suite 1200
Washington, DC 20530

The opportunity to make commennts on the Microsoft annual lawsuit is much appreciated with the importance it carries for the economy. We would like to other our opinion for your consideration as you deliberate the proposed settlement of this case.

As the owners of a wholesale plumbing supply company, we understand that government has a role in protecting consumers and businesses from monopolistic behavior. Although we were never supportive or the case against Microsoft, we acknowledge the Court of Appeals findings.

To this end we believe that settlement is the best option for the economy and the high-tech industry.

The key point in our minds in that settlement not only ends the suit, but it does accomoplish what the government set out to do; put a more watchful eye on Microsoft's business practices to ensure consumers are protected.

What we have read about the details of the suit and the settlement talks us that the settlement that is on the table is a good compromise that gives the government what it is seeking. Microsoft some of what it wants, and the economy what it desperately needs. We hope your deliberations bring you to the same conclusion.

Sincerely,
John and Beverly Trimmell, Owners
B & J Wholesale Plumbing Supply
525 S Kansas Avenue
Liberal, KS 67801

MTC–00029796

To whom it may concern:

I am responding to the proposed Microsoft settlement in accordance with the Tunney Act I was someone who has been an IT professional for the past seven years it disturbs me to learn that the proposed settlement will have no real affect on Microsoft and will not restore competition. It is imperative that a settlement to restrain Microsoft include:

1. The equired publishing of API's, file formats, and other protocols to all developers. This is the only way to truly give independent soft-ware companies the ability to compete with Microsoft.

2. Protection to OEM's that wish to load competitive software on their systems. This will allow OEM's to install the software that customers want.

3. Full ??ricing disclosure from Microsoft on how much it charges OEM's for its products. This will allow consumers to make informed choices as to which products are the most cost effective solution.

Thank you for you time.

Mark King

MTC–00029797

January 16, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
Dear Mr. Ashcroft:

As a Microsoft supporter, I would like to see this case concluded. I believe Microsoft has become powerful not by malicious intent, but because it makes a quality product that is reasonably priced.

I do not agree with every decision that Microsoft has made in the past, but I understand the idea of aggressively marketing your own product. Either way, I do not agree with the allocation of scarce state and federal resources on problems that have already been solved.

Under the settlement agreement, Microsoft has promised to change the way it develops, licenses, and markets its software. It has granted computer makers broad new rights to configure Windows to better promote non-Microsoft software on the Windows platform. Also, Microsoft has agreed not to retaliate against software or hardware developers who develop or promote software that competes with Windows. Microsoft has opened its inventions to the competition that would see that invention become obsolete. This goes against the very fundamentals of capitalism, but if it ends the case, then Microsoft is willing to concede.

Although the settlement reaches further than Microsoft may have wished, Microsoft realizes that settling sooner is better than settling later. The longer that the case proceeds and innovation suffers, the greater the risk that American products may lose their competitive advantages in the world market. I am convinced that the only reason states would continue litigation would be an effort to appease Microsoft's competitors, rather than to protect consumers. Let's make sure that we don't lose our place as the world leader in the IT industry; let's end this debacle once and for all.

Sincerely,
Randall Baxley

MTC–00029798

28 January 2002
The Attorney General, John Ashcroft
US Department of Justice
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing today to encourage the Department of Justice to accept the Microsoft antitrust settlement. The issue, which should never have begun, has been dragged out long enough and it is time to put the issue to rest. A settlement is available and the government should accept it.

Under the settlement, Microsoft gave in to many concessions in order to return to software design. They have agreed to give computer makers the flexibility to install and promote any software that they see fit, With no fear of retaliation, Microsoft has also agreed to license Microsoft software at a uniform price to computer makers no ma?? software the company decides to install or promote. Also Microsoft has agreed not to enter into any agreement that would obligate a computer maker to exclusively install or promote Microsoft software.

Microsoft has given far too much in order to settle this issue. Microsoft and the technology industry need to move forward, arid the only way to move ahead is to put this issue behind us. In these days, we hear shouts of outrage that the government has not done more to bolster the airlines, Enron, K-Mart, and many other companies in financial trouble. It is truly outrageous that the government should do much to destroy one of the this country's most successful businesses.

As unfair as it is to Microsoft, ask you to please accept the Microsoft antitrust settlement.

Michael R. Yosko

MTC–00029800

7199 Bahne Road
Fairview, TN 37062
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

We wanted to write to you today to express our dismay over the Microsoft antitrust dispute. As Americans, we feel that this quit is contrary to the very ideals of Free trade and capitalism theft we treasure in this nation. It is our opinion that punishing a company or an individual for demonstrating the very cleverness and ingenuity upon which we have built this nation is un-American.

Americans are unlike any other people in the world. It is our goal to became a success; to became something marc than our Fathers and grandfathers were: to start with nothing more than a good idea and a diligent work ethic and end up a success. This is the American dream, and it is this dream that is under attack in this suit.

This litigation is not a question of whether or not Microsoft violated antitrust laws. It is a question of whet her or not we, as Americans, have the right to become successful without the interference of the government. We are pleased that this heinous suit has finally reached a conclusion that is satisfactory to all of the parties involved. However, it is our fondest wish that none of this unpleasant litigation had begun in the first place, Please keep the government out of the private sector. Thank you.

Sincerely,
Don Crohan
Gayle Crohan

MTC–00029801

Robert Agness
608 Juanita Court
The Villages, FL 32159
January 28, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

As a concerned citizen who would like to see this process ended,

I would like to ask for your approval of the proposed agreement in the Microsoft anti-trust lawsuit. This legal action appeared to have been punishment for not having given enough campaign contributions to the previous administration, which then led down the ridiculous path of Judge Jackson trying to break up Microsoft.

It is time to come back down to earth and accept this more reasonable compromise without further legal action.

The fact is that Microsoft has done more than any other company to move the PC industry forward over the last 20 years. With such advantageous terms, the Justice Department should finalize this deal and let this company continue to work toward further innovations. Considering Microsoft's flexibility of allowing non-Microsoft software programs to be placed on Windows, and offering to license intellectual property and access to its internal code, the competition should be quite pleased with this decision.

It is time to end the arduous legal proceedings and get back to priorities. Please keep Microsoft intact and the software industry stabilized by moving forward with this plan. Thank you very much for your support.

Sincerely,
Robert Agness

MTC–00029802

FAX
DATE: 12802
TO: Renata Hesse, Dept of ??
202, 616, 9937
FROM: Kim Waltman
Number of pages: (including cover sheet) 2
Please call 815–282–8053 if you do not receive all pages indicated.
Message:
January 28, 2002
Ms. Renata Hesse
Department of Justice, Antitrust Division
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

I am writing to you regarding you the Microsoft lawsuit. This lawsuit was brought against Microsoft by the federal government. During the course of this three-year lawsuit, the federal government has spent $30 million pursuing their case. The funding for the federal government's case comes from the taxpayers of this country.

This case has had its day in court. And the Court of Appeals has ruled to do away with the lower courts' plan to break up the company. Let's put an end to the lawsuit. At this point, spending any additional taxpayer money would just be sending good money after bad. The proposed settlement agreement is the only logical solution.

If this case is carried out any longer, it will only result in unnecessary increased expenses to consumers. I believe any additional public funds spent on this lawsuit are not being used for an appropriate cause. That is why I am asking that you move ahead with the settlement agreement without delay. The agreement will close the book on this overdone court case and allow us to move forward into the next century of technological advancements.

Thank you for giving consideration to my opinion.

Sincerely,
Kim Waltman
Founder
InSync Communications

MTC–00029803

10852 NORTH KENDALL DR # 208
MIAMI, FLORIDA 33176–3469
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft,

We are writing to show our support for the Microsoft antitrust settlement. It is of vital concern to this country that a climate of stability and support by established for American businesses to flourish, With the grave challenges facing America now, both in the domestic economy and around the world, self-destructive legal abuse is uncalled for.

Microsoft has shown that it is willing to bend over backwards to reach a settlement that will help its partners and competitors perhaps more than itself. The settlement, whatever the effect it has on Microsoft, will greatly help the broader American technology industry. Software companies will be better able to have their products work with Microsoft's Windows operating system when Microsoft makes the code for the internal interfaces and server interoperability protocols that tie program together available. Computer manufacturers will have more flexibility to contract with other companies, like AOL Time Warner, RealNetworks, and Symantec to substitute their products for the program Microsoft includes in the standard Windows installation, such as internet Explorer. The American computer industry should benefit from the settlement I welcome your support and leadership for the settlement, Mr. Attorney General, The Federal Judge who will be deciding on the settlement should approve it in the best interests of the American public.

Sincerely,
Axel Heimer

MTC–00029804

OnQuest Technologies, Inc
January 17, 2002
Attorney General John Ashcroft
U.S, Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

Whatever might be said of this lawsuit against Microsoft, it is, in my opinion, good that the entire case has settled. Without necessarily taking sides on any of the issues explored during the court proceedings, at the very least it can be observed that the tone was contentious and unnecessarily inflammatory.

All of this has apparently created a perceptible nervousness among consumers that has, in turn, adversely affected both sales of computer products, as well as the economy in general.

I am therefore writing to convey my support of the settlement, as well as my hope that there will be no further federal action against Microsoft, or any other IT company. The settlement assures that Microsoft will commit to better business practices, and change its software to reflect that.

Starting with the next release of Windows XP, Microsoft will make their software easier to use for non-Microsoft software developers, and Microsoft will even make it easier for developers, since Microsoft will release its interfaces and protocols to them so they can be more competitive.

This really is more than a slap on the wrist; it's a whole new way of doing business.

Sincerely,
Luis Navarro
President

MTC–00029805

January 28, 2001
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue NW
Washington, DC 20530
Fax: 1–202–307–1454

Dear Mr. Ashcroft:

This letter pertains to the recent settlement of the antitrust lawsuit between Microsoft and the Department of Justice. I am in favor of leaving the company as it is—NOT breaking it up. Let's accept the terms of the settlement and let Microsoft and the industry move forward.

I support final adoption of the settlement as soon as possible. I feel the terms are reasonable and fair to all parties—they meet, or exert go beyond, the ruling by the Court of Appeals. This has been going on far too long.

Helen M. Pickering
3815 E. Funk Avenue
Spokane, WA 99223

MTC–00029806

COLESYSTEMS
Business Applications
Networking Technologies
Software Development
Web Commerce
Training
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft,

I have always believed that it was a bit overzealous for our government to have actually reacted with a federal lawsuit against Microsoft simply because a few of Microsoft's competitors had suggested it. I agree that Microsoft may well have employed aggressive marketing and sales tactics, but these tactics had never risen to the level of needing federal court intervention. I worry more about any business that doesn't aggressively pursue sales.

The IT business, by its very nature, is a very fluid business. Where one particular company may be dominant today, another will be tomorrow. It is incumbent upon all who hope to survive in the IT world to change with the current times and technologies. Any company that does not—even a company with the apparent invulnerability of Microsoft—will soon find itself relegated to yesterday's outmoded ideas. By the very nature of the IT business, therefore, Microsoft would have had to change to remain competitive. The limitations on Microsoft brought on by the settlement, such as disclosure about internal interfaces of Windows, will only make trade secrets public, and prepare IT engineers for the ''next big thing.''

The irony here is that this lawsuit, and the subsequent settlement, only delayed what would have had to happen on its own anyway. I am hopeful that this marks the end of any federal action against Microsoft, or any other IT business.

Sincerely,
Ivan Cole
Chief Technology Officer

cc: Representative Jerrold Nadler
174 Hudson Street
New York NY 10013
Phone: (212) 965 6400
Fax: (212) 965 6401
Toll Free: 888-COLESYS
Web: http://wwwcolesys.com

MTC–00029807

David Millage
STATE REPRESENTATIVE
Forty-First District
Statehouse (515) 281–3221
e-mail—dmillag@legis.state.ia.us
HOME ADDRESS
3910 Aspen Hills Drive
Bettendorf, Iowa 52722
Home: (319) 332–8723
Office: (319) 388–8417
House of Representatives
State of Iowa
Seventy-Ninth General Assembly
STATEHOUSE
?? 50319
COMMITTEES
Appropriations, Chair
Judiciary
Labor & Industrial Relations
State Government
January 28, 2002
Renata Hesse
Department of Justice, Antitrust Division
202–616–9937
VIA FACSIMILE

Ms. Hesse:

Iowa Attorney General Tom Miller's leadership in the Microsoft antitrust case has caused many Iowans to track the situation with a watchful eye.

According to the Wall Street Journal, Miller ''was the one who originally cooked up the idea of a multi-state assault on Microsoft.'' (November 9. 2001) Regarding the case, Miller told the Journal, ''Everyone knew it was high profile. This one was a no-''??rainer.'' (The same article on November 9, 2001.)

I serve as Chair of the Iowa House Appropriations Committee and I am trying to solve the sizable budget deficit the State of Iowa is facing. I have publicly urged AG Miller to sign on to this settlement and bring this case to an end.

The state is scraping for every dollar in a time of budget cuts, yet our state attorneys are spending staff time and money pursuing this case—that has not and likely will not bring anything back to our state. Thus far, Miller has claimed over $1.1 million in spending on the case. Of the 19 states involved when that claim was filed, only three states topped Iowa's spending, including much larger states like California and New York. According to the Wall Street Journal, Miller is a main reason several states are balking at a settlement, ''...some state pols will stoop lower than others to latch onto a celebrated case in hopes of boosting their name recognition for future electoral ambitions. These antics might have been tolerated when the economy was stronger. but such frivolity looks conspicuously out of place after September 11. In light of the discovery that we have real enemies in the world, suffice it to say the Microsoft prosecution looks more myopic and perverse than ever.''—Wall Street Journal.

''Finally, A Settlement'' Nov. 2.

The hard-earned money of taxpayers can be better spent, and consumers will be no better off if this case are prolonged. At a time of belt-tightening all over the country, the attorneys general who remain on the case are acting like they have unlimited resources for an indefinite pursuit of an American business that anchors a sector of an already limping economy.

Americans deserve fiscal responsibility from their government. Please We strong consideration to approving the settlement in this case.

Sincerely,
David Millage
Iowa House of Representatives

MTC–00029808

Lon Anderson
REPUBLICAN CAUCUS STAFF
IOWA HOUSE OF REPRESENTATIVES
STATE CAPITOL
Des Moines, Iowa 50309
(515) 281–5184
January 28, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

With utter consternation, I have watched my state attorney general continue to battle Microsoft on the issues raised in the current lawsuit pending with the U.S. Department of Justice. I'm not clear on his motives, given that 1owa is facing a severe budget crisis and the expenses of his continued crusade against Microsoft would be much better used to aid Iowans with their education and security budgets than it is to relentlessly pursue one of the most successful companies in the country.

I'm always amazed when politicians like Tom Miller conveniently use lawsuits as a means to advance their own personal agenda at the expense of the taxpaying public they claim to represent. Anyone with any common sense realizes how ludicrous it is to continue this lawsuit when a settlement has been proposed that addresses the concerns raised in the original complaint.

In my opinion, from its onset, this lawsuit was brought by jealous colleagues who are in awe of Bill Gates and his phenomenal capacity to invent and market his products. Isn't that what America is all about? In a few short years, Gates built one of the most successful and profitable companies in the world, which, by the way, made billions of dollars for investors across the globe. To portray this man as an evil to be ''dealt with'' is unfair and unwarranted. The Bill Gates and Microsoft legacy will be one that stands the test of time.

Settle this nuisance lawsuit as quickly as possible so we can all get back to business.

Sincerely,
Lon Anderson
Research Analyst

MTC–00029809

To,
The Department of Justice,

United States of America.

Dear Sir or Madam:

Sub: Opinion on Microsoft settlement

Since it has been proven in US court of justice that Microsoft Corporation has been unlawfully maintaining its monopoly, violating US competition laws. Being a software engineer for about 3 years now I have been in situations when I was a victim of the unlawful monopoly and hence, I would like to make a few suggestions and give possible solutions so that the fights and freedom of people like me is protected in the free market.

Firstly, the judgment has overlooked an important aspect. All OEM's licensing Microsoft software should be made to provide an option without the Microsoft product. For e.g., An OEM selling desktop computers preinstalled with Microsoft Windows Operating System should give an option of a desktop without the Microsoft software. The rationale being ''Why should a consumer who just wishes to buy a desktop computer be forced to have Microsoft software we-installed on it.'' Currently there is not a single portable computer (notebook) in the market which offers a option other than Microsoft Windows.

Though its good to see nearly all clauses of the ''Prohibited Conduct'' talk about the Microsoft licensing policy in the section of the judgment. But, a very important aspect has been missed out: Currently Windows OS overwrites the Master Boot Record so that no other preinstalled operating system would be recognized. Microsoft should be asked to make changes to their OS so that it stops it intrusive behavior and thus making other OS to co-exist on the same machine.

Sincerely hoping that my comments would be helpful to the justice effort.

Regards,

JayaBharath Goluguri

Texas Instruments Inc.

P.O. Box 660199

12500 TI Boulevard, MS 8723

Ph: 972–978–6807(c)

MTC–00029810

To the United States Department of Justice:

Sub: Opinion on Microsoft settlement

I am writing in response to the proposed settlement which is currently under the 60 day public comment period. I consider myself to be a person whom the outcome of this case will have a very significant effect. Since it has been proven in US court of justice that Microsoft Corporation has been unlawfully maintaining its monopoly, violating US competition laws. Being a software engineer for about 3 years now I have been in situations when I was a victim of the unlawful monopoly and hence, I would like to make a few suggestions and give possible solutions so that the rights and freedom of people like me are protected in the free market.

Firstly, the judgment has overlooked an important aspect. All OEM's licensing Microsoft software should be made to provide an option without the Microsoft product. For e.g., An OEM selling desktop computers preinstalled with Microsoft Windows Operating System should give an option of a desktop without the Microsoft software. The rationale being ''Why should a consumer who just wishes to buy a desktop computer be forced to have Microsoft software pre-installed on it.'' Currently there is not a single portable computer (notebook) in the market which offers a option other than Microsoft Windows.

Microsoft has been using open standards in its products and then making some proprietary extensions and claiming all rights over it including closing the source of the so-far open protocol How can Microsoft claim trade secrecy for a protocol that is distributed over the Internet? For example the 'Kereberos'' case.

Microsoft makes it unable for prospective purchasers of its operating system to make informed judgments regarding interoperability with other operating systems in connection with their purchasing decisions. Also it overwrites MASTER BOOT RE CORD of all other previous OS's thus ensuring that user does not have access to his/her OS, other than WINDOWS. The fact is that now, Microsoft has a monopoly on not only operating systems, but also to a lesser degree, office software and web browsers. They have blatantly and obviously abused this monopoly in many cases over the years and it has to stop. The DOJ has made that very clear. However the penalties sought to be imposed nor the agreement between the DOJ and MICROSOFT do not properly address and punish MS for its judged illegal Monopoly. All communication standards and protocols and API, file system formats must be made open source so that all developers can effectively compete and produce more efficient software for the users who are currently forced into buying MS software by various illegal means.

Sincerely hoping that my comments would be helpful to the justice effort.

Regards,

Ravi Shankar R Jagarapu

University of Texas at Dallas

2200 Waterview Pkwy, # 2125

Richardson, TX 75080

Ph: 972–437–2846

MTC–00029811

Tim Pawlenty

Majority Leader

District 38B

Dakota County

COMMITTEES: CHAIR, RULES AND LEGISLATIVE ADMINISTRATION

Minnesota House of Representatives

January 28, 2002

Ms. Renata B. Hesse

Antitrust Division

U.S. Department of Justice

601 D Street NW

Suite 1200

Washington, DC 20530–0001

Dear Ms. Hesse:

I applaud the leadership displayed by the Department of Justice and the nine Attorneys General for developing the proposed Microsoft settlement agreement that balances the protection of consumer interests and the competitive process.

I believe that this settlement will preserve Microsoft's ability to innovate and engage in normal procompetitive activities, critical during our nation's current economic recession. At the same time, the settlement is a win for consumers, with its broad scope of prohibitions and obligations imposed on Microsoft. It will certainly require substantial changes in the way that Microsoft does business. It imposes significant costs on the company and entails an unprecedented degree of oversight. Furthermore, the agreement strikes an appropriate balance within the technology industry, providing opportunities and protections for firms seeking to compete while allowing Microsoft to continue to innovate and bring new technologies to market.

This reasonable settlement will help consumers, the industry, and the economy to move forward.

Very truly your,

Tim Pawlenty

Majority Leader

MTC–00029812

Raymond E Beal

300 E 27th St

Dover OH 44622

January 28, 2002

Attorney General John Ashcroft

US Department of Justice

950 Pennsylvania Avenue, NW

Washington, DC 20530

Dear Mr. Ashcroft:

After three long years of court battles Microsoft and the Department of Justice have reached a settlement regarding the anti-trust stilt. I believe that the settlement will be beneficial to both the IT industry and the consumers alike. It is necessary that all those who are involved in this suit put aside their differences and work to put this issue behind them. I would like to go on record as being a staunch supporter of the settlement.

This settlement went further than what Microsoft would have liked, but they believe that settling the case now is the right thing to do to help the industry and the economy move forward. The agreement is fair and reasonable, and was arrived at after extensive negotiations. The industry will be more competitive since Microsoft has agreed not to retaliate against competitors who produce, promote and ship software that competes with Microsoft's.

I am satisfied with this settlement since it is fair and reasonable to all parties involved.

Sincerely,

Raymond Beal

MTC–00029813

Stephen and Diane Walter

1460 Mills Court

Menlo Park, CA 94025

28 January 2002

Renata B. Hesse

Antitrust Division

US Department of Justice

601 D Street NW

Suite 1200

Washington, DC 20530–001

Fax: 1–202–307–1454

1–202–616–9937

RE: Microsoft Settlement

We urge the Department of Justice to withdraw its consent to the revised proposed Final Judgment. The agreement, as it now stands, will allow Microsoft to extend its monopoly to most if not all aspects of

computing. The new settlement allows firms better access to APIs necessary to work with Windows, which only reinforces the Windows monopoly.

We ask that you (1) restrict Microsoft's practice of forcing Internet Explorer in contractual tying, (2) restrict their practice of giving favorable Windows pricing deals to OEMs, (3) require Microsoft to allow users to remove icons from Windows desktops, (4) restrict Microsoft's bundling of middleware to force its monopoly, (5) re-insert the source code licensing provision of the 2000 DOJ settlement, and (6) allow OEMs to modify Windows to add features.

As you are aware, it is small business that its the fire of the US economy. By allowing Microsoft to extend its monopoly as your proposed agreement will do, you are in essence a□lowing them to continue chasing small companies out of business. Microsoft tolerates NO competition—no matter how small, Please, please take this shark out of the waters of our economy.

Sincerely,
Diane Walter

MTC–00029814

632 Khyber Lane
Venice, FL 34293
January 27, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The nine plaintiff states in the Microsoft antitrust case who are seeking to overturn the settlement reached last November are claiming to act in the best interest of the public. They are mistaken. I do not understand the intricacies of the Microsoft antitrust case. but I do know that extended litigation would be anything but beneficial to the consumer. I do not believe it is necessary to continue litigation at this point. Extended suit can only result in wasted time and money.

The settlement is reasonable. Microsoft will be allowed to remain intact, and it will also retain control over its software, but it will be required to give its competitors access to various parts of Microsoft technology and to refrain from monopolistic actions. For example, Microsoft will not be permitted to enter into any contracts that would require a third party to distribute Microsoft software either exclusively or at a fixed percentage.

It is wrong for States to attack Microsoft under the guise of protecting the consumer. Consumers benefited from Microsoft's developments & marketing. Allowing these nine states to cause the existing ruling to be overturned will only result in expensive litigation, which is contrary to the best interest of consumers.

Thank for your consideration.

Kenneth Twigg

MTC–00029815

620 Terrace Place
Norman, OK 73069–5037
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I completely disagree with the last three years of litigation against Microsoft. The government has no right to keep messing around with private enterprise and it stands to reason why the economy took a turn for the worst when America's number one company is a victim of lawsuits brought on by the Attorney General and Microsoft's competitors.

The terms of the settlement are not fair as they force Microsoft to disclose interfaces that are internal to Windows'' operating system products. They also force Microsoft to grant computer makers broad new rights to configure Windows so that competitors can more easily promote their own products.

Although the terms of settlement are not fully justified, I urge your office to implement it as soon as possible, because our economy cannot afford further litigation against it. Thank you.

Sincerely,
Glen Bell
cc: Senator Don Nickles
Representative J.C. Watts, Jr.

MTC–00029816

decisionmarkTM
818 Dows Rd. S.E., Cedar Rapids, Iowa 52403–7000
Phone: 319–365–5597
Fax: 319–365–5694
January 28, 2002
Renata Hesse
Trial Attorney
Anti-Trust Division
U.S. Department of Justice
601 D St., NW
Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

It is no secret that one of the reasons that Microsoft has succeeded is that the federal government has had very little control over the technology industry. Over-regulating this industry will slow progress.

Technology has fueled the current economic expansion and we should be looking to preserve its status rather than take it down. As a regular consumer of high technology products, I enjoy the benefits of a free and competitive market prices are affordable, the products are of high quality, and the rate of development is the fastest of any market in the world.

There is now an agreement between the opposing parties in this case that designates a fair system of checks and balances. Additionally, it sets out a plan to monitor future activities and a technology committee to enforce them.

Resolving this case once and for all is not only beneficial to the courts and all participants, but also to the marketplace, t hope you will accept this fair agreement.

Sincerely,
David Cechota
2311 Bever Ave SE
Cedar Rapids, IA 52403

MTC–00029817

Carolyn Sergel
3100 Springdale Boulevard
Lake Worth, Florida 33461
January. 22, 2002
Attorney General Ashcroft
US Department of Justice
Washington, DC 20530

Dear Mr. Ashcroft,

I am writing in full support of the recent settlement between Microsoft and the US department of Justice. Although I think the lawsuits have dragged on too long to date, I am happy to see a settlement has been reached. I am confident that the settlement will serve the public's best interests and protect the consumer.

The terms of the settlement are more than fair. Microsoft will be forced to document its Windows interface codes for competitors. It will also be monitored by a special ''Technical Committee'' that will make sure that it stays within the bounds of the settlement.

Our nation cannot afford to continue litigation on fids issue. For the sake of our IT sector and economy, please finalize the settlement. Microsoft needs to focus on business, not politics.

Sincerely,
Carolyn Sergel

MTC–00029818

4040 Lake Forest Drive W
Ann Arbor, MI 48108
January 2.5, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to ask the Department of Justice to accept the Microsoft antitrust settlement The suit by AOL that Microsoft has violated antitrust laws is outrageously beyond my reasonable imagination. Microsoft has done nothing wrong and both companies should work together as well as on a competitive bases to improve the benefit of end customers. It is absolutely bad idea for both companies and the government to spend their resources for nothing. A settlement is in place and the terms are fair, I would like to see the government accept it.

I believe the settlements by Microsoft are more than I could think of as a private company could endure. At the same time, the Justice Department should use its resources from tax dollars in more productive ways for the consumers than harassing Microsoft as a company.

Sincerely,
Seha Son

MTC–00029819

January 24. 2002
Attorney General ,John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing you today to express my opinion m regards to the Microsoft settlement that was reached m November. I favor Microsoft and support the settlement that was reached by Microsoft and the DOJ. I am anxious to see an end to the costly litigation that has gone on for throe years. Microsoft has agreed to all terms and conditions of this agreement, and will be monitored by the

government to ensure, compliance with the agreement Under this agreement, Microsoft has agreed to grant computer makers broad new rights to configure Windows so as to promote non-Microsoft software programs that compete with programs that. compete with programs included within Windows. Microsoft has also agreed to disclose information about. various internal interfaces in Windows. This litigation is costly and a waste of time. I urge you to support this settlement so Microsoft. can be free to design and market its innovative software, which will benefit our society. Thank you for your support. Sincerely,

Roger Perer??
3616 Spokeshave Lane
Matthews, NC 28105

MTC–00029820

Fax Cover Sheet
James and Christianna Downs
3624 Thai Road
Titusville, FL 32796–4017
(321) 267–2485
1–202–307–1454
Supporting comments regarding current Microsoft settlement issue.
James and Christianna Downs
3624 Thai Road
Titusville, FL 32796
January 27, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

We are writing you today in regards to the Microsoft settlement issue, We support the settlement that was reached in November and feel that this costly dispute has gone on too long. Further pursuit of Microsoft will cement the impression held by stockholders that our government is simply conducting a harassment program, Shame on those responsible!

The current settlement is thorough and complete. Microsoft has agreed to share more information with other companies and give consumers more choices. Microsoft has agreed to disclose for use by its competitors various interfaces that are internal to Windows' operating system products.

Microsoft has also agreed to grant computer makers broad new rights to configure Windows in order to promote non-Microsoft software programs that compete with programs included within Windows. Computer makers will now be free to remove the means by which consumers access various features of Windows, such as Microsoft's Internet Explorer web browser, Windows Media Player, and Windows Messenger.

Unfortunately for stockholders, this settlement will benefit companies attempting to compete with Microsoft. We accept that consequence, as this settlement will benefit consumers and will be good for stimulating our lagging economy. Please support this .settlement so our precious resources can be funneled into more pressing issues. Thank you for your support.

Sincerely,
James and Christianna Downs

MTC–00029821

The Seale Group, Inc.
The Source for Developer Training
January 28, 2002
8601 Dunwoody Place Suite 310
A??anta, Georg?? 30350
(770) 992–4888
FAX (770) 992–1296
www.seste.com
Attorney General John Ashcroft
Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

The government's case against Microsoft quickly degenerated into such a war of rhetoric that it became impossible to decipher the real issues. It is my opinion that the government has badly misunderstood the free market concept of employing aggressive marketing techniques over and against its contention that Microsoft was in any way attempting to create an atmosphere of unfair competition.

However, now that the case has entered into the settlement phase, these questions will remain unresolved. I am writing to suggest that the settlement itself is a decidedly better option than the continuation of the litigation. However, I may have some misgivings over some of the more salient terms of the settlement, particularly the provisos for information and divulging of intellectual property.

Sincerely,
Christopher Seale President

MTC–00029822

January 28, 2002
Renata Hesse
Trial Attorney
Department of Justice Antitrust Division
601 D Street NW, Suite 1200
Washington, DC 20530
Re: U.S. vs. Microsoft

Dear Ms. Hesse:

This letter will acknowledge my support for the settlement reached by the Department of Justice and Microsoft Corp.

Realizing the time and expense involved, there does not appear to be further reason to expend any more taxpayer money on an already long drawn out process. This case appears to have been thoroughly litigated and attempts by competitors to influence judicial review appear unfounded and contrary to the best interests of the consumer.

Thank you for the chance to express my view of this very important issue.

Sincerely,
Susan B. Sweetland
Account Executive
Fax: 202 616–9937

MTC–00029823

RE: Microsoft Settlement
January, 28, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

While my business has not been adversely affected by this lawsuit against Microsoft, had it continued to its anticipated bitter end, I cannot help but think that all IT businesses would somehow have been hurt.

There is a perception that Microsoft had grown a little too big and successful for its own good. Adding to that perception is the allegation that they had treated much of their customer base (the OEMs) with a certain amount of undue, over-protective suspicion. However, this has more than adequately addressed in the settlement, and the settlement has ample protections figured into it.

It is good on several levels that there has been a settlement. While in a few areas, the settlement goes beyond the lawsuit, it does address the initial concerns leveled at Microsoft by their competitors. I am writing to express my support for this settlement, and hope that with it the IT community, can resume business in a more normal fashion.

Sincerely,
Walter A. Householder
President
cc: Representative left Flake Microsoft
SUITE 400 2999 NORTH 44th STREET, PHOENIX,ARIZONA 85018 602.840.4750 FAX 602.840.5250 WWW.KDC-PHOENIX.COM

MTC–00029824

595 Providence Street
Everett, PA 15537
January 22, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

This correspondence is to show my support for the proposed settlement that has been reached between the Justice Department and Microsoft. The litigation has lasted for over three years, and the time has come to worry more about our slumping economy than a company who has been vital to the economy.

It is nice to see that the government and Microsoft both realized that the best way to stop a recession is to attack the problem at its source. As soon as the antitrust suit against Microsoft was announced, the market started to dive. The longer the litigation lasted, the lower our economy sunk. The settlement will allow the IT industry to be more competitive, and Microsoft will have to work closer with their competitors. They will actually share information and source code to their products just so their competitors can make products that are compatible with Microsoft's.

All in all, this settlement is the best thing that could have happened, and I support it all the way.

cc: Senator Rick Santorum
Sincerely,
Robert Harclerode

MTC–00029825

Charles H. Schaaf Jr.
4900 Southwest 31st Avenue
Fort Lauderdale, FL 33312
January 28, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

In the interest of ending this costly litigation, I would like to ask for your support

of the pending settlement with Microsoft Corporation. This case has been motivated by states that want to protect their weakened software businesses, which would seem antithetical to America's purported belief in the free market system. The case should be wrapped up at the earliest opportunity.

This agreement is a very good one for the competition, as Microsoft has made several gestures to encourage more competition in the industry, even surpassing some of the government's initial complaints. They will allow computer makers to receive universal terms and conditions on licensing the Windows operating system, while working without any contractual quotas to distribute or promote their technologies. Additionally, the broader rights of these companies to offer non-Microsoft software will enable software developers plenty of opportunities to gain a bigger share of the PC market.

In light of the ongoing struggles of the U.S. technology sector, it is time to accept this deal and get these companies back to business. Any further action would only postpone a solution and cost taxpayers more government time and money. I thank you for your support.

I wonder if all the lawsuits that American businesses have to put up with will ruin our economy.

Sincerely,
Charles Schaaf

MTC–00029826

2516 NE 37th Drive
Fort Lauderdale, FL 33308
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I avidly support the Microsoft Corporation and have so for many years. Thus, the federal case against Microsoft over antitrust laws met me with trepidation. I do not believe that the federal government was justified in enacting the outdated antitrust laws against Microsoft. Despite this, however, the settlement that was reached in November is suitable in that it ends the negotiation process.

Microsoft has made many concessions in an attempt to end this process. Microsoft has agreed to disclose much of the internal information regarding the design of Windows. Microsoft has agreed to disclose both the protocols and the design interfaces of the Windows system to its competitors on reasonable grounds. Now Microsoft competitors can access this information when designing software. The software designed from information sharing should result in products that are compatible.

Microsoft has done enough. They have complied with all the terms of the federal government. I believe it is time to put this issue to rest once and for all.

Sincerely,
Wynn Courtney

MTC–00029827

1001 NW 63rd Street Suite 280
Oklahoma City, OK 73116
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to support the implementation of the recent settlement between the U.S. Department of Justice and Microsoft. There is no sense in continuing litigation a against a company that is the only bright in our sorry economy. I do not think the lawsuit should have begun in the first place. Microsoft has made a good offer and the rune states opposing the settlement should accept it. Microsoft is giving away technological secrets, granting broad new rights to computer makers to configure. Windows so as to make it easier for non-Microsoft products to be promoted, and a three-person team will monitor compliance with settlement.

I urge your office to finalize the settlement and to make sure that further unnecessary lawsuits against Microsoft do not occur. Thank you. My losses in the stock market during the past year have been in excess of $2,000,000 and Microsoft is the only bright spot I have left in my technology portfolio, I urge you to get this lawsuit settled and allow Microsoft to work on behalf or the stockholders and America.

Sincerely,
George Platt
CC: Senator Don Nickles

MTC–00029828

STRUCTURAL ASSOCIATES, INC.
General Contractors/Construction Managers
January 28, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D. Street NW, Suite 1200
Washington, DC 20530
Fax: (202) 616–9937
Re: United States vs. Microsoft

Dear Ms Hesse:

I believe that the proposed consent decree between Microsoft and the U.S. Department of Justice provides a fair settlement of this case.

I support the settlement because I believe it is in my best interest as a software user, both Microsoft and other.

Sincerely,
Larry M. Ike
Controller

5903 Fisher Road ?? East Syracuse, New York 13057 ?? Phone: (315) 463–0001 ?? Fax (315) 432–0795 ?? E-mail: info@structuralassociates.com

Regional Office: PO Box 43968 ?? 7939 Honeygo Blvd., Suite 226 ?? Baltimore, Maryland 21236

Phone: (410) 931–0905 ?? Fax (410) 931–0135 ?? E-mail: bill@graytechnologies.com

MTC–00029829

MASTERMAN ADVOCATES
Beth J. Masterman, Esq.
4 Philbrook Terra??e
Lexington, Massachusetts 02421
Telephone: (617) 227–9404
Fax: (781) 863–8550
BJM@mastermanadvocat??.com
Publi?? Consulting and Legal Services
Honorable Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
c/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
RE: U.S. v Microsoft

Dear Judge Kollar-Kotelly,

The proposed settlement between Microsoft and the Department of Justice seems inadequate in resolving Microsoft's monopoly of the market. The settlement may serve to promote further monopolies for Microsoft in web services and other related products. This settlement does not sufficiently protect competitors against predatory pricing and does not protect consumer choice. The unanimous ruling by the Court of Appeals for the District of Columbia against Microsoft should warrant a strong remedy and this settlement does not meet those standards. Microsoft's violation of federal antitrust is no longer an issue it is time that they are held accountable for their questionable practice& It is time that we find a remedy that meets the appellate court's standard to ''terminate the monopoly, deny Microsoft the fruits of its past statutory violations, and prevent any future anticompetitive activity.'' This proposed settlement fails to do so.

The settlement says that Microsoft ''shall not enter into any agreement'' to pay a software vendor not to develop or distribute software that would compete with Microsoft's products. However another provision permits those payments and deals when they are ''reasonably necessary.'' The ultimate arbiter of when these deals would be ''reasonably necessary?'' Microsoft. The settlement does not go far enough to provide greater consumer choice, and leaves Microsoft in a position that it can continue to charge whatever it wants for its products. Consumers should be protected from these types of practices Enforcing federal antitrust laws is vital to maintaining the integrity of free markets. It is Important that we continue to enforce them to protect tile welfare of consumers and the fundamentals that contribute to what makes our country's industries great.

I appreciate you taking your time to examine this important matter.

Sincerely,
Both Masterman
President
Masterman Advocates
CC: Honorable Tom Reilly, Attorney General Commonwealth of Massachusetts

MTC–00029830

O'Sullivan & Associates
333 Victory Road
Quincy, MA 02171
U.S. v Microsoft
January 28, 2002
Hon. Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
C/O Ms. Renata Hesse
Antitrust Division
United States Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001

Dear Judge Kollar-Kotelly,

The Antitrust Procedures and Penalties Act, also called the Tunney Act, was passed to insure that competition and consumer choice continue in the marketplace. With regard to Microsoft, neither competition nor consumer choice seems to be a concern.

Manufacturers of computers are hamstrung as are those who use computers because they cannot install the software they prefer on their computers. Instead Microsoft, which has become a monopoly in this arena dictates what may be used. Software developers need to have complete information about Microsoft's operating system so that they can compete creating a competitive market.

Included among the concerns I have in looking at the remedy are:

–Microsoft will be permitted to expand its control by bolting applications to Windows using a ''commingling code''. This violates antitrust law.

–Some of the future applications which will undoubtedly be included are: financial, cable services as well as an expanded use of the internet.

–Microsoft is required to share technical information concerning Windows. The catch is that Microsoft itself will determine if there is any possible situation where its security or software licensing may be compromised. The likelihood that Microsoft will use this option is very high.

–The manufacturers' concern is that Microsoft will have access to its intellectual properties by virtue of doing business with the software giant.

–Microsoft will make decisions concerned with which companies it will share technical information as called for m the settlement. There is a clause indicating that sharing information must be reasonably necessary.

–A three person technical committee will be set up to hear violations.

–It is highly unlikely that a company will take on the giant when it could lose the challenge and risk retaliation in the future.

–One of the three people on the committee is appointed by Microsoft; one by the Department of Justice and the third must be an individual who will be agreed to by both Microsoft and the Department of Justice. This arrangement gives an interesting advantage to Microsoft.

–The findings may not be admitted into court in enforcement proceedings. Additionally the compliance is for only five years.

For the most part after all the years of investigating and litigating there will be little or no change in the way Microsoft does business. I appreciate your interest in tiffs matter. If there is any way with which I may be of assistance, please contact me.

Sincerely,

Paul J. O'Sullivan

CC: Tom Reilly

MTC–00029831

Gregory & Associates
Honorable Colleen Kollar-Kotelly
U.S. District Court,
District of Columbia
c/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
RE: U.S. v Microsoft

Dear Judge Kollar-Kotelly,

I would like to express my dissatisfaction with the settlement between Microsoft and the Department of Justice. I feel that the settlement, made virtually no impact on protecting consumers from companies like Microsoft who have monopolies in the marketplace.

The settlement has many loopholes and its level of enforcement is questionable, this does not provide consumers the level of protection they need for greater consumer choice. In addition the settlement leaves Microsoft in a position to continually raise prices for their products. It is my understanding that many consumer groups have opposed the settlement.

The agreement states that Microsoft ''shall not enter into any agreement'' to pay a software vendor not to develop or distribute software that would compete with their products, but it is Microsoft that will be the final decision maker on that provision. The agreement also states that Microsoft must share certain technical information, but only if it would not harm the company's security or software licensing. Again, Microsoft will be the final decision maker regarding this matter. The settlement does nothing to deal with the effects on consumers and businesses of technologies such as Microsoft's Passport.

The enforcement of the settlement is questionable at best. The three person technical committee that will be assigned to monitor any violations made by Microsoft of the agreement is comprised half of people selected by Microsoft, and if any violations are found, the work of the committee cannot be admitted into court.

I find these inadequacies to be too broad to accept this settlement. I hope that Microsoft will not be able to continue to preserve its monopoly while consumers and competitors are subject to the practices that are supposed to be protected by antitrust laws.

Thank you for your time.

Regards,

CC: Attorney General, Tom Reily
77 North Washington Street
Boston, MA 02114.1908
Phone 617.367.6449
Fax 617.367.6299
Email chris.gregory@neec.org

MTC–00029832

TO: Microsoft
From: ??tore Val??
Date: 1/28/02
P??: ?? will do ?? possible to help Microsoft ?? believe in Microsoft and the Company Philo??ply.
Salvatore Volvo
101 N Woodland Ridge
Elma, NY 14059
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

This is to give my support to the recent settlement between Microsoft and the Department of Justice. This litigation has gone on long enough, and it is time to settle this matter. The basis of the suit is that Microsoft excluded other companies from competition. However, whenever I have gone into a store, I have had any number of choices. I chose Microsoft because it worked. The competition could not produce the same quality product; hence, the public chose the product that worked for them. This is the basis for all free market philosophy, which is really what the antitrust suit was against.

Furthermore, Microsoft has more than acceded to the demands of the Department of Justice. Microsoft has agreed to allow computer makers to ship non-Microsoft products to its customers; Microsoft has agreed to help companies achieve a greater degree of compatibility with regard to their networking software; axed Microsoft has agreed to gram computer makers broad new license to make Windows promote non-Microsoft software programs. Ultimately, the company agreed to terms that extend well beyond the products that were at issue in the original suit.

Further litigation will only hinder our progress in this direction. Let Microsoft, and the country, get back to work.

Sincerely,

Salvatore Valvo

MTC–00029833

FAX TRANSMISSION
DATE: 28 JAN TIME:
TO: ATTORNEY GENERAL
FROM:
LOCATION:
LOCATION:
FAX#: 1–202–616–9937
FAX#:
MESSAGE:
PHONE#:
Dennis C. Deggett
383 Center Road
Lopez Island, WA 98281–8298
January 28, 2002
Attorney General Jon Ashcroft
US Department of Justice
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing today to encourage the Department of Justice to accept the Microsoft antitrust settelment. The issue was brought about the former administration that simply did not understand the technology industry. They ignored one of the things that makes this country the best in the world, our free enterprise system, Then to top it all off, they extended their socialistic philosophy to apply antiquated antitrust laws to a brand new industry.

In the free market, Microsoft rose to the top because they had the best products. Their products are user friendly and Microsoft has made them very easy to Integrate and at lower cost than the alternitives. It is no wonder that where people had a choice most choose Microsoft software. Under the terms of the settelment Microsoft has agreed to allow computer makers the flexability to install and promote any software they see fit. Microsoft has also agreed not to enter into any agreement that would require a computer maker to use a fixed percentage of Microsoft software. I beleive that computer makers will

continue to predominatly preinstall Microsoft software becuase it is the best and most computer buyers will choose a Microsoft Windows based computer when making a new purchase. This is not a monopoly problem, Microsoft simply is, supplying a better product and most people know it.

My experiance as supervisor of an electric power generation plant for over 15 years, offered me the oppertunity to try many brand, of computer software products and computer equipment. What I found over time was that even when cost was not a consideration, products that were not Microsoft based, did not perform satisfactorly. Microsoft products and windows based computers were simply the best. On top of that we experienced signifig??nt savings over other options. Sure Microsoft has made a lot of money, but can you imagine the cost to the people of our nation if Microsoft and all they have provided for us vanished or had never existed? This is my plea for justice in our mechanized and technolgical society.

Microsoft has gotten to where they are by developing better products, not by crushing their competitors. This suit and the fact It has gone on for over three years Is simply mind-booling. It is time to end It. DO NOT PUNISH MICROSOFT FOR BEING BETTER. Please accept the Microsoft antitrust settelment.

Sincerely,
Dennis C. Daggett

MTC–00029834

THE WASHINGTON COURT HOTEL
FACSIMILE TRANSMITTAL SHEET
TO: Renata Hess
FROM: Joe Wiegand
FAX NUMBER: 202–616–9937 OR 202–307–1454 DATE: 1–28–02
COMPANY: Dept of Justice
TOTAL NO. OF PAGES INCLUDING COVER: 2
PHONE NUMBER: RE: Microsoft Settlement
NOTES/COMMENTS:
Attorney Renata Hesse
Justice Department
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Attorney Hesse,

I am certain that you are receiving many letters of comment regarding the Microsoft settlement with the Justice Department. Your time is greatly appreciated.

It was 1998 when the government first brought its anti-trust suit against Microsoft. In the years since then we have witnessed truly astounding developments in our industry. Laptops are thinner and more reliable, email is a communications device many Americans depend on, and many of us are speeding across the Internet at speeds not thought possible four years ago. These innovations are truly amazing and beneficial to our daily lives. These new products and ideas came about because of the competitive free market system we live in, not because the government was directing it behind the scenes.

The circumstances of our current economy and the government's anti-trust case have truly stifled new growth in this industry. As our country's economy is struggling to find its way toward positive growth again, settling the anti-trust suit can only be viewed as a benefit. Please work to make sure this settlement is agreed to.

Sincerely, ??
32486 White Street??
Ki??bland, ?? 60146
815–522–3801

MTC–00029835

microsoft settlement
Subject: microsoft settlement
Date: Mon, 28 Jan 2002 15:46:14–0500
From: Frank Lastner <FLastner@qis.net>
To: microsoft.atr@usdoj.gov

Microsofts efforts in the computer field have been invaliable to th U.S. Their inovations, systems and marking kept prices falling until the Government intervention. Close the books on litigation and help get the economy moving again.

Frank Lastner
16 Stillway CT.
Hunt Valley Md. 21030

MTC–00029836

Fax Transmission
The Sack Company, Inc.
P.O. Box 528
3302 Zell Miller Parkway
Statesboro, Georgia 30459
Phone: 912.871.8771
Fax: 912.681.6001
TO:
Date: 1/28/02
Fax Number: 202–307–1454
Pages: 2 pages, including this cover sheet
From: Albert Roesel
Subject:
Comments:
''A Standard of Excellence''
The Sack Company, Inc.
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

I am writing to express my support of the Microsoft antitrust settlement agreement. I am in favor of this case settling. As a fellow entrepreneur, I sympathize with the position of Bill Gates. I believe Microsoft should be free to conduct its business with limited government intervention. Notwithstanding my opposition to the lawsuit, the terms of the settlement agreement are reasonable. Microsoft has made many concessions in the interest of settling this case. Microsoft has agreed not to take retaliatory action against those who promote software that competes with Windows. They also agreed not to enter into agreement obligating third parties to exclusively distribute Windows. These types of concessions should put to rest the complaints of anticompetitive behavior on Microsoft's part.

I am happy of see that the current Department of Justice has made the wise decision to settle this case. I appreciate your review of my comments.

Sincerely,
Albert Roesel
Chairman of the Board

MTC–00029837

Microsoft Corporation
123 Wright Brothers Drive
Suite 200
Salt Lake City, UT 84116
Microsoft
Tel 801 257 6300
Fax 801 257 6501
http://www.microsoft.com/
January 26, 2002
Attorney General Ashcroft, USDOJ
950 Penna. Avenue, NW
Washington, DC 20530–0001

Dear AG Ashcroft,

I believe that your decision to settle this Microsoft suit was a wise one. Anytime that our government takes upon itself the rather extreme position of suing a private business is serious indeed. It is important for our government to encourage innovation and creativity through incentives, rather than discouraging them through convoluted, politically expedient lawsuits. It seems as if this case may have had less actual legal merit than it first appeared. In these days, we should remain especially vigilant at concentrating on far more important issues like national security and budgetary problems. It is good for us to settle this case and move on to these more important matters. The settlement does an excellent job of answering for all the problems that competitors brought against Microsoft. By allowing manufacturers their own say in how to configure Windows and competitors more access to source code that will improve their programs' ability to operate in Windows, Microsoft is going well beyond what has been asked of them.

Thank you for your foresight and wisdom in this matter and thank you for taking the time to review my opinion in this matter. It is about time for the Justice Department ask the people who will be most affected by this decision how it will impact them.

Sincerely,
Clark Spencer
Microsoft Corporation is an equal opportunity employer,

MTC–00029838

STRATFORD
3737 Glenwood Ave.
Sutre 100
Raleigh: NG 27612
Tele: (919) 573–6102
Fax: (919) 573–6026
January 23, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D, Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

I understand that the federal courts are now reviewing the proposed settlement in the Microsoft antitrust case. I further understand that the government is collecting public comment on that issue.

My comment is simple: Accept the settlement and help get this country back to work. A lengthy, expensive lawsuit contributes nothing to our nation's economic prosperity. Unwise government interference in the marketplace contributes nothing to economic growth—in fact) it hurts growth. And the Microsoft lawsuit has hurt our nation's economy, make no mistake about it.

The marketplace, not the courtroom, is where these issues should have been decided. Those who are concerned by Microsoft's dominance of its market should remember other industry leaders that no longer lead: Apple and Tandy in computer manufacturing; Kodak and 3M in copiers, and CompuServe m online services.

A market leader that fails Is satisfy its customers will remain a leader no longer. Microsoft will remain a leader if and only if it continues to provide new services and lower costs. That is where its competitors should seek to replace Microsoft, not through the courtroom.

The government should not file antitrust lawsuits simply because a company is dominant in its market or because competitors cry foul. Yes, Microsoft plays hardball. But nothing in this long and costly lawsuit has established that the consumer—the most important person in this proceeding—has been damaged by anything Microsoft has done. In fact, the consumer has been the big winner. If this settlement is approved, the consumer will again be the big winner—as will the entire American economy.

Sincerely,

James A. Ciao

Introduction ?? in from sources ?? it not ?? by ?? and is subjects to change in ??, cor??, ?? and ?? or withdrawal without notice

MTC–00029839

January 28, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax: 202–616–9937

Dear Ms. Hesse:

As the government accounts representative for Comark, a leading regional tech firm, I am thrilled that the long awaited settlement between Microsoft and thee federal government is finally at hand. All we need now is for the Judge to approve the settlement. The Judge, in my opinion, has more than ample reason to do just that.

First of all, let me say how well I believe that government and business can work together for mutual prosperity. It can and does happen—EVERY DAY! I see it when I call on governmental agencies, officials and departments.

I enjoy using technology to build a bridge between government and business. It makes perfect sense. After all, the emerging technologies of today make every segment of society more productive—it makes no difference if the end user works for the public good or a private interest. Let's forge ahead and revitalize the American economy. Let's renew our commitment to research and development, so that we continue to lead the world in productivity and quality. Let's create a new spirit of cooperation between the government and private enterprise. Let's show the rest of the world that American don't take recessions lying down—that we will act to strengthen our country and assist our countrymen.

Now is the time for bold action. I request that Judge Kollar Kotelly approves the settlement.

Sincerely,

Jason Deans

MTC–00029840

FAX
To: John Ashcroft
Phone
Fax Phone +1(202)307–1454
Date: Monday, January 28, 2002 Pages including cover sheet: 2
From: Eric & Britt Boston
17525 199th Place NE
Woodinville
WA 98072
Phone +1(425)788–2297
Fax Phone +1(425)788–2297
NOTE:
January 26, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I'm writing to encourage you to accept the terms of the antitrust settlement recently reached between Microsoft and the United States Justice Department. Microsoft has agreed to terms that will result in a much more competitive software environment and that will allow Microsoft to move forward with its business of developing innovative software.

To put this lawsuit behind it, Microsoft has agreed to allow computer makers and software developers to set-up Windows within their computer systems they will sell on the market so that Microsoft products can be disabled and competitive non-Microsoft products can be enabled in their place. And to make this easier, Microsoft will show competitors the various interfaces that are internal to Windows. This will allow smaller, developing software companies to get their foot in the door and grow while fostering a competitive environment that will drive all parties to create better, more innovative software.

Further, Microsoft will not take any retaliatory action against any computer makers of software developers who choose to modify Windows, nor will Microsoft retaliate against any computer makers who ship operating systems that directly compete with Microsoft Windows. Based on these facts, I encourage you to support the terms of the settlement so everyone can move forward with the business of developing good software for the American people. Thank you for all your hard work!

Sincerely,

Brittisha Boston

MTC–00029842

FHANC??S H SUITTER
SUITTER AXLAND
A ??ALT PROSESSIONAL LAW ??TION
175 South West ??emple
Seventh Floor
Sal?? Lake City, ??tah 84101–1480
Telephone (801) 512–7300
F Man ??utter@sunter.com
?? (801) 532 73??
January 28, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Attorney General Ashcroft:

I write today concerning the Microsoft Antitrust Class Action Lawsuit. I urge you to settle this case as quickly as possible. As a user of technology on a daily basis, I am concerned that technology consumers are suffering the biggest loss rather than those involved in this suit. I am increasingly alarmed at all of the government regulatory oversight, which will be placed tm computer companies. I have never witnessed a settlement where more government intervention and layers of bureaucracy have been the solution. I urge you to move forward to settlement.

Sincerely,

Francis H. Suitter, Esq.

FHS/jg ??

MTC–00029843

Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax: 202–616–9937

Dear Ns. Hesse:

Given that my husband is a local television news personality, I follow the news even more keenly than I ordinarily would. I began working at a new job just a few short weeks ago, as the membership and marketing director for Heritage Golf Club in Wake Forest, North Carolina. Unfortunately, the news and my common sense tells me that many other folks won't be fortunate enough to find new jobs because of the poor economic conditions our country is in. Were got to change that.

Our government must demonstrate that it is serious about stimulating the economy. A great first step in that process would be to finish the job of settling its antitrust lawsuit against Microsoft. I think I speak for most American when I say, ''Enough already!'' Both sides have agreed to settle—it's time to move on to something else,

I believe that I also speak for executives who work in membership and marketing when I say that I'm much more efficient in my job because of Microsoft's quality products. Database management, communications, and publications are all professionally done with just a click of a mouse.

The American people choose Microsoft products because they make life better. Life will also be better for many Americans once this suit is settled. I request that Judge Kollar Kotelly approves the settlement.

MTC–00029844

To: Microsoft Fax: 001
fin@Mobilization Office.com
1–202–307–1454
From: Joe G. Ike
Date. 1/26/02
Letter to Attorney General
Pages: 2

To Whom It May Concern:

Reference is made to your e-mail of Friday January 25, 2002, Attachment USAGike—

Joe—1018—0123 and my reply thereto by return e-mail. As noted in my reply, please find attached a signed copy of the letter that I dispatched this morning to the Attorney General of the USA. I sincerely hope that all will turn out in your favor! Wishes!
3410 76th Avenue, SE
Mercer island, WA 98040–3439
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft

I am writing to you today to encourage you to bring the litigation against Microsoft to an immediate and decisive closure. I must state that I have been unequivocally and strongly against this case from its very inception. It appears evident to me that it is very unfair to punish a company for excelling in their industry. I am a volunteer instructor with a non-profit organization teaching senior citizens how to enrich their lives by becoming computer literate. This is no easy task but at the close of every session I thank God that Microsoft has been so innovative and far sighted as to integrate their basic Operating System with applications to provide the User with a basis of commonality that makes the learning process infinitely easier. This applies not only to senior citizens but also to those individuals learning the use of new software to increase their knowledge and consequently leading to industrial efficiency. Prior to my retirement I vividly remember the days when it was a nightmare when attempting to home-brew our own integrated system, I have experienced the fact that Microsoft has expended every effort to provide us with the features that we sorely needed.

As I dwell upon the past three years ! conclude that it must have been very taxing on the IT industry, the economy, Microsoft and its employees. I understand that Microsoft has spent millions of dollars in their defense-money that could have been put into the development of new products resulting in further advancement of technology and industrial efficiency. The employees of Microsoft have had to endure an air of uncertainty during this entire situation. As a citizen I am extremely concerned with the possible flight of talent that is the backbone of Microsoft's awesome capability.

It is difficult for me to understand the problems related to the proposed, but rejected, settlement. Judging from what the media has reported, Microsoft has agreed to the terms included in the settlement as well as to the terms brought forth on issues that were not considered to be unlawful, To name two concessions, Microsoft has agreed to avoid agreements that would obligate any third party to exclusively distribute Windows technology. Additionally, Microsoft will not obligate software developers to refrain from developing competing software. Frankly, I personally cannot understand why Microsoft should have to divulge the code that makes up their Operating System. t would certainly include that in the realm of being proprietary and intellectual property. To put it more strongly, to me it smacks of being a case of sour grapes by certain other organizations that have not been as successful. Chairman Greenspan commented, with words to the effect, that the Guide-On that is going to lead the economy of our nation out of tile doldrums is technology. It is our future. There is absolutely no doubt in my mind that Microsoft has been a major contributor to technology. As a result, and to reiterate, I personally would like to see this matter dosed as soon as possible and I am sure that I am among many who share this same point of view. Thank you for your time and giving me this opportunity to voice my opinion.

Sincerely,

Joe 13. Ike

Engineer(retired) e-mail joeikel@attbi.com tel: (206) 232–5e43

MTC–00029845

Edward A. Garvey
32 Lawton Street
St. Pail, MN 55102
Phone: 651–296–2243 (wk); 651–221–1922 (hm) E-mail: GarveyEd;@;AOL.com
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington DC 20530

Dear Ms. Hesse:

As a small Microsoft stockholder (about Ii0 shares in my daughter's college fund) and a user of diverse computing and software products, I have followed the antitrust proceedings against Microsoft with interest. With this introduction, I thought it worth sharing with you that I think the settlement between the Department of Justice and Microsoft is a reasonable conclusion to a matter whose founding facts have been (and are being) addressed in the marketplace.

I support the settlement and am pleased that it was reached. Thank you for considering my thoughts.

Sincerely,

Edward A. Garvey

MTC–00029846

Renata B. Hesse
Antitrust Division
U.S. Department of Justice
6ol D Street NW
Suite 1200
Washington, DC 2053D–0001
Randolph S. Kahle
6161 N Canon del Pajaro
Tucson, AZ 8S750
28-January-2002

Dear Ms. Hesse:

I have worked in the computer industry for over 2S years. During that time I have worked as a developer, a marketing / business strategist, and as a consultant to large and small companies. I have a degree from Rice University in software and hardware design and an MBA from the Amos Tuck School of Business Administration at Dartmouth College.

My work experience includes Hewlett-Packard as well as six years as a marketing and business strategist at Microsoft working on database and developer products.

I have seen Microsoft from both the inside and now, for the last ten years, from the outside. As I am not an attorney, I cannot speak to the legal specifics of the Proposed Final settlement, however, I am qualified to speak to the practical implications of the terms in the computer industry as well as other industries and markets into which Microsoft may enter.

COMMENTS IN GENERAL

As the computer industry moves towards a future, fully-distributed, computing environment, it is vital to have an environment which fosters and rewards innovation. While it may seem a mature industry, we are still only at the early stages. To date, there have been several waves of general innovation and consolidation. Each wave brings cost reductions, creative ideas, whole new companies and new technologies. After a wave, there has been consolidation around standards and then the next wave appears. These waves could be named the ''mainframe era'', the ''minicomputer era'', and the ''personal computer era''. We are now leaving the ''personal computer era'' and entering a new one centered on distributed computing and information, the ''distributed computing era''. As each era transitioned to the next, the companies and products of each successive wave accommodated the past, while providing new innovations.

IBM anchored the mainframe era, Digital and Hewlett-Packard emerged during the minicomputer era, and Microsoft, Dell, Gateway, and others emerged during the personal computer era.

What is different about the current transition, is that a single company, Microsoft, is attempting to leverage their monopolistic power created in the personal computer era and their position in the industry to define and control the next era.

COMMENTS ON CULTURE

I worked at Microsoft before Windows was a monopoly. What I observed was a culture fixated on domination at all costs. While Microsoft was growing, these actions and activities were not illegal. After becoming a monopoly, they clearly are (and were found to be so by the courts). What is important to note is that these illegal behaviors stem from the culture of the company. Because of this strong culture, I do not believe that any external monitoring of internal operations would ever be successful (e.g. the ''TC'' as proposed). Microsoft managers are simply too smart, experienced, and aggressive to ever agree to submitting to external pressures. This comes from the top, Bill Gates himself. In my experience, I have never encountered a discussion in which anyone at Microsoft ever thought that they were in the wrong. This would never occur to anyone. This is a cultural factor, an arrogance of doing no wrong. With this culture, it seems extremely unlikely that Microsoft would be able to self-monitor or even work with an external auditing agency.

REMEDIES

My first choice for a remedy is to break Microsoft up into smaller competing entities. The reason for this is to attempt to reshuffle the organization so that there could be cultural and behavioral change.

I petition the court to explore this remedy as the best way to combat future violations by Microsoft.

If the court does not pursue a break-up of Microsoft, then I strongly agree with many others, that there must be changes to and additional provisions added to the Proposal Final Settlement.

For example, I fully support, and have sign Dan Kegel's open letter (http://www.kegel.com/remedy/letter.html).

OPENNESS AND TRANSPARENCY

My second choice for a remedy is to force openness and transparency in Microsoft's technology. Distributed computing systems are very complex and can be very subtle. To help the court, many other petitioners have listed specific technology disclosures that will help create openness. I will add that, in a general way, if Microsoft's technologies can be viewed by the industry and the market as *components* rather than as a *whole*, then a good balance may be struck between Microsoft's ability to innovate, and the industry's ability to compete and develop both complementary technology as well as competing technology.

The tricky question is this: ''Where are the boundaries between the components7''

A simple answer can be found by focusing on and leveraging the upcoming pressures that will be felt as the distributed computing era arrives. The answer I propose is simple, easily monitored and enforced:

* Force Microsoft to fully disclose all wire-level (binary) protocols used between independent computing devices. (This include .Net protocols, SMB/NBT protocols for file sharing, and others) Force Microsoft to disclose the APIs which they expect other components to use as they access the wire-level protocols.

* Force Microsoft to fully disclose all file formats used to store persistent information. The reason these are good remedies relies on the following:

* The future direction of computing is toward small, distributed computing devices. The economic and technological pressures will force the definition of boundaries between distributed components. This will be a constant pressure to *increase* disclosure over time.

* It is easier to monitor and audit compliance at these boundaries compared to other more abstract and more easily re-defined boundaries. (Microsoft is a master at redefining boundaries for their own benefit).

* These disclosures provide significant value to competitors and innovators. However, I must also point out that this is only a first step, This describes the technological boundaries and requirements. The Settlement must also address the legal issues such as Microsoft's attempt to prevent open-source software from running on Windows, and other licensing and cross-tie issues. I will leave these issues to the legal experts.

Violation of the Settlement must bring with it a powerful and costly punishment. I propose that if Microsoft violates the provisions of the Settlement that they be forced to place any software or system found to be in violation or associated with a violation into the general domain through, an open-source license. This, more than any financial penalty, would be a real deterrent.

Randolph S. Ka??e
Tucson, AZ

MTC–00029847

FROM : Santo L Gaudio
3011 146th Street
Flushing. NY 11354
January 25, 2002

Dear Mr. Ashcroft:

I am writing this letter to express my full support for the settlement with Microsoft. Enough is enough. Milllons of dollars are being wasted on unnecessary litigation and we must take advantage of this opportunity to end needless spending now.

Microsoft has made many concessions just so that the company may move forward with developing new products. For example, Microsoft, has agreed to disclose for its competitors various interfaces that are internal to Windows' operating system products—a first in an antitrust settlement, Also, the Company has agreed in design its future products to provide easy access to computer makers and consumers to promote non-Microsoft software within Windows. In addition, Microsoft has agreed to license its Windows operating system products to the 20 largest computer makers on identical terms, including price. Clearly, these changes will benefit both consumers and the economy.

Not only is this settlement fair and reasonable, but it will prevent any future antic0mpetitive behavior as well. The recession has had a huge affect on both government and individual pocketbooks, and it. is important that the IT industry be allowed to concentrate on business as soon as possible.

MTC–00029849

Avionet (U.S.A.) Ltd.
Avionet Leasing Inc.
888 S. Figueroa St., Suite 800
Los Angeles, CA g0017
Tel: (213) 896–1000 Fax: (213) 824–7796
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing to express my support of the recent settlement between the Department of Justice and Microsoft. Even though the terms of the settlement are certainly not favorable to Microsoft, the settlement has the advantage of ending the litigation.

It is better that Microsoft will now be encouraged to handle its pricing policies to its OEMs in a fairer and more equitable fashion, but the requirement that Microsoft release more of its source codes to developers and competitors can be problematic. I am hopeful that that proposed technical committee would be a fair arbiter when dealing with all of these issues.

With so many other more important issues facing our country today, I am glad that this lawsuit is finally over. I am hoping that no further federal action in this matter will be necessary.

MTC–00029850

347 Chilian Ave.
Palm Beach, FL 33480
January 28, 2002
Ms. Renata B. Hesse
US Dept of Justice

Dear Ms Hesse:

I strongly support the Microsoft settlement. I do so as a taxpayer and consumer. Thank You.

Very Truly Yours
Marvin A. Goldenberg

MTC–00029851

Constance Roberts
3421 South Dye Road
Flint, Michigan 48507–1009
January 23, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am urging you to settle the lengthy antitrust lawsuit pending against Microsoft. I think it is ridiculous that the case even made it as far as it has. I think it is a shame that the government has gone after Microsoft. Bill Gates is simply a guy who made good and has been punished for his success. The Justice Department seems to have unfairly singled out Microsoft instead of treating all companies in similar positions in an evenhanded manner.

Though I believe that the justice system has wasted significant time and money in continuing to pursue legal action against Microsoft, I believe that the terms of the current settlement are reasonable, and I would like to see Microsoft back on track. I am a stockholder in the company, so I am affected by its inability to conduct business as usual.

The government's stated aim is to increase competition. The new provisions Microsoft has agreed to will do just that. Users and computer makers can more often and more easily install and configure Windows in ways that promote and use competing products.

Please settle the case as quickly as possible.

Sincerely,
Constance Roberts

MTC–00029852

05/06/1994 09:07 0609663171
GARY REID HOMES INC
Jan–28–02 11:66A Sharon Cassidy
Gary and Susan Reid
5651 Mission Road
Bellingham, WA 98226–9580
Tel (360) 966–2385/1 ax (360) 966–3171
Form: The Attorney General
From: Oaty Reid
Date: January 28, 2002
Re: Microsoft Anti-Trust Settlement

From any viewpoint as a consumer, this suit needs to be resolved. I believe that this suit with cost in money. First, it has increased Microsoft's cost to do business second, it has diverted effect from producing a better products and, third, the tax dollars spent on this suit exceed possible savings to the public.

I believe the Microsoft's product is fairly priced when compared to the benefits obtained I can be par?? communication revolution that has changed the world for less than $200,00.

Does not Microsoft have a proprietary right to its st??ems? It appears that the patent

holder of be ?? hoop has more rights than the designers of this life-changing system The me?? of the internet browser into the basic system is important to the consumer. I should not be se??nitted to give a competition an advantage. Several of the business p?? that were in question have already been changed. If our economic system is ?? competitors need to produce better products—not resort to politically driven ?? that results in power products for the purpose of bringing equality

ee: Microsoft

MTC–00029853

SGM Bindery Inc.
January 28, 2002
Attorney General John Ashcroft
US DOJ
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I would like to take this time to give you my opinion on die Microsoft Anti Trust case. This case has been a fiasco since its beginnings and I can't understand how it has been allowed to go on for so long.

I run my own company and use Microsoft products every day. I have never been forced to use their software. This is supposed to be a free enterprise system and anyone can go out and buy whatever products they want. There is a reason Microsoft's products have become so widespread and widely used that consumers prefer them to their competitors. Consumer preference does not constitute a monopoly.

Even though I feel this settlement goes farther than Microsoft may want, it is necessary to get out country on its feet again. Microsoft has agreed to give away a lot of thee intellectual property and will be changing their business practices to make it easier for consumers to access non-Microsoft products on their computers.

For the sake of our technology industry and our entire economy, please do your pall m putting a final end to this case.

Sincerely,
Stephen G Martinec
President
7120 Rutherford Road,
Baltimore, MD 21244
410.944.7660
800.852.4530
Fax 410.944.5707
bind@sgmbindery.com
www.sgmbindery.com

MTC–00029854

Jan 28 02 04:28p
EVERGLADES
Laboratories. Inc.
1602 Clare Avenue
West Palm Beach, FL 33401
ph: 561/833–4200
fx: 561/833–7280
email: evlabs@beffsouth.net
January 28,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DO 20530

Dear Mr. Ashcroft:

Microsoft is not the evil money grubbing corporation that it has been made out to be. Rather, it is in my opinion that the other information technology companies are the ones with dollar signs in their eyes. The antitrust lawsuit filed against Microsoft was nothing more than profit driven facade.

The settlement that was reached in November is reasonable and in the best interest of all parties involved. Microsoft has agreed not to seek any sort of retaliatory measures against computer manufacturers that promote software other than Windows. The settlement further stipulates that

Microsoft must provide documentation on how to interface competitors' software with its own operating system. Microsoft has already given a lot of ground with this settlement, and I feel that they should be asked to give no more. The settlement as decided upon in November should be left as is with no changes. The money driven attack on this company needs to stop, so please finalize the current settlement and stop litigation now.

Sincerely,
Ben Martin, Ph.D.

MTC–00029855

James Woodward
432 Lynshire Lane
Findlay, OH 45840
January, 26, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

I am writing you today to express my concern in regards to the Microsoft settlement issue. I feel this settlement is fair and reasonable, and I believe that this three-year-long dispute should be resolved permanently. Because of the federal action many states have jumped on board. I don't understand their cause. If you drop the case and accept the initial agreement, then, I'm sure man), of the states will also.

Microsoft is a company that is successful m its business. I do not believe they should be penalized for this. Microsoft has pledged to share more information with other companies and create more opportunities for them, therefore, the entire technology industry will benefit from this settlement.

Again, it will be more productive to allow Microsoft to continue doing what they do best. This will benefit the economy and consumers. I sincerely hope that this settlement will be finalized because it is in the best interest of the industry and the American consumers.

Sincerely,
James Woodward

MTC–00029856

January 27, 2002
Renata Hesse
Trial Attorney
Anti-Trust Division
U.S. Department of Justice
6Ol D St., NW
Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I am not a lawyer, an officer of the court, a technology professional, or a politician. So granted, there may be nuances that I am overlooking in the Microsoft antitrust case. I am having a difficult time understanding why some of Microsoft's competitors driving the antitrust case, along with half of the states suing the company, are unhappy with the settlement that all others involved in this case have agreed upon.

Reviewing the compromise from my vantage point, it would appear that Microsoft gave the most and the plaintiffs got the most. Computer makers using Windows receive flexibility allowing them to replace and remove specific parts of Windows. Even customers receive more flexibility with the product and information technology providers will have access to technical specifications. Plus, they would set up a panel to make sure all parts of the settlement are complied with.

As children, and sadly sometimes as adults, when it comes to decision-making there are always a couple of people that won't budge. In order to seek a compromise, two sides must at least come part way to meet somewhere in the middle. It seems those not signing off on the settlement simply refuse to take any steps toward the middle. Where I come from, that's bullheaded and stubborn and it gets you nowhere fast.

It is my hope that as the officer of the court making a final judgment on this decision, that you will be able to compartmentalize the intricate parts of this case. Set aside those who haven't signed on to the settlement, set aside those technology companies seeking a break up of Microsoft refusing to accept any punishment less, set aside those politicians who may be seeking continued spotlight by moving on with the case. Focus on the facts. A settlement has been reached by most of the parties partaking in the case. It seems to me to be a just compromise.

Sincerely,
Joe Meyers
4822 Ashley Park Drive
W. Des Moines, IA 50265

MTC–00029857

January 28, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

During my tenure as Assistant Director of Admissions at North Carolina State University, I have witnessed many technological innovations and trends. Most Of these have involved the use of a computer, and many involved Microsoft products.

While I cannot say with exact certainty why the federal government pursued an antitrust lawsuit against Microsoft, I can tell you that it has had a devastating impact on technological innovation while it has transpired. Before the lawsuit, tech companies were lauded for focusing on research and development at the exclusion of politics. In fact, few of the leading tech firms employed anyone to conduct government relations programs.

Microsoft learned quickly that its exclusive focus on making life more efficient for everyone had made its competitors struggle

for market share. The competitors retaliated by getting into the political game. The lawsuit followed. Even today, Microsoft's competitors are lobbying to contignue the lawsuit endlessly.

We should support the federal government and Microsoft in their decision to settle the case. I urge Judge KollarKotelly to approve the proposed settlement of the lawsuit. Let's allow research and development to march ahead.

Sincerely,
Jill Green

MTC–00029858

January 28, 2002
Renata Hesse
Antitrust Division
Trial Attorney
U S. Department of Justice
601 D St NW, Ste 1200
Washington, DC 20530

Attorney Hesse:

In my eyes, the government's treatment of Microsoft has not been unlike the actions of Medieval European Lord's who would cut off the head of a nemesis and display it on a stake in the village square for all to heed the warning. Unfortunately, the real harm goes to taxpayers, consumers, and tech investors in this case.

The government and Microsoft finally came to a settlement after going in and out of courtrooms as fast as they would enter and cease mediation talks since this case began a few years ago. Although this settlement is fair, we are beyond even that factor in this proceeding. Whether or not the agreement serves one side more than the other—which from the looks of it serves the government over the corporation—what is important is that a settlement has been reached with most of the contributors to the case have signed off on.

Please end this portion of the case with your approval of the settlement so that all of us—Microsoft, consumers, taxpayers, government court officials, and investors—can get back to business as usual.

Many Thanks,
Richard J. McLaren
President, McLaren Ins. & Associates

MTC–00029859

Linda Diamond
1961 West Hood Avenue 2B
Chicago, Illinois 60660
January 28, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I would like to see the government stop interfering with the business practices of Microsoft, and I am happy to see this case has been settled at the federal level. The two sides reached a fair compromise in November of last year, and it is time to finalize that settlement and end this matter once and for all.

The government agreed to settle this matter because Microsoft agreed to change its operating system to allow independent companies a better chance to compete in the marketplace. Windows will be designed so that these other companies can promote their own products rather than Microsoft's, and Microsoft will not retaliate against its competitors in any way for promoting non-Microsoft products. Them will be no more risk of anti-competitive behavior by Microsoft because a three person technical committee will oversee Microsoft's business operations from this point forward, ensuring that the company fully complies with all terms of the proposed settlement. I see no need to continue this litigation.

Once this case is settled, the IT industry will really benefit, and consumers will have more choices and better choices as a result. Competition will be strong, the industry will flourish, and the nation's economy will get a jump-start that it desperately needs. Thank you for settling this lawsuit, as it is the right thing to do for the industry and for the American economy.

Sincerely,
Linda Diamond

MTC–00029860

Wayne Hummer
Investments, LLC.
Fax
To: Attorney General John Ashcroft
From: Steven & Linda Diamond
Fax: 1–202–307–1454 or
1–202–616–9937 3
Phone:
Date: 1/26/02
Re: Microsoft Litigation cc:
Comments:
JAN-28–2002 15:29
WAYNE HUMMER
312 431 0704
P.02/03
Wh Wayne Hummer
INVESTMENTS
300 South W. Drive,
Chicago, IL 60606–6607
local 312/431.1700 / toll free 800.621.4477
312,431,0704
www.whunmer.com
January 28, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I would like to see the government stop interfering with the business practices of Microsoft, and I am happy to see this case has been settled at the federal level. The two sides reached a fair compromise in November of last year, and it is time to finalize that settlement and end this matter once and for all.

The government agreed to settle this matter because Microsoft agreed to change its operating system to allow independent companies a better chance to compete in the marketplace. Windows will be designed so that these other companies can promote their own products rather than Microsoft's, and Microsoft will not retaliate against its competitors in any way for promoting non-Microsoft products. There will be no more risk of anti-competitive behavior by Microsoft because a three person technical committee will oversee Microsoft's business operations from this point forward, ensuring that the company fully complies with all terms of the proposed settlement. I see no need to continue this litigation.

Once this case is settled, the IT industry will really benefit, and consumers will have more choices and better choices as a result. Competition will be strong, the industry will flourish, and the nation's economy will get a jump-start that it desperately needs. Thank you for settling this lawsuit, as it is the right thing to do for the industry and for the American economy.

Sincerely,
Steven M. Diamond
Serving Investors Since 1931

MTC–00029861

January 28, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite
1200 Washington, DC 20530

Dear Ms. Hesse:

I wanted to correspond with you and convey my opposition to the Microsoft lawsuit and support the compromise settlement.

I don't sec rely harm that has come to the American consumer as a result of the legal proceedings. Capitalism continues to work and Microsoft has developed useful and practical technology for education I am clear that Microsoft has been targeted by its competitors and I don't believe that taxpayers'' money should be silent for this type of lawsuit. Take the government out of this dispute and let capitalism do its job.

In conclusion, I ask that the Court resolve this issue as quickly as possible, in the interest of the American people.

Sincerely,
Barnes Elementary Principal

MTC–00029862

Wake Forest Town Commission
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms, Hesse:

As a member of the Wake Forest Board of Commissioners, I am concerned that the Microsoft antitrust lawsuit has dragged on too long and we need to settle it now. I am elected to represent all the people in Wake Forest, and I am concerned that everyone's jobs are being threatened by the recession. Microsoft products are the backbone of business and industry—and they help offices run efficiently throughout our community. I am opposed to prolonging the lawsuit in any way. The suit needs to be resolved... and resolved now! Many of our commuting citizens work in the Research Triangle Park. High tech solutions for health care, business and communications firms are developed here in the Triangle. However, the ability of these companies to be innovative in creating solutions, and productive in the creation of jobs, hinges upon moving beyond excessive litigation.

Let's face the fact that both parties want the suit to end, Microsoft and the federal

government are in agreement on all points of the settlement. I want to strongly urge Judge Kollar-Kotelly to promptly approve the settlement. This lawsuit has cost businesses and local governments untold millions in lost revenues, Let's stop the bleeding,

Let's move beyond this case and move the economy forward.

Sincerely,

Kim Marshall

Mayor Pro Tempore

401 Owen Avenue—Wake Forest, NC 27587

MTC–00029863

2601 Scofield Rid6e Parkway
#1523
Austin, TX 78727
David Morgan
Fax
To: Attorney General John Ashcroft
From: David Morgan
Fax: 1–202–307–1454 or
1–202–616–9937
Pages: 1
Phone:
Date: 1/28/2002
Re: Microsoft Anti-Trust
cc:
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft

I'm happy to see the Federal Government has come to at least some decision to end the unjustifiably offensive and expensive anti-trust case against Microsoft Corporation. Three years of untold waste has been directed at Microsoft and we the tax payers incurred the entire cost. Quite frankly, had Justice spent the amount of money it wasted in this suit in anti-terrorist security several thousand people would be alive and working at the World Trade Center building. The agreement arrived at after extensive negotiations with a court-appointed mediator is very unfair and only serves the self interests of the individuals and companies which brought the action as well as those political interests of the Justice Department attorneys and US politicians. Simply; Microsoft has gone well beyond any legitimate or fair agreements to remedies. It's time the government accepted the terms levied against the company and moved on to other things, Let Microsoft continue doing great things for the computer industry which helps us all instead of hindering the company and as we all know harming the little guys—the employees and the consumers.

Enough is enough. No more federal legal action should be taken against Microsoft.

Sincerely,

David Morgan

MTC–00029864

Jeffrey L. Phelps
4705 East U.S. Highway 160
Independence, KS 67301
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

The proposed settlement of the Microsoft antitrust case is a good deal for the taxpayer, investors and the computer industry. I strongly encourage the court to accept the settlement. The good news for supporters of the free-market system is that Microsoft is not going to be busted up by the federal government. Instead tiffs settlement specifically provides remedy for portions of the complaint that have been made it through lower courts.

Under this agreement competitors of Microsoft will find it much easier to promote their products into the Windows operating system, it requires Microsoft to provide intellectual property with other companies when necessary, and Microsoft will be banned from cutting special deals with specific computer manufacturers.

Clearly the Department of Justice and the company are interested in seeing this case ended. I the American public can count on the court to support this agreement.

MTC–00029865

To: Attorney General John Ashcroft
From: Forrest G. Gregory
11134 Villas On The Green DR
Riverview, Fl. 33569
Sub. Microsoft Settlement
Date: January 26, 2002

Dear Sir.

I feel the Justice Department should settle with Microsoft. The agreement you and the nine states agree to was a victory for neither side.

Now we need a victory for the consumer. Allow us to use the windows system without diluting it with more regulations on Microsoft.

The public has been supporting the Justice Department and state attorneys with our tax Dollars to continue these lawsuits. Settle and allow the private industry to make a profit. If an inventor has his property taken away by the government, other inventors will take notice. Consider what little incentive Microsoft or other potential targets of lawsuits would have to make a better product I would not be able to type and send you this letter without windows operating system. I'm sure there are others systems but I don't have time to search them out. Settle and somehow don't allow the other nine states to continue battling the litigation can be endless and no benefit to the public.

Settle and close the book.

Forrest G. Gregory

MTC–00029866

Anne Gould Anderson
614 West Marconi Ave
Phoenix AZ 85023–7447
January 28, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I would like to urge you and the administration to do every thing in your power to bring to a close the years old Microsoft case. This anti-trust suit is settled but m name and further politicking in Washington or posturing in the media are wasteful and counter productive exercises. The proposed settlement agreement was born of years of litigation, negotiation and mediation, it is a hard fought and won compromise between the several parties and varied interests. It deserves to be adopted for the sake of Microsoft, a great American company, the faltering IT industry, and our national wellbeing.

The settlement will leave Microsoft as it stood at the outset, the sole leader of America's most innovative industry. It will require the company, however, to change its ways and embrace a more Open and pro-competitive business philosophy. Microsoft will have to abandon its software exclusivity demands when selling its platforms to computer manufacturers. It will have to open itself up to regular government review. It must eschew further predatory or anti-competitive marketing practices. It will have to, not just accept, but also promote a more competitive IT world. In doing so it will hopefully become a catalyst for the whole industry.

Please support this settlement.

Sincerely,

Anne Gould Anderson

MTC–00029867

HENRY G, & EILEEN C. JAMES
1825B BRIARCLIFFE BOULEVARD .
WHEATON, IL 60187
P 630–665–8904 .
F 630–260–4037
Email: twojames@earthlink.net
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

We are writing to express our opinion regarding the antitrust suit against Microsoft, which is that it should be concluded at once. The settlement reached in November 2001, is a fair and just settlement that ought to be accepted by the Justice Department.

For fire sake of Microsoft's shareholders and customers, this antitrust suit needs to be brought to a swift and final conclusion.

Thank you and we think you are doing a good job in your cabinet position.

Sincerely,

Henry G. James

Eileen C. James

MTC–00029868

Fred Dorst
11715 Canyon Vista Lane
Tomball, TX 77375–7677
January 26, 2002

Dear Mr. Ashcroft:

I am happy to hear that the Justice Department has decided to end its antitrust lawsuit against Microsoft. The Department's three-year case has gone on for way too long.

The agreement they came up with came after extensive negotiations with a court-appointed mediator. The company agreed to terms that extend well beyond the products and procedures that were actually at issue in the suit—trust for the sake of wrapping up the suit. The company even agreed to document and disclose, for use by its

compertitors, various interfaces that are internal to windows' operating system products—a first in an antitrust settlement.

Microsoft has been distracted long enough. I don't think the federal government should ever have to drag the company in to the courts ever again, it would be soon by most as nothing more than pure harassment.

Sincerely,
Fred Dorst

MTC–00029869

TRAVEL WORLD
US DEPARTMENT OF JUSTICE
RE:COMMENT PERIOD MICROSOFT SETTLEMENT
JANUARY 28, 2002

AS A SMALL BUSINESS OWNER WHO BELIEVES STRONGLY IN THE FREE INTERPRISE SYSTEM WE SHOULD BE ABLE TO COUNT ON IN THE UNITED STATES, I WISH TO OFFER MY OPION ON THE MICROSOFT ANTITRUST LAWSUIT. I BELIEVE IT WAS WRONG FOR OUR GOVERNMENT TO INITIATE THE LAWSUIT WHICH IN ESSENCE PENALIZED MICROSOFT FOR IT'S SUCCESS IN THE TECHNOLOGY ARENA. I STRONGLY FEEL THAT MICROSOFT HAS NOT HARMED CONSUMERS AND THAT CONSUMERS INSTEAD HAVE BENEFITED FROM THE NEW CHOICES, AND LOW PRICES PROVIDED BY MICROSOFT AND OTHER COMPANIES LIKE THEM. I WAS VERY SORRY TO HEAR THAT NINE ATTORNEYS GENERAL AND THE DISTRICT OF COLUMBIA HAVE DECLINED TO ACCEPT THE SETTLEMENT TO THIS 3 YEAR MILTIMILLION DOLLAR EFFORT TO TOPPLE MICROSOFT AND ALLOW THEIR COMPITORS TO HAVE UNFAIR LEVERAGE OVER THEM. UNFORTUNATELY MY STATE OF IOWA IS ONE OF THOSE NINE.

I WANT TO INCOURAGE THE DOJ TO MOVE FORWARD WITH WHAT IS BEING CONCIDERED A SETTLEMENT WITH SOMETHING FOR EVERYONE WHILE NOT ENTIRELY SATISFYING TO ANYONE. IN THIS TIME OF ECONOMIC UNCERTAINTY, WE NEED BUSINESSES THAT STIMULATE DEMAND FOR PRODUCTS THROUGHOUT THEIR INDUSTRY TO RETURN WORK AND NOT! ENCOUNTER NEW OBSTACLES TO GROWTH.

THANK YOU FOR THE OPPORTUNITY TO EXPRESS MY CONCERNS REGARDING THE LAWSUIT AND PROPOSED SETTLEMENT.

KAY KING, OWNER/PRESIDENT
TRAVEL WORLD. INC
5922 Ashworth Road
West Des Moines, Iowa 50266
Office: 515.223–7474 .
Fax: 515–223–7722

MTC–00029870

Management Reports Incorporated
23945 Mercantile Koad
Beachwood, OH 44122–5924
January 7, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC, 20530–0001

Dear Mr. Ashcroft:

At first glance, many companies in the IT community were elated when the Department of Justice filed their suit against Microsoft. As time went on, however, it became evident that the punitive nature of the suit would probably end up more damaging than helpful to the entire IT community.

Now there is this settlement. I believe this settlement to he amply fair. It is my hope that it will prevail through this period of public comment, and that no further federal action will be contemplated. The settlement's call for interoperability protocol disclosure and Windows reconfiguration will ensure that more varied and effective computer software is brought to the market.

The IT business community has already been hit with slowdown and its share of business failures, both of which cut into the ability to quickly rebound. As the IT business has faltered, so has our entire national economy. It is time to put all of this unpleasantness behind us and allow the IT community to regain its position of strength. It is here that our economic recovery as a nation will be greatly enhanced.

Sincerely,
Robert Burger
IS Manager

MTC–00029871

Kevin H. Smith
12435 129th Avenue E
Puyallup, WA 98374
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I favor an immediate resolution to the Microsoft anti-trust case. A settlement proposal exists. It has the support of the major parties and the majority of party states. It is fair and it is workable and it deserves to be ratified by the government and enacted.

The settlement agreement addresses the concerns and the complaints of all parties. It leaves Microsoft whole while requiring the company to adopt practices that benefit its competitors. Microsoft must abandon predatory market practices. It must open its systems and technology to the exploitation of its competitors. It must now license its Windows platforms to computer manufacturers without exclusivity requirements for its software. These and other settlement terms, which Microsoft has accepted, make it clear that the company is willing to actively contribute to a new more competitive marketplace and justify an end to this case.

Please support this settlement and use your influence to convince the congress that it is, as it is in fact, the best thing for everyone.

Sincerely,
Kevin H. Smith

MTC–00029872

FACSIMILE COVER PAGE
To: Renata B. Hesse
From: Bill Barmes
Sent: 2/1/2002 at 10:17:56 AM
Pages 1 (including Cover)
Subject: Microsoft Settlement

I am a VAR (Value Added Reseller) in the state of Idaho. I believe it is extremely important for the economy of this country to have the DOJ Microsoft agreement resolved as soon as possible. The Small Business Owner not only in Idaho but accross the country has already been badly affected by this process being dragged out. We all need to move forward and get OUR economy going again in the right direction.

Bill Barmes
CompNet Systems
208–283–5400
bbarmes@velocitus.net
fax 208–388–0610

MTC–00029873

Bill Hughes
33 Deborah Drive
Roswell, New Mexico 88201–6501
January 27, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0011

Dear Mr. Ashcroft:

I am of the opinion that the settlement that was reached between the Justice Department and the Microsoft Corporation is fair and reasonable, and I am in full support of it. It is nice to see that the lawsuit that has leveled the stock market and pushed our economy into recession is over, and I hope that the other states still involved in litigation will follow the lead of the federal government.

The settlement does not go easy on Microsoft, but will be beneficial to the entire information technology industry and the economy. Microsoft has agreed to design future versions of Windows, which will include a mechanism that will make it easier for computer makers and consumers to install and use non-Microsoft software within the Windows operating system. It will also make it easier to add or remove access features that are built into Windows. This will push the competition to develop better software that will rival Microsoft's, and gives the consumer more choices. This gives the consumer the best of all worlds. Competition in the information technology industry will benefit as will consumer choice, This settlement is good for everyone involved, and i stand behind it.

Sincerely,
Bill Hughes

MTC–00029874

January 28, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

I work in the financial services industry (commercial insurance) and have closely watched the impact of the Microsoft lawsuit, particularly its effect on the economy as a whole. I don't believe it is a coincidence that just when the lawsuit was getting underway, our economy began a significant downturn which some say we are just beginning to come out of in recent weeks. Continuing this lawsuit is only detrimental to the companies involved and the American economy as a whole. It would be far more advantageous to

all parties to settle the matter with appropriate safeguards in place to prevent a similar suit in the future. In my opinion this suit did nothing to protect me or other American consumers. In fact it harmed our buying power and the overall strength of the economy.

As I understand the settlement from media reports, Microsoft has agreed to share intellectual property (which I don't think is right or fair) and create software that would allow for more flexibility for competing products to be used within Microsoft's operating system. In addition, a special committee will be formed to ensure compliance with all aspects of the settlement. It seems to be a fair and just compromise. Continuing to cripple Microsoft to allow others to ''catch up'' is not what our market economy is based upon. The fair opportunity taken advantage of by Microsoft 20 some years ago was open to all, do not further punish them for exercising their opportunity.

Please accept the settlement before you and put this case to rest. Thank you.

Sincerely,
Scott M. Scheidel

MTC–00029875

Advanced Network Design, Incorporated
301 N. Harvey
Oklahomg City, OK 73102
(405) 319–9795, Fax: (405) 319–9824
January 28, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

During the course of the past several years, there has been a lot of saber-rattling going on between Microsoft and the department of Justice over this lawsuit. I personally do not think that the ultimate goal of the government to break up Microsoft would have survived a Supreme Court review, but the very threat seems to have tamed Microsoft into this settlement.

In the unlikely event that Microsoft would have ever been broken up, it could have been beneficial for my company. However, it must be quickly said that the Microsoft product line is deservedly superior to anything on the market today. The long-term effects of having Microsoft splintered through this lawsuit would have been devastating for most consumers as well as many IT companies.

This settlement is therefore good. Even though its terms encompass more than the lawsuit did, it has been accepted by both sides and, with its acceptance, the struggle between our government and Microsoft is over. i am hoping that this in itself will be enough to allow all of us to put this behind us and move forward.

Sincerely,
John Woods
President
CC: Senator Don Nickles

MTC–00029876

ALLIED WASTE
Charlotte Metro District
January 19, 2002
Renate Hesse
Trial Attorney
Anlitrust Division
Department of Justice
601 D Street NW, Suite I200
Washington, DC 20530
Subject: Support for Microsoft Settlement

Dear Ms. Hesse:

I started in business as a very young man, working with my father at the garbage company he owned. Since then I have worked with a variety of companies in the waste industry. I have seers dramatic changes not only in this industry but also in the national economy, Technology is a driving force in the waste industry and the economy, providing the foundation for increased productivity, consumer and business knowledge and millions of new jobs in almost every industry.

Microsoft has been the leader in technology, not only in the United States, but internationally through its establishment of technology standards and integration of software. The efforts to restrict Microsoft's ability to compete could have serious implications for our economy. I urge a speedy resolution to the antitrust lawsuit. The proposed consent decree offers new flexibility and access to the tachnical aspects of Microsoft software so that computer makers and software developers can integrate non-Microsoft products into computer operating systems. Microsoft itself, its competitors, computer manufacturers, information technology providers and, most important of all, the consumer and end-users will benefit from the protections provided in the settlement agreement. It is time to accept this agreement and allow Microsoft and other technology companies to return to building a competitive technology industry.

Sincerely,
Jimmie Jones
P.O. Box 219/ Pineville, NC
28234/ 704.377.0161/ 803.548.2026 FAX
Waste Services of Charlotte
January 17, 2002
Renata Hesse
Tria1 Attorney
Antitrust Division
Department of Justice
601 D Street NW. Suite 1200
Washington, DC 20530
Fax 202–616–9937
Subject: Support for Microsoft Settlement

Dear Ms. Hesse:

For more than 20 years, I have worked in different aspects of the waste management industry During that time, I have seen dramatic changes in my industry as well as the overall economy. Certainly the use of technology has dramatically changed the way business is done, The waste industry is much more efficient and more capable of keeping track of equipment, waste sites and a variety of other aspects of our work because of technology.

I have watched the antitrust litigation against Microsoft with interest not only because of the impact on technology but also the impact it could have on innovation and product development. While not a panacea for the concerns voiced by computer makers and software developers, the proposed settlement agreement will give them new rights to configure Windows so that non-Microsoft products can be used. Microsoft has also agreed to the establishment of a technical committee to monitor progress of the settlement and to provide a venue for concerns of computer makers, software developers and consumers.

Microsoft will have the freedom to continue efforts to develop new and innovative products, Innovation is key in this country's ability to thrive in a global marketplace where foreign competitors try to replicate our products and sell them st cheaper prices to undercut our economic growth, The proposed settlement, agreement provide protections to all involved in this industry Microsoft itself, its competitors, computer manufacturers, information technology providers and, most important of all, the consumer. From my own experience, I know how difficult it is to come up with a compromise I encourage a quick resolution to the litigation so the technology industry can focus on regaining its competitive edge in the world economy.

Sincerely,
Tony Davies
5105A Morenead Road
Concord, NC 28027
(704) 393–6900, Fax (704) 782–2177
?? Pre??cts, Inc.
?? Break Read, FF-202
Charietie, North Carallas 28205
Phone 704–373–9889
Toll Free 888–332–2888
January 22, 2002
Ronal?? Hesso
Trial Attorney
Antitrust Division
Department of Justice
601 D Streat NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesso.

I am writing in support of the proposed settlement a??eement in the United States v. Microsoft case The Antitrust laws were meant to protect consumers, not to stop market competition. As a small business owner, I believe this proposal will not penalizeó other competing operating systems. This proposed settlement encourages more competition and groater innovation. All new Microsoft operating systems, including Windows XP. would have to include a mechanism that readily allows and users to remove or to-enable Microsoft's middleware products, such as the Internet web browser We need to be encouraging the technology sector, which is critical to out economic recovery.

This Agreement is good for the technology industry, the economy and consumers

Sincerely,
Evan J. Boxer
President
EJn/dgb

MTC–00029877

John O'Donnell
13000 NE 28th Place
Bellevue, WA 98005
January 27, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing in full support of the recent settlement between Microsoft and the US

Department of Justice. It is time that this foolishness comes to a prompt end. More than enough time has been used to cover all of the bases and I feel that it is just a political standoff at this point.

The terms of the settlement make apparent to me the intense lobbying efforts of Microsoft's competition as they will be granted new rights to configure Windows so that non-Microsoft products can be promoted more easily and also be given interfaces that are internal to Windows' operating system produces.

Even though these concessions do not actually protect consumers and just help Microsoft's competitors that were unable to be innovative on their own, I urge your office to finalize the settlement. It is in the best interests of our economy, IT sector, and public for the case to end and our country to move on. Thank you.

Sincerely,
John O'Donnell

MTC–00029878

Beverly Duncan
8310 E MORRIS ST
WICHITA, KS 67207
Renata Hesse
Trial Attorney
Antitrust Division
US Department of Justice
601 D Street NW—Suite 1200
Washington, DC 20530

Attorney Hesse:

Please accept the settlement before involving the Department of Justice's antitrust suit against Microsoft. Based on what I have seen on the news and read in the papers lower courts have ruled that Microsoft should not be broken up and have thrown out much of the original case. It is my understanding that this occurred because the case revolved around proving consumer harm and such harm has never been proven.

While this case has gone on for the last several years, we have all felt its negative impact on our wallets. Whether you consider the astronomical costs that taxpayers must bear or the millions lost in the stock-market, the effects of this case have been negative to average Americans. In an effort to resolve this case the Justice Department and Microsoft have wisely found a way to reach an agreement. It seems to me this agreement more then addresses any concerns some may hold about Microsoft's business practices.

Please support the settlement before the court.

Sincerely,
Beverly Duncan

MTC–00029880

Gary G. Hill
44024 Countryside Druive
Lancaster, CA 93536
January 26, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

Re: Microsoft Settlement Support

As an elected member of the Antelope Valley Health Care District representing 450,000 people, I am writing this letter as in support of the settlement in the case against Microsoft. I believe that this whole suit was a waste of time and money. Only in America do we focus on tearing down success, and destroying a product line the works. There are choices out there, but none of them work as well as the Microsoft products.

There are more pressing issues that are of concern to me in this country such as the energy crisis here in California. The state has lost $22 billion dollars resulting in consumers getting gauged. In addition, the price of gas has risen 20 cents per gallon, just in the last week. The Department of Justice should have taken a strong NO to the rash of oil company mergers this past decade; we can live without a home computer, but must have gasoline (real public transit has not arrived yet) Microsoft did not get off as easy, as its opponents would have people think. They agreed to terms beyond what was required in the suit. They also agreed to design future versions of Windows, starting with an interim release of XP, to provide a mechanism to make k easy for computer companies, consumers and software developers to promote non-Microsoft software within Windows.

Microsoft seemed to be generous when settling the case. Let's end litigation now so that Microsoft can go back to work. We, the American people, need a company like Microsoft to stay strong, so they can continue to create innovative products, well paying jobs, and help strengthen the tech sector of the economy.

Sincerely
Gary G. Hill

MTC–00029882

TAMMY FOX
Renata Hesse
Thai Attorney
Anti-Trust Division
U.S. Department of Justice
601 D St., NW
Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

After years of hearing and reading about the Microsoft antitrust case, it is a great opportunity for the those of us in the general public to voice our opinion as part of the official record. Thank you for the opportunity to do so.

Bill Gates started his company in his garage. Today, it's one of the largest software companies in the world. There is no better example in our time of fulfilling the American Dream. This man and his company are what entrepreneurial spirit is all about. When raising our children, never was it instilled in them to work hard, work smart, build something, BUT be careful not to get too big because if you do, the government might try to take it away. That is not how our country became the economic super power it is today. We got there with freedom and free enterprise. Clearly, I disagree with the premise of this entire case. However, we are past that point. Now we are at a place, after three long years of courtrooms and lawyers, where you have a decision to make On a proposed settlement. The agreement presented delivers what the federal and state governments involved felt they needed—oversight of Microsoft's business operations. I hope you will see fit to endorse the agreement so we can all move on.

Thanks Again,
Tammy Fox
2136 Blake Boulevard SE
Cedar Rapids, Iowa 52403

MTC–00029883

State Senator Stan Clark
205 US Highway 83
Oakley, KS 67748
January 25.2002
Judge Kolar-Kottely
Attn: Renata Hesse, Antitrust Division, U.S. Department of Justice
601 D Street, NW, Suite 1200
Washington. DC 20530

Dear Judge Kolar-Kottely,

This is a difficult time for our nation as we face economic hardship we have not seen in a decade. As a state senator, I know the difficulties that come with this economic downturn. My own state of Kansas is facing budget shortfalls and the threat of increased taxes as a result.

I understand that the economic situation is the result of a number of elements that together have culminated in a recession. Some of these elements, like the attacks on America on September 11(th), were beyond our immediate control. Others elements, like the monetary'' policy of the Federal Reserve are controlled directly by the government. The US Department of Justice's antitrust suit against Microsoft is another event that contributed to our economic downturn at the hands of our own government.

There is quite a pool of evidence that demonstrates that specific events during the government's case against Microsoft had a direct correlation to the state of the stock market, Upon Judge Jackson's ''findings of fact'' against Microsoft, the NASDAQ fell. Upon his recommendation for splitting up the company, there was another NASDAQ freefall.

The lawsuit against Microsoft may seem to be a small part of the whole economic picture, but it is difficult to deny that the case has had a negative economic impact—and on one of the driving sectors of our economy: the high-tech industry''.

When the high-tech industry is ailing, the rest office economy suffers as well. Technology is so integrated into our daily lives that we sometimes forget just how dependent up on it we are. Thus the ripple effect through the economy. When high-tech hurts, everybody hurts.

From what I understand of the settlement accord the Department of Justice, state attorneys general and Microsoft Corp have agreed to, the major concerns of the government have been addressed; yet Microsoft is kept from breakup and allowed to continue to be an innovator in our high-tech industry.

I hope you take a valuable step forward for our national economy by lending your approval to this settlement. It is a timely and appropriate way to end this suit and allow our country's economy to begin to repair itself.

Sincerely,
Sen. Stan Clark

MTC–00029884

VIRGINIA V. MANN
3004 Normandy Place
Evanston, Illinois 60201
January 25, 2002
Renata B. Hesse
Anti-trust Division
US Department of Justice
601 D Street, NW
Washington, DC 20530
Sent via fax to: 202–307–1454

Dear Ms. Hesse:

I was pleased to hear that the Department of Justice had settled its ridiculous suit against Microsoft. Clearly, this lawsuit was politically driven and using our government and our laws in this fashion was unfortunate from the beginning. I am relieved to see this dispute resolved, although believe it should never have been brought in the first place.

Although Microsoft has agreed to the restrictions in this settlement, I believe it is unfortunate that our government has chosen to do anything less than completely dropping the case. Microsoft has done more to improve our efficient and effective communications than has any other company in history. They should be left alone to continue their fine work without further interference from our government.

Sincerely,

MTC–00029885

Mark D. Snipe
420 West 42(nd) Street, Apt, 11F
New York, New York 10036
To: Attorney General's office
Fax: 202–307–1454
From: Mark D. Snipe
Date: 1/28/02
Re: Microsoft Settlement
Pages: 2 (including fax cover page)
CC:
420 West 42nd Street, Apt. 11F
New York, NY 10036
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing you today to express my opinion m regards to the Microsoft antitrust dispute. I fully support Microsoft in this dispute and feel that this company is being punished for being successful. Microsoft has contributed such a great deal to our society that stifling this company would only have adverse consequences for consumers. I support the settlement that was reached in November and believe that this settlement will serve in the best public interest.

Microsoft has agreed to all provisions of this agreement. Microsoft is willing to grant computer makers broad new rights to configure Windows so as to promote non-Microsoft software programs that compete with programs included within Windows. Microsoft has also agreed to design future versions of Windows to provide a mechanism to make it easy for computer makers, consumers, and software developers to promote non-Microsoft software within Windows.

This settlement is thorough. Continuing litigation against Microsoft will only serve to negatively impact our economy and consumers. Please support this settlement so that this company can devote their resources and time to innovation, rather than litigation. Thank you for your time.

Sincerely,
Mark Snipe

MTC–00029886

To:
Fax:
Date:
Subject:
FAX
Citizens for a Sound Economy
Phone 202 783–3870
Fax 202 783–4687
1250 H Street NW
Suite 700
Washington, DC 20005–3908

To the U.S. Department of Justice:

I am writing in support of the recent settlement of the long-running antitrust lawsuit between the U.S. Department of Justice, state attorneys general and Microsoft Corporation. Though I applaud the nine state attorneys general that decided to follow the federal government's lead and settle the case, I am thoroughly disappointed that remaining state attorneys general and the District of Columbia have decided to further pursue this baseless case.

The settlement is fair to all. It will allow Microsoft's competitors to use Microsoft's Window's operating system to incorporate their software programs and will give consumers more services and products to choose from.

As you are well aware, members of Citizens for a Sound Economy have been unrelenting in our opposition to the federal government's antitrust case against Microsoft. For nearly 3 years, activists like myself have called, emailed, visited, and sent letters to the U.S. Department of Justice and to state attorneys' general offices explaining that Microsoft's actions did not harm consumers, but provided them with great benefits by lowering the cost and increasing the availability of software products. We have stressed that Microsoft is a pioneer in the high-technology market and that their products increased our familiarity with the Internet. Once again, I thank you for your decision to settle this unfortunate lawsuit against a successful and innovative company.

Respectfully,
Name:
Address:
Email:

To the U.S. Department of Justice:

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Email:

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Address:

Email:

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MTC–00029891

January 25, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax: 202–616–9937

Dear Ms. Hesse:

As the new Commissioner of the Babe Ruth Softball League, I am confident in the future of our programs. I only wish that I had reason to be as optimistic about the future of the American economy. It seems as though everywhere I look I see doubt, confusion and a lack of stability in the American economy. We've got to improve this situation

I think that President Bush has the right ideas: strengthening our military, improving education and cutting taxes will make our nation stronger, smarter and more ready for business. However, consumer confidence in the short term must be fixed in order to spur growth. The American people want to see their government working to help create jobs. In that spirit, I believe that the pending settlement in the federal government's antitrust suit against Microsoft needs to be finalized. Think about it: the stock market took a nosedive when the federal courts announced that they planned to dissolve Microsoft. The economy has never recovered. We need to reverse this trendl

When I think of every American out of work, it makes me realize how needless and futile that any further pursuit of this lawsuit would be. We need our industry leaders, particularly our industry giants, like Microsoft, to be as strong as possible. Our government should work cooperatively to bolster, not weaken, them.

I request that Judge Kollar Kotelty approves the settlement.

Sincerely,

Famie Horn

MTC–00029892

Adam Marigold
January 27, 2002
Renata Hesse
Trial Attorney
Anti-Trust Division
U.S. Department of Justice
601 D St., NW
Suite 1200
Washington, DC 20530

Dear Ms, Hesse:

The antitrust case against Microsoft brought the booming success of the high-tech industry to a screeching halt.

Microsoft has been a leader in the surge in both the high-tech sector and our overall economy. The case caused numerous slides on Wall Street costing investors everywhere. Future success for not only tech companies, but businesses of all types, seems in jeopardy of government intervention.

The marketplace is constantly changing and guarantees success to no one, but opportunity for success to all. Government involvement in business obstructs the workings of America's free-market system. Customers determine what they want, what they like and buy it. There's no sure thing. The federal government should not be placed in a position of authority over the market—choosing champions and runners up. There is a place for a limited government—to protect.

Those who argue this is in fact the role the state and national Justice Departments undertook in this case, should be asking

themselves—Why does this settlement come three years too late? Three years after it began we have a wounded economy, a limping technology industry, puzzled consumers and furious taxpayers. Please accept the settlement before you.

Sincere
Adam Marigold
3906 B Ave NE
Cedar Rapids, IA 52402
(319) 363–3527

MTC–00029893

Commercial Underwriters
22720 Michigan Ave., Ste. #210
P 0 Box 1088
Dearborn, MI 4812t
Phone: (3t3) 278–3800
Fax: (3t3) 278–8467
TO: Attorney General John Ashcroft
DATE: 1/28/02
COMPANY:
FROM: US Department of Justice
FAX# 202–307 145/05 616–9937
FROM: Dan Schwartz
PAGES INC- COVER:
MESSAGE:
Please see Following page.
Click on us at:
www. CURMinc.com
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, N W
Washington, DC 20530

Dear Mr. Ashcroft:

I want to express my gratitude liar the work you have done since being named Attorney General last year. I am especially pleased with your decision to settle the government's anti-trust lawsuit against Microsoft, and I fully support this settlement. Private businesses should have the right to develop ideas and become successful from them without being punished by the federal government.

This lawsuit has had very negative effects on the technology industry, and this has carried over and hurt the U.S. economy. Microsoft has agreed to change its business practices so that competition can increase, the industry can be revitalized, and the economy can be stimulated. The settlement calls for a three person technical committee that will watch over Microsoft, and make sure that no more anti-competitive behavior exists in the future. Consumers will benefit from more choices in the marketplace, and this was the desired outcome when the lawsuit began over three years ago.

Settling now is the right thing to do for our country at this time, and I thank you for your decision to end the litigation against Microsoft. I am hopeful that this is truly the end of this case at the federal level, and that there will no further action taken against Microsoft.

Sincerely,
Dan Schwartz
P.O. Box 5644
Dearborn, M—I 48128
P.O. Box 1088,
Dearborn, Michigan 48121–1088
22720 Michigan Avenue,
Suite 210,
Dearborn, Michigan 48124
Phone (313) 278–3800
Fax (313) 278–8467—Toll Free 1–800–856–8701
www.curminc.com

MTC–00029894

JOSEPH TARTAGLIA
88 FARRELL DRIVE
WATERBURY, CT 06706
Renata Hesse, Esq.
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Via Facsimile 202–616–9937

Dear Ms Hesse:

This letter is to articulate my support for the proposed settlement in the Microsoft case. The fact that over $30 million in taxpayer dollars has been spent in this case during these trying economic times is proof enough that this case has gone on far too long. Hopefully, the settlement will signal a return to innovation without the threat of government intervention.

The Department of Justice has done a commendable job in putting together an agreement that is fair but won't put Microsoft out of business. It is a reasonable conclusion to this case and I support it wholeheartedly.

Sincerely,
Joseph Tartaglia

MTC–00029895

ASSOCIATED BROKERS
OF SUN VALLEY, LLC
Real Estate
January 28.2002
Mike Sampson
P.O. Box 2004
Sum Valley, ID 83353
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing in support of Microsoft and believe this whole antitrust case has become political. I don't see how this benefits consumers and businesses—especially at the expense of the economy. The tech stocks are down. The technology sector is down. The employment numbers are down. Let Microsoft get back to work and the government get on with worthwhile business. The only people I see benefiting from this case are the lawyers.

I am a small businessman who employs 25 people. I have greatly benefited since 1982 from the products Microsoft produces and feel they have been more than fair to me. If their competitors can't put out a better product with competitive pricing and service that's their problem. I don't see why I should suffer as a small businessman.

After years of extensive negotiations and mediation, Microsoft has gone out of their way to settle this case. They went well beyond what would be required in any antitrust case. They agreed to design future versions of Windows, starting with an interim release of XP, to provide a mechanism to make it easier for computer companies, consumers and software developers to promote their software within Windows.

Let's end this litigation so that we can focus on what's really important. Thanks,

Sincerely,
Mike Sampson
cc: Senator Larry Craig

MTC–00029896

Jesse L Clay
1205 Ridgecrest Drive SE
Albuquerque, NM 87108
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I would like to take some time to express to you my feelings about the proposed settlement that was reached between Microsoft and the Department of Justice. It is about time that the antitrust suit ended, and I feel that the terms in the settlement, although harsh on Microsoft, will be for the betterment of the computer industry and the economy.

I am pleased with the prospect of the case being resolved, but I think it was initiated for all of the wrong reasons. Microsoft's competitors had a major role in initiating the litigation, because they could not bring to the market a product that matched Microsoft's own. The competition should be happy though. The terms of the settlement require Microsoft to turn over to their competitors source code and design data that are crucial to the internal makeup of Windows. Enough is enough. This settlement needs m he approved so the industry can get back on its feet, and with competitors working more closely with one another, the industry will benefit.

I feel the proposed settlement will benefit all parties involved, including Microsoft's competitors.

Sincerely,
Jesse Clay

MTC–00029897

Carol Morse Sibley
92 Overlook Terrace
Bloomfield, NJ 07003–2917
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

The antitrust lawsuits against Microsoft have gone on for too long. They are also not very well justified. Microsoft has not only created jobs and wealth for our country, but also has made technological breakthroughs that have revolutionized the IT sector. I do wish that when they come out with new versions of software they would always make it compatible with previous versions, which they didn't do, for instance, with PowerPoint.

Still, it's clear that the settlement seems to only help competitors gain an edge they were not able to gain beforehand. It forced Microsoft to disclose interfaces that are internal to Windows operating system products, and also grant computer makers broad new rights to configure Windows so that non-Microsoft software can be promoted more easily. It is in the best interests of the

American public to finalize the settlement. Our nation cannot afford further litigation so I urge your office to use its influence to try to rein in the nine states that want to drag this case out for even longer. Thank you for your time.

Sincerely,

Carol Morse Sibley

MTC–00029898

Nancy A. Waxdahl
305 N. Chicago Avenue
Sioux Falls, SD 57103
605–332–5335 Home/Consultant Phone
January 24, 2002
Renata Hesse, Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I am addressing in this letter the settlement agreement in U.S.v. Microsoft, and its benefits for our state and America's economy.

Frankly, this case has run its course after four years and the tremendous financial investment by federal and state governments, and the Microsoft Corporation, I am aware that nine of the 18 states in the antitrust case have chosen not to agree to settle, but I think it speaks more loudly and convincingly when nine states and the U.S. Department of Justice agree that this case has reached a satisfactory conclusion.

As someone who has served on county and city boards which were created a better quality of life, I am very pleased that a positive result of this case wilt be the distribution of computers, software and support for low income schools in the nation. Our state will certainly benefit, particularly among the Indian populations where some of America's poorest counties are found. I am also pleased that this agreement indicates that this court action will finally end, and Microsoft will be able to refocus its energies to providing the leadership in information technologies. Because Microsoft has blazed the path, America's technology industry has been a cornerstone to our nation's economic position in the world. Please do what you can to allow this agreement to be implemented so that we can all move forward. Thank you very much.

Sincerely,

Nancy Waxdahl

MTC–00029899

JEFFREY Q. OLSON, D.D.S.
Clock Tower Plaza. Suite 211B
2525 West Main St.
Rapld City, SD 57702 605/342.2445
January 25, 2002
Renata Hesse, Trial Attorney
Antitrust Division
U.S, Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Trial Attorney Hesse:

Thank you for the opportunity to provide my Input on the settlement reached recently in U.S.v. Microsoft. I am very pleased that this antitrust case has settled after the years and millions invested in pursuing every relevant issue involved, I realize that it has been a complicated case which has caused the courts to enter unfamiliar terrltory in determining the appropriateness of Microsoft Corporation's practices as they affect its equally ambitious competitors, However, I have been concerned that this case would also act to stifle the dynamic ability of Microsoft—or any other software firm—to create and successfully market the best software which meets the needs of consumers Placing our government in charge of micromanaging innovation would certainly limit the ability of American software companies to keep our nation ahead in technology development, For my dental practice and home use, I have relied on Microsoft to provide a competent and versatile system to conduct bustness and communicate with friends and family. I hope this settlement will allow Microsoft to dived its resources into continuing to make Its clients satisfied with its new products.

Sincerely,

Dr. Jeff Olson

MTC–00029900

COMMUNITY COLLEGE
224 NORTH PHILLIPS AVENUE
Sioux FALLS. SD 57104
605/336,1711
FAX: 605/336–2606
1–800–888. 1147
E-Mall: Info@kee.cc.??d.us
January 17, 2002
Renata Hesse, Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Renata Hesse:

My letter is for the public commentary portion of the settlement phase in U.S. vs. Microsoft. As an educator in a Sioux Falls college, one reason I support the settlement is it offers a chance to improve education in South Dakota's and the nation's poorest school districts by bringing IT equipment, software, and support to them. This will create a ladder to those who've been trapped in the IT access gap, and give these children the tools they will need to continue their education in our state's colleges.

I also support the proposed settlement largely because it puts an end to an antitrust suit which has not shown consumers have been harmed by Microsoft, and because it has found answers to the issues which were found to be important by the federal court system. Additionally, when a case of this size and important has boon running for four years with all of the resources brought into it, I think you can safely assume that all valid issues have been brought to light and all questions have been answered satisfactorily, Apparently the U.S. Department of Justice thinks so, as do half of the state attorneys general who brought the case.

Our own state did not join this antitrust action. Our Attorney General felt it lacked enough ?? to warrant using our state's limited financial resources to pursue it, I think he was right. Considering them arc much more important and pressing matters before the Department of Justice, I think it's time to call this matter resolved and settled.

Thank you for your attention to my letter.

Sincerely,

Kip Scott

MTC–00029901

Randy
2408 W. Rice Street.
Sioux Fails. SD 57104
January 24, 2002
Renata Hesse—Trial Attorney
Antitrust Division
US Department of Justice
601 D Street NW—Suite ''1200
Washington, DC 20530

Dear MS. Hesse:

With the court's approval, our nation will be best served by the settlement agreement reached between the Department of Justice and Microsoft Corporation. The settlement resolves the issues which were found to be legitimate. It resolves an issue which has absorbed four years and many millions in taxes from the Justice Department.

While our nation has endured a recession, one Of the strong points in our recovery has been the Microsoft Corporation which has Shown great resiliency, even though its resources and attention have been split with the threats posed by the antitrust case. Microsoft has ?? In one of the most hostile Industries because the entire company's energetic focus is on remaining the leader in software development. Their competitors are also very wealthy and they are equally as determined to replace Microsoft as the leader. Therefore, I am not surprised that half of the states in the original suit are still in the hunt to bring down Microsoft.

I am impressed with one Of the gifts available In this settlement, Which will target computers and Information technologies resources for our nation's most poverty-stricken school districts. My home state will probably be rewarded With these computers since some of the nation's poorest counties are located in South Dakota. I nave been an activist on social development Issues, Including my service as Executive Director of the S.D. Alzheimer's Association. I support this settlement not only because It ends an action which has served its usefulness, but also because it benefits children who need the help. I appreciate your consideration of my letter.

MTC–00029902

PAUL SYMENS
STATE SENATOR
3ENATE CH.AMBERS: RESIDENCE:
TELEPHONE:
State Capitol RR Box 89 605/a48–5775
(home)
Pierre, SD 575Ol Amherst, SD 57421 605/
448–2624 (work)
phone: 773–525I 605/448–5786 (fax)
January 18, 2002
Reacts Hesse, Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Trial Attorney Hesse:

Thank you for the opportunity to provide my comments on the settlement of U.S.v. Microsoft and the benefits this settlement will have for the nation and our state. South. Dakota has been pro-active in making information technologies ubiquitous for

children and adults throughout our state. Governor Bill Janklow's Wiring the Schools Program is making high-speed, wide ban interact service available in all schools and public buildings in every town. Additionally, with the help of a $670,000 matching grant from the Bill and Melinda. Gates Foundation, the state is bringing faculty and administrators up to speed on using these systems so that more children will benefit. The settlement from the Microsoft antitrust case will result in financially disadvantaged school districts receiving free software, hardware and technical support. For disadvantaged kids, this is a case of what happens when preparedness meets opportunity, In South Dakota, where the nation's three poorest counties are found, this settlement will have great meaning for young people seeking their way in tills world.

Aside from the educational benefit, I am glad that this ease is nearly settled. It has absorbed an incredible amount of taxes and four years of productive time to resolve the issues brought to the court. Those issues are addressed in this settlement, and I believe they should he satisfied. There are those who would like to continue this case, I can't imagine that after all of the time and money invested to date that anything useful or productive would be the result. Please let this case become settled, Microsoft is part of the foundation of our nation's economy, and continuing this case will work only to weaken a corporation which has been a responsible citizen to our nation. Thank you for considering my letter.

Sincerely,
Paul N. Symens
State Senator, District I
Paid for by Paul Symens for Senate Committe, RR Box 89, Amherst, SD 57421

MTC–00029903

South Dakota Network
Against Family Violence and Sexual Assault
P.O. Box 20453.
Sioux Fails, SD 57109.
(605)731.0041.
sdnafvsa@meleodusa.net
January 17, 2002
Renata Hesse, Trial Attorney
Antitrust Division
U.S, Department of Justice
601 D Street NW, Suite t200''
Washington, DC 20530

Dear Ms. Hesse:

My comments here are'' in favor of the settlement in U.S. vs. Microsoft, because the settlement's provisions will be a benefit for children in regions'' where poverty has prevented them from accessing the intenet. The state government of South ''Dakota has put an emphasis of wiring our public schools and public'' buildings for the. internet, but obtaining good software and hardware, and the support needed to make the system work smoothly, have been lacking. The settlement will be of great benefit to this program and to the state's children.

I also feel the settlement is the. right thing for our nation's economy, I have used Windows products for work and pleasure, and I am satisfied with the products. They empower people to gain the full benefit of the information superhighway, and they enable business people and nonprofits to correspond on the same technical level, I think it is noteworthy that the antitrust case never established a finding that consumers were shortchanged by Microsoft.

Your attention to my letter .is appreciated.

Sincerely,
Deb Aden

MTC–00029904

Mark Proctor
family & children advocacy services
713 N. Madison Avenue
Picrre, SD 57501
January 22, 2002
Renata Hesse
That Attorney
Anti-trust Division
US Department of Justice
601 D Street NW, Suite t200
Washington, DC 20530

Dear Ms. Hesse:

On the issue of the settlement agreement in US v. Microsoft, please allow this agreement to move forward so that this anti-trust case is allowed to come to a fair and final conclusion very soon.

The time and money which has gone into this case, in both the government and private sectors, has been more than sufficient to render sensible decisions, it is my understanding that the settlement agreement addresses each of the issues which needed to be addressed by the courts. It is interesting that none of Microsoft's practices and policies were determined to be harmful to consumers. AS someone who has worked in family and children advocacy projects in Western South Dakota, I am pleased that an important aspect of this settlement will help to bridge the IT gap among poorer Children in the nation.

The distribution of computers and supplies by Microsoft is in keeping with the reputation of the Bill ?? Melinda Gates Foundation. The Foundation made a sizeable gift to our state to enhance the development of IT services within South Dakota's public school systems. And the Foundation has a tremendous record of philanthropic contributions [o eliminate diseases worldwide through vaccination programs. Despite the criticism by some, the remedy of forcing Microsoft to install and maintain computer systems in public schools to help the neediest children is profoundly wise and beneficial to society.

Sincerely,
Mark Proctor

MTC–00029905

South Dakota Legislature
State Capitol,
500 East Capitol,
Pierre, South Dakota 57501–6070
January 22, 2002
Renata Hesse—Trial Attorney
Antitrust Division
US Department of Justice
601 D Street NW—Suite 1200
Washington, DC 20530
RE: Public commentary In U.S. v. Microsoft settlement

Dear Ms. Hesse:

Public service, for me, means investing my time and energy to help improve the quality of life for the people in my legislative district. That is why I have served as a member of the Rossbud Sioux Tribal ??, and as a State Senator for 10 years, and now as a State House member for my second year.

My legislative District 27 is home to the pine Ridge Reservation and the Ro??obud Reservation, where you will find two of the poorest counties in the entire United States, according to the U.S. Census Bureau. My district is filled with kids who want to do well in school no that they can make a good life for themselves as adults, Everybody is encouraged by our Governor's program Wiring the Schools because it brings wide band, high speed Internal capabilities to our schools. But it is discouraging when you visit the schools and see Kids waiting their turn to use systems which are slow, dilapidated and not up to the standards of systems used by kids in other parts of the United States.

That is one important reason why I support the settlement agreement, because it will bring updated systems, software and support to the schools in my district. Another strong point is the fact that this antitrust case has been fully scrutinized and debated for four years in the federal court system, and the settlement agreement speaks to all of the significant issues which have survived the court process. I have enough faith in the U.S. Justice Department to know that this settlement is a good one, or it would not have aigned off on the agreement.

Thank you for the opportunity to submit my opinion on this important settlement.

Sincerely,
State Representative

MTC–00029906

STEVEN D. SANDVEN
LAW OFFICE5
300 HUNDRED BUILDING
300 NORTH DAKOTA AVENUS, SUITE 516
SIOUX FALLS, SD 57104–6026
PHONE: (605) 332–4408
FAX: (605) 332–4496
CELLULAR: (605) 941–1498
January 22, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Dept. of Justice
601 D Street NW / Suite 1200
Washington, DC 20530
RE: Public commentary on U.S.v. Microsoft Settlement

Dear Ms. Hesse:

In my service as General Counsel to the Sisseton-Wahpeton Sioux Tribe at Lake Traverse Reservation, I am concerned with the development of tribal schools and the education of Indian children. My work also involves services to other tribes in more remote areas of western South Dakota, North Dakota, and Kansas where education programs are also viewed as essential to the economic survival of Indian people and tribal governments.

Tribal schools throughout this region are becoming increasingly interested in new technologies and making sure Indian children are not left behind the curve with non-Indian students. That is why I believe the Microsoft settlement is going to have untold benefits for generations by supplying

these schools and schools of other low-income students with computers, software and technical support they need to operate competent systems.

As an attorney, I have been watching the antitrust case, and I have taken an interest in its outcome. While consumers clearly have not been hurt by anything Microsoft has done, I think it is debatable whether Microsoft was inappropriate in its practices against its competitors. I am glad to see that the U.S. Justice Department and nine of the 18 states in the case come to terms with Microsoft, because I think this case has had enough time and resource paid to it to render a just settlement of issues.

I appreciate your interest in my thoughts on this settlement, and I ask for a quick resolution to approve the settlement.

Steven D. Sandven

MTC–00029907

City of Winnfield
PHONE (318) 628–3939
FAX (318) 628–6773
P. O—BOX 509
WINNFIFLD, LOUISIANA 71453
winn@imerica.net
Deano Thornton, Mayor
Council Members
TONY ASOSTA
KENNY CALDWELL
WILLIE HOLDEN
ANDRE'' HOWARD
MATT MILAM
Date 1–28–02
From?? Fax No.318–428–4773
To?? Fax NO. 202–414–9937
Re: MESSAGE
Renata Heese
Trial Attorney
Antitrust Division Department of Justice
601 D. Street NW. Suite 1200
Washington. DC 20530
FAX: 202–616–9937
RE: Settlement of U.S. vs. Microsoft

Dear Ms. Heese:

I have always been a strong believer in the free enterprise system. It is what built this country from the beginning and is responsible for making us the economic giant of the world. This case has cost taxpayers over thirty million dollars and It is high time that it come to an end. Microsoft's competitors need to return to competing in the marketplace When they do. the consumer wins and the free enterprise system works.

The last thing the technology sector needs is more ''lawyers and governmental intervention. Please accept this letter as complete support of the settlement and request that this case come to an end.

Thank you.

Sincerely

Deano Thomoto

Mayor

DT/sp

MTC–00029908

Peripherals Plus Technologies, Inc
317 North Queen Sweet
Lancaster PA 17603
Phone 717.397.9752
Fax 717.397.9905
www.pptnet.com
January 23, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

Since the Courts reached a settlement on the Microsoft antitrust case in November, I was hopeful we could move forward. Now with the additional states and competitors coming forward to pursue further litigation, I am starting to wonder if this benefits the consumer at all or just the business of the competitor's.

Microsoft has been more than cooperative. They agreed to license their Windows operating system products to the 20 largest computer makers on identical terms and conditions, including price. They also agreed to grant computer makers broad new rights to configure Windows, in order to promote non-Microsoft software programs that compete with programs included within Windows.

I urge you to put an end of this litigation fiasco. There are more pressing issues upon which the government should be focused.

Sincerely,

Byron Wright

MTC–00029909

Ellisport Engineering, Inc.
January 28, 2002
To: Ms. Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
Subject: Microsoft Settlement

Dear Ms, Hesse,

I believe the terms of the agreement are reasonable and fair to all parties involved. This settlement represents the best opportunity for Microsoft and the industry to move forward. To continue prosecuting Microsoft is to punish one of the few American companies who are helping us to compete in the international arena of commerce,

Please settle this now. It is in the best interest of the country.

Stephen T. Kicinski, PE
Ellisport Engineering, Inc.
20501 81st Ave. S.W.
Vashon, WA 98070
Telephone (206) 463–5311
FAX (206) 463–2578
E-Mall: Ellisportl@aol.com

MTC–00029910

ReportWare
1460 Manzanita Lane
Reno, Nevada 89509–5207
(888) REPWARE
(775) 827–4494/Fax 827–3213
www.ReportWare.com
Sales@ReportWare.com
January 27, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Re: Microsoft Settlement

Dear Mr. Ashcroft:

I support the settlement between Microsoft and the U.S. Department of Justice. Please stop this foolishness.

I feel that, as an attorney and president of a technology firm, I have some reasonable understanding of the issues in this case. It is my strong feeling that the Government's actions have been overly aggressive and caused problems damaging to the whole software industry. I have no sympathy for Microsoft's competitors who have sought to promote this case. I believe that they have done so in order to gain advantage for their otherwise inferior software. I have no economic relationship with Microsoft, beyond being in the same industry and using their products—for which I pay retail. I support Microsoft and this settlement and I hope you will lend your support as well. Thank you.

Yours truly,

Randy Hanshaw

9President. ReportWare, Inc.

RH:gt

cc: Senator Harry Reid

MTC–00029911

34 Heritage Court
Randolph, NJ 07869
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to express my support of Microsoft and by extension, the settlement recently proposed by the DOJ. I support this settlement because Microsoft deems the terms fair and will comply in the hope of regaining a measure of normalcy in the IT industry as soon as possible. I am sure that this has been public's desire from the very beginning.

However, I don't believe in the prosecution of Microsoft, in the first place, in my mind, this all started due to an overzealous prosecutor and competitor's which used the available court system as a venue to retain competitive advantage, damn fairness and free trade. Microsoft has brought new innovative products to market and because they were superior, they've become widespread. Why on earth should they be prosecuted for being successful?

To me the only good thing that has come out of this lawsuit is that the public has been able to see the kind of company that Microsoft is, one that provides products that the market wants, low cost and effective computing solutions. That they bundled their software, made it easier for me and I support them for it. It didn't kill Netscape (I still use it) or any other competitor. They just failed to be as successful as Microsoft, and now they're complaining.

Microsoft's willingness to comply with the terms of this agreement and those not even at issue in the lawsuit is a classic example of their high caliber. Microsoft has agreed to allow their competitors aspects of Windows that will facilitate competitiveness such as Microsoft's internal interfaces, protocols and intellectual property. To ensure their compliance, Microsoft has agreed to be monitored by a Technical Committee.

In the interest of seeing a restored IT industry and a more stabilized economy, please make the necessary decision to

formalize the proposed settlement, though I personally think it goes to far.

Sincerely,
Richard Paeschke

MTC–00029912

The Genate
Slate of Iowa
Seventy-ninth General Assembly
STATEHOUSE
Des Moines, Iowa 50319
STEVEKING
STATE SENATOR
Sixth District
Statehouse: (515) 281–3371
HOME A ADDRESS
3897 Esther Avenue
??, Iowa 51448
Home—(712) 675–4572
Office—(712) 668–2300
FAX—(712) 675–4573
steve king@legistrate ??
January 28, 2002
COMMITTEES
State Government, Chair
Appropriations
Business & Labor Relations
Commerce
Judiciary Oversight & Communications
Appropriations Subcommittee
Vice Chair
Renata Hesse
Department of Justice, Antitrust Department
601 D St NW
Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

I am a State Senator from Iowa and I also the owner of construction contracting business. In my capacity as a State Senator I am chairman of the state government committee and also serve on the commerce committee. I chose to serve on these committees because as a business owner I am acutely aware of'' negative impact: over regulation can have on business It is from this unique perspective that I am writing you today to encourage you to settle the Microsoft anti-trust case

The suit against Microsoft was brought under anti-trust laws that were developed in at a time in our history when our nation was growing into the industrial and economic leader it is today. These laws were meant to protect American consumers from harm inflicted by monopoly companies. These laws have served their purpose in the past. However, in this case, I do not think they apply the government and Microsoft's critics have yet to prove consumer harm as a result of Microsoft actions or practices.

As a businessman and strong supporter of our free-market system, it is apparent to me that Microsoft's only crime is giving the American public a superior product, and therefore has been able to build a loyal following of committed users. Assumedly, Microsoft worked very hard to develop its products and market. They should not be punished for this or for having the business savvy to take action to protect their market.

A closer look at this suit and the lobbying efforts that have fueled it will expose disturbing realities. Microsoft's competitors do not appreciate that technology consumers are overwhelmingly loyal to Microsoft products. However, instead of committing to production of new products that may allow them to more successfully compete in our free-market, they have banded together and found a way to use outdated anti-trust laws for their own purposes.

The settlement before you is truly a compromise for Microsoft. Certainly, Microsoft will be held to the severe provision of this settlement, not the least of which is the sharing of intellectual property. However, negotiating settlement is the best solution for the technology industry and our'' economy in general. When this settlement is approved it will send a signal to the technology industry that the threat of government interference has been lifted.

Sincerely,
Senator Steve King

MTC–00029913

C. Cowdery
3926 NE Eighty-Ninth Street
Seattle, Washington 98115
January 22, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

After three long years of court baffles, Microsoft and the government have settled an antitrust suit that has profound implications for all software publishers, the rest of the Information Technology industry, and American consumers. By ending this case, the government is actually giving a boost to our sagging economy.

The settlement has teeth. Under the agreement, computer manufacturers were granted new rights to configure systems with access to various Windows features. Microsoft must also design future versions of Windows to make it easier to install non-Microsoft software and to disclose information about certain internal interfaces in Windows.

The government even went so far as to create an ongoing technical oversight committee to review Microsoft software codes and books and to test Microsoft compliance to ensure that Microsoft abides by the agreement. This will help to promote fairness. In conclusion, I don't think it will ever be necessary for the federal government to ever bring any more litigation against Microsoft beyond this agreement. This agreement is more than fair and reasonable and was arrived at after extensive negotiations with a court appointed mediator.

Sincerely,
C. Cowdery

MTC–00029914

RJA Pollinating Co.
P.O. BOX 58
450 West Main St.
Westmorland, CA 92281
760–344–3726
760–344–3091
FAX 760–344–0012
TO: MA Renata B. Hesse
Location: U.S. Dept by Justice—Antitrust Division
Telephone:
FAX: 202 616 9937
Date: 1–28–02
Comments:
Total Number of Pages Sent: 2
Approval:
RJA Pollinating Co.
P.O. Box 58 450
West Main St.
Westmorland, CA 92281
760–344–3726
760–344–3091 FAX 760–344–0012
January 28, 2002
Ms. Renata B, Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
VIA FACSIMILE: 202–816–9937

Dear Ms. Hesse:

As a concerned citizen with an eye for government waste, I strongly believe that the antitrust case against Microsoft has been a squandering of public resources. I also believe this was brought on by those who have a liberal bias and are against corporate America. Therefore, I support the agreement between Microsoft and the nine plaintiff states.

As you know, our antitrust laws are supposed to protect consumers, not competitors, What's going on here is that our government is penalizing Microsoft for its success, The consequences are far ranging. If the United States government can attack one of the most successful companies in America, who's next?

As a believer in open markets and opponent of government intrusion, I support ''the Microsoft settlement.

Thank you for your time.
Sincerely,
Richard J. Ashcroft

MTC–00029915

1000 Chesterbrook Boulevard,
Suite 101
Berwyn, Pennsylvania 19312
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am happy to hear about the settlement that has been worked out with Microsoft. It has taken three long years to finally reach an agreement like this that is fair for both sides. I hope that the Federal government will let this be it and finally put the matter to rest.

The settlement is fair. First of all, Microsoft will adhere to a uniform pricing list when licensing Windows out to the larger computer vendors in the United States. Also, Microsoft has agreed not to retaliate against companies that promote or use non-Microsoft products. Most importantly, Microsoft has agreed to share sensitive information with its competitors; information that will allow them to more easily place their own programs on the Windows operating system.

I know that many people who daily depend on Microsoft products will write to you about this matter. I hope that you take their and my opinions into account. I support the settlement, and look forward to seeing the suit come to an end. As a consumer and a

user of Microsoft products, I do not feel that I am being ''clobbered'' by Microsoft. Many of their competitors would like you to think this is the case. Since many other companies can't effectively compete with their own inferior products, they want the taxpayers to help them get rid of Microsoft by way of a government breakup. Enough is enough, settle the lawsuit and allow Microsoft to get on with creating more innovative products!!

Sincerely,
Marc T Nettles
Cc: Senator Rick Santorum

MTC–00029916

Denterlein Worldwide
Honorable Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
C/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
RE: U.S. v Microsoft

Dear Judge Kollar-Kotelly,

At a time when innovation in the computer technology industry should be booming the decision with regard to U.S. v Microsoft certainly makes it very difficult for companies to find the investment dollars to develop software. Limiting the ability of companies competing, the settlement provides loopholes which will probably keep this issue in litigation for years. Microsoft's monopoly has grown stronger. Its Windows operating system and Office Suite have higher than 90% usage. It is clear that operating systems which may have posed a threat and others that might have competed are no longer a concern.

If competition is precluded it is very unlikely venture capital will be available. Investors historically will avoid the risk involved when potential future development is impeded by a monopoly, Consumers are affected as well be, cause they will not find affordable products in the marketplace, The already sluggish job market and economy certainly does not reflect the potential in the industry if a monopoly did not exit.

It is clear that Microsoft hopes to expand to web services, financial, cable and the like, perhaps even the interact. Without venture capital companies will be unable to creatively address emerging markets, At a time when government on all levels faces serious challenges involving security and privacy issues they will be limited in the software they can use if it is not compatible with Windows.

There is nothing the settlement which will hinder Microsoft. It will be business as usual. The settlement requires Microsoft to share technological information unless Microsoft determines that sharing the information might harm its security or software. In addition Microsoft, due to its monopoly and dominant market share, dictates the technologies, which will be compatible with Windows.

Ten Liberty Square
Boston. MA 02109
P: 617 482 0042
?? 617 357 6911
gerl@denterleinworldwide.com

One of the three person technical committee will be selected by Microsoft. The Department of Justice will choose a second member and they must agree on the third member. There is no question that companies will be less inclined to take on a monopoly when their future business, if the challenge fails, may well depend on that company. Microsoft will continue to be able to charge whatever it wants for its products, prices will skyrocket.

The technical committee must identify violations of the agreement. No findings may be admitted into court in enforcement proceedings and compliance is only for five years. This seems a short time for such a flagrant violation of antitrust law.

After all the years examining this important issue it would seem a better solution could be found. I appreciate your interest. If there is any additional information with which I may be of assistance, please contact me,

Sincerely,
Geri Denterlein
President
CC: Honorable Tom Reilly, Attorney General

MTC–00029917

Lynch Associates, LLC
Honorable Colleen Koltar-Kotelly
U.S. District Court, District of Columbia
c/o Renata B. Hesse Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
RE: U.S. v Microsoft

Dear Judge Kollar,Kotelly,

I am writing in regards to the proposed settlement between Microsoft and the Department of Justice. In the decision on U.S.v. Microsoft it appears that the settlement does not fully resolve Microsoft's monopoly of the market and will continue to lead to predatory, practices.

Microsoft's ''bolting'' of applications to their software which was not terminated in the settlement has maintained an unfair advantage for Microsoft in the distribution of these applications. These types of practices don't create an environment of fair competition, which creates a problem not only for their competitors but also eventually for consumers.

It is clear that Microsoft hopes to expand its monopoly to web services, financial, cable and the like, perhaps even the Internet. If we let Microsoft continue this expansion ultimately consumers will have to pay inflated prices for these products that we will only become more dependant on. Antitrust laws were created to avoid business being conducted in such a manner.

This deal also threatens to curtail innovation in an industry that is a vital part of our new economy. At a time when serious challenges face government and corporations they will be seriously handicapped in choosing the high value systems they need for privacy and security because compatibility with Windows does not exist.

The enforcement mechanisms in the settlement leave Microsoft free to do whatever it wants. The three person technical committee will only serve as a kangaroo court, which further threatens the integrity of enforceability. Analysts from many sectors of the technology industry have indicated the lack of impact the settlement will have and will result in minuet changes in Microsoft's practices.

10 Liberty Square, 5th Floor
Boston, Massachusetts 02109
Telephone: 617.574.3399
Facsimile: 617.695.0173

Enforcing federal antitrust laws is vital to maintaining the integrity of free markets, It is important that we continue to enforce them to protect the welfare of consumers and the fundamentals that contribute to what makes our country's industries great. I appreciate you taking your time to examine this important matter. If there is any additional information I can provide for you, please contact me

Sincerely,
Anne Lynch
Lynch Associates
CC: Honorable Tom Reilly, Attorney General Commonwealth of Massachusetts

MTC–00029918

International Brotherhood of Electrical Workers
256 FREEPORT STREET
DORCHESTER, MASSACHUSETTS 02122
TELEPHONE; (617) 436–3710
FAX: (617) 436–3299
TOLL FREE: (800) 218–0015
WEBSITE: www, ibew103, corm
January 25, 2002
The Honorable Coleen Kollar-Kotelly
U.S. District Court, District of Columbia
C/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20540–000:t
RE: U.S. v Microsoft

Dear Judge Kollar-Kotelly:

After many years of investigating Microsoft with regard to monopoly issues, a settlement has been struck which appears to continue that monopoly. Limiting the ability of other companies to compete, the settlement provides loopholes, which wilt probably keep this issue in litigation for years.

The longer it takes for competition to be permitted the less likely it is for those interested in investing venture capital to risk taking a chance on potential future development by companies hoping to compete. The result is that not only are consumers affected in that they will be unable to buy an affordable product, but the already sluggish job market will fail to reflect the potential of the industry.

It is clear that Microsoft hopes to expand its monopoly to web services, financial, cable and the like, perhaps even the internet. Without venture capital companies will be unable to creatively address emerging markets.

Although the agreement precludes Microsoft from paying a vendor to keep it from developing or distributing software that would compete, Microsoft is the determining body when an exception is identified. Likewise Microsoft: must share technological information unless Microsoft determines the

information may harm its security or software. In addition Microsoft, due to its monopoly and dominant market share, dictates the technologies, which will be compatible with Windows.

The Honorable Coleen Kollar-Kotelly
January 25, 2002

At a time when serious challenges face government and corporations they will be seriously handicapped in choosing the high value systems they need for privacy and security because compatibility with Windows does not exist.

Although the technical committee will oversee the process, Microsoft will choose one of its three members. The Department of Justice will choose a second and they must agree on the third member. There is no question that companies will be less inclined to take on a monopoly when their future business may well depend on the company. Given that Microsoft will continue to be able to charge whatever it wants for its products, prices will skyrocket. The technical committee of three must identify violations of the agreement. No findings may be admitted into court in enforcement proceedings and compliance is only for five years. This seems a short time for such a flagrant violation of antitrust law.

After all the years examining this important issue it would seem a better solution could be found. I appreciate your interest. If there is any additional information with which I may be of assistance, please contact me.

Sincerely,
Richard P. Gambino
Business Manager
cc: Honorable Tom Reilly, Attorney General

MTC–00029919

January 23, 2002
CARROLL LOGISTIC8 INC
P.O. Box 4797
Tisbury, MA 02568
TEL 617–945–1600
FAX 617–945–2416
Honorable Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
C/o Renata B. Hesse
Antitrust Division
U.S. Department. of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001

Dear Judge Kollar-Kotelly,

I am writing with regard to the settlement between the Department of Justice and Microsoft in U.S. v Microsoft. It appears to violate antitrust law. Microsoft has a monopoly now and will be permitted to expand it with regard to emerging markets.

The fact that Microsoft Is free to bolt financial services, cable services or even the internet to Its Microsoft Windows is a great concern. As companies develop software they will be unable to address the issue of affordability due to the dependency on Windows technology to function.

Microsoft may not pay a vendor to keep them from developing or distributing software that would compete, however Microsoft is the determining body when an exception is identified. Likewise Microsoft must share technological information unless Microsoft determines the Information may harm Microsoft security or software. In addition Microsoft, due to its monopoly and dominant market share, dictates the technologies, which will be compatible with Windows. Governments and corporations will be unable to choose high value systems they need for privacy and security if that compatibility does not exist.

Half of the technical committee will be appointed by Microsoft. The Department of Justice and Microsoft each appoint one member while they must agree on the third member. There is no question that companies will be less inclined to take on a monopoly when their future business may well depend on that company. Given that Microsoft will continue to be able to charge whatever it wants for its products, prices will skyrocket.

The technical committee of three must identify violations of the agreement. No findings may be admitted into court in enforcement proceedings and compliance is only for five years. This seems a short time for such a flagrant violation of antitrust law. After many years of examining this important issue I would think a better solution could be found. I appreciate your Interest. If there is any additional Information with which I may be of assistance, please contact me.

Sincerely,
Thomas R Carroll
PO Box 4797
264 Sandpiper Lane
Vineyard Haven, MA 02568
CC: Honorable Tom Reilly, Attorney/General

MTC–00029920

allan associates
six osmanosen avenue
ball, massachusetts 02045
(781) 925–6388
January 22,2002
Hon. Colleen Kollar-Kotelly
US District Court
District of Columbia
C/o Renata B. Hesse, Antitrust Div.
US Dept. of Justice
601 D St. NW
Washington, DC 20530–0001
RE: US v Microsoft

Dear Judge Kollar-Kotelly,

The settlement agreed to by the Department of Justice and Microsoft appears to fly in the face of antitrust laws. Although the examination of this problem took a number of years, the results seem inadequate and the penalties less than one would expect for such serious violations of the law. Among the areas which are of concern:

* Microsoft will determine if any company's technology violates Microsoft security or software. This would preclude a vendor from distributing or developing software as proscribed by the settlement.

* Microsoft may bolt financial, cable services or even the internet to Windows, creating a dependency on Windows technology for all software developers.

* The technical committee which will oversee implementation will be stacked in favor of Microsoft, as there will be one member appointed by Microsoft, another appointed by the Department of Justice and a third on whom both entities must agree.

* The process to'' file a complaint would be unlikely to attract many businesses challenging Microsoft, as the most probable result would be the company then still having to deal with Microsoft.

* Consumers will bear the brunt of this decision, as they will find the expense of software reflected in the monopoly Microsoft will hold in its development.

* At a time when governments and corporations are looking to develop software to insure privacy and security it will be impossible if compatibility with Microsoft Windows does not exist.

I am pleased that Attorney General Tom Reilly has agreed to reject the settlement and is pursuing all avenues to assist individuals and businesses in the Commonwealth of Massachusetts. I appreciate your attention. Please contact me if I may be of assistance.

Sincerely,
Virginia M. Allan
CC: Attorney General Tom Reilly

MTC–00029921

Law Offices of
Mark T. Collins
329D Boston Post Road Millbrook Park
Sudbury, Massachusetts 01776
Telephone (978) 443–7677
January 24, 2002
Honorable Colleen Kollar-Kotelly
U.S. District Court
District of Columbia
C/O Ms. Renata B. Hesse
United States Department of Justice
Antitrust Division
601 D Street NW, Suite 1200
Washington, DC 20530–0001

Dear Judge Kollar-Kotelly,

With regard to the settlement of the Department of Justice and Microsoft in U—S—v Microsoft I would like to raise a few issues. It appears Microsoft will continue to have a monopoly in the marketplace. Expansion will only increase the corporation's ability to intimidate smaller companies as they make an effort to produce software at more affordable prices.

At a time when development of financial services, updated cable services and the internet are offering challenges to many small and midsized companies to be creative in new uses, the inability of a company to progress without compatibility with Microsoft is a major stumbling block. Microsoft in theory may not keep a vendor from developing or distributing software, even if it might be competition, but Microsoft itself will determine if a company's information technology might adversely affect Microsoft's security or its software.

Compatibility with Microsoft Windows is essential and Microsoft makes the determination as to which technologies will be compatible thus limiting the ability for companies whose technologies are not included to procede.

The oversight of the settlement offers additional problems in that Microsoft will be responsible for the appointment of one individual on the technical committee. In addition the Department of Justice appoints one other and the two must agree on the third. The committee must identify violations of the settlement. In addition it must hear

complaints from the companies whose products are not compatible. It is highly unlikely that a challenge will be made against a company which essentially controls the monopoly which at some point may well control the smaller companies ability to develop future software,

Although Microsoft will comply with these lenient restrictions it will only be required for five years. This seems a short time for a penalty for violating antitrust law, Please contact me if you have any questions.

Sincerely,
Mark T. Collins
CC: Honorable Tom Reilly
Attorney General
Commonwealth of Massachusetts

MTC–00029922

THE LIBERTY SOUARE GROUP
Honorable Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
C/O Renata Hesse
Antitrust Division
United States Department of Justice
601 D Street NW
Suite l200
Washington, DC 20530–0001
RE: US v Microsoft

Dear Judge Kollar-Kotelly,

I realize there has been discussion over many years concerning this issue. It does seem a more equitable solution could have been reached in light of antitrust laws. As it stands now, Microsoft can still bolt financial services, cable or even the internet to Windows hindering competition. The fact that Microsoft will determine what technologies will be compatible with Windows makes it very difficult for companies to develop software or for that matter find capital investors to even be interested in their companies.

As it stands now both Microsoft Windows and Office Suites enjoy a 90% user status. Expansion into other markets will expand that usage even more. At a time when computer technology should be expanding to address security and privacy issues in government and corporations, the inability to compete is certainly not making it the environment good for growth. The settlement provides many loopholes which will probably keep the issue in litigation for years.

Without competition it is very likely venture capital will be unavailable. The affect on consumers will be reflected in the high cost of software. The already sluggish job market and economy certainly does not reflect the potential in the computer software market. It is clear that Microsoft plans to expand to financial, cable and the internet, expanding its monopoly. There is nothing in the settlement which will hinder Microsoft.

One of the three people on the technical committee will be selected by Microsoft. The Department of Justice will choose a second member and they must agree on the third member. It is apparent that companies will be reluctant to take on a monopoly when their future business may well depend on that company. Microsoft will continue to be able to charge whatever it wants for its products, prices will skyrocket.

This issue has been discussed for many years. It seems a more equitable solution could be determined, if I may be of any assistance, please contact me,

Sincerely,
Scott M. Ferson
President
Liberty Square Group
CC: Attorney General Tom Reilly

MTC–00029923

JENNIFER E. LAWRENCE, ESQ.
Honorable Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
c/o Renata B. Hesse Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
RE: U.S. v Microsoft

Dear Judge Kollar-Kotelly,

I am writing in regards to the anticipated settlement with the Microsoft Corporation, This proposed settlement allows Microsoft to preserve and reinforce its monopoly, while also freeing Microsoft to use anticompetitive tactics to spread its dominance into other markets. After more than 11 years of litigation and investigation against Microsoft, it seems a more equitable solution can be reached.

The deal fails to meet the appellate court's remedy standards, which are clearly laid out by the appellate court. The following are some examples of how the deal fails to meet the standards:

1. The settlement does not address key Microsoft practices found to be illegal by the appellate court, such as the finding that Microsoft's practice of bolting applications to Windows through the practice of ''commingling code'' was a violation of antitrust law. This was considered by many to be among the most significant violations of the law, but the settlement does not mention it.

2. The proposed settlement permits Microsoft to define many key terms, which is unprecedented in any law enforcement proceeding.

3. The flawed settlement empowers Microsoft to retaliate against would-be competitors and to take the intellectual property of competitors doing business with Microsoft.

4. The deal fails to terminate the Microsoft monopoly, and instead guarantees Microsoft's monopoly will survive and be allowed to expand into new markets. The settlement is also fiddled with loopholes making the enforceability of the settlement questionable.

The agreement requires Microsoft to share technical information with competitors so that non-Microsoft software will work on Windows operating systems. However, Microsoft is not required to do so if it may harm the security or software licensing. The determiner of this harm? Microsoft. The settlement also says that Microsoft ''shall not enter into any agreement'' to pay a software vendor not to develop software that would compete with its products. However, another provision permits those payments and deals when they are ''reasonably necessary.'' Again who determines this ''reasonably necessary?'' Microsoft.

The enforcement provisions in the settlement are weak and leave Microsoft virtually unaccountable.

Microsoft is only subject to comply with the terms of the agreement for a mere five years. Hardly an adequate amount of time for a corporation found guilty of violating antitrust laws. The three-person committee that is being assembled to identify violations of the agreement will have nearly no effect since the work of the committee cannot be admitted into court in any enforcement proceeding.

The proposed settlement between the Department of Justice and Microsoft in U.S.v. Microsoft falls short of what would be prudent and necessary in rectifying Microsoft's monopoly and changing their current practices.

Thank you for your time.

Regards,
Jennifer E. Lawrence, Esq.

MTC–00029924

4712 Ferncreek Drive
Rolling Hills Estates, CA 90274
January 27, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Attorney General Ashcroft:

I would tike to express some of my opinions regarding the settlement agreement between your Department and Microsoft. I feel that it is fair, reasonable, and extensive. I do not see the need for further federal action, especially when nine states have approved the agreement. Microsoft is currently negotiating with the opposing states to reach a conclusion. Not only does this agreement address the issues that brought about the lawsuits, but it provides direction in dealing with future problems as weft.

Although the settlement calls for concessions that make antitrust precedent, Microsoft has agreed in an effort to end this case sooner rather than later. The company will stop retaliating against those that design or p ore non-Microsoft programs, end will allow computer makers to configure Windows so as to promote those programs. Most importantly, a technical oversight committee will ensure Microsoft's compliance with these concessions, and competitors will be allowed to sue Microsoft directly if they feel they've been treated unfairly.

I appreciate you taking time to consider my views on this issue. We must bring certainty and stability back to the IT sector. This agreement will allow the market, the industry, and the economy to move forward.

Sincerely,
Erwin Oetken

MTC–00029925

Henry Kath P.O. Box 1920
Cottonwood, CA 96022–0351
January 18, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

As a citizen of California I am very disappointed that the settlement reached between Microsoft and the Department of Justice has not been accepted by my state. I believe that this suit has gone much farther than was ever appropriate. It is my opinion that the alleged crimes committed by this company are much less severe than a number of people have made them out to be. Microsoft does not deserve the callous treatment that they have been given, and the continuation of this already protracted suit will not benefit either the United States as a whole or the state of California.

The proposed settlement is well thought out and is a fair conclusion to this unfortunate litigation. Microsoft will not commit any further anti-trust infringements, the company will be monitored by a three-man oversight committee which will ensure that all business tactics engaged by the company in future are fair and do not lean towards monopolistic practices. The settlement ensures that Microsoft will not strike back against any company that develops products that compete against its own. And finally, Microsoft will develop all future versions of Windows to work more completely with the products of competing companies. This settlement will remedy any problems that any of Microsoft's competitors may have experienced when dealing with this company. All of the states should jump at the chance to accept the terms and finalize this costly litigation.

I understand the need to protect businesses and to ensure that there is a fair playing field for everyone. However, free enterprise must be protected. Without it, we lose the very fabric upon which we have built this nation. I believe that we need to move forward as a nation and to do so we need this settlement. Thank you for the work that you have done to bring this agreement about and for ensuring that we do not ring in another year with this costly litigation hanging around our necks.

Sincerely,
Henry Kath

MTC–00029926

Elliott.
US Department of Justice
Attorney General John Ashcroft
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
Elliott Davis Technology Solutions, LLC
1200 Woodruff Rd. Suite C40
P.O. Box 5088
Greenville, SC 29606–6088
Phone 864,281 7440
Fax 864.987.0180
1866281,74.10
January 22, 2002

Dear Mr. Ashcroft,

I personally believe that this lawsuit against Microsoft is better settled. Even though many of the points enumerated in the suit were valid, the litigation was quickly getting out of control and could have resulted in a lot of unnecessary complications for both Microsoft and for the IT businesses in general.

The points of the suit have been adequately addressed in the settlement. The settlement, for example, requires more responsible and flexible attitudes by Microsoft towards its OEM licensees as well as to third party software developers, who will now be able to take advantage of disclosure of Microsoft software code. Microsoft's competition should be elated at this.

I am therefore writing in support of the settlement and hope that this kind of lawsuit be prevented in the future.

Sincerely,
Charles Johnson
Partner

MTC–00029927

LS Consulting
Date: January 21, 2002
Renate Hesse
Triel Attorney
Antirust Division
Department of Justice
?? D Street NW. ?? 1200
Washington, DC 20550

Dear Ms. Hesse.

The Microsoft ?? case reminds me of the novel ?? Shrugged, written by Ayn Rand In the novel, industral competitors turn to the govenment and empower it to choose ?? and losers in the marketplace.

Without question, Microsoft's primary competitors have joined into an unholy zilance with the judicial ?? of government, in an effort to target the success of Microsoft are its popular software You might also want to reference ?? Bastiat's The Law, to gain his insights on how government attempts to choose winners and losers in the marketplace.

I have been intimately involved with personal computers and the software that drives them since the very ??. As a computer consultant and a database software developer for nearly twenty years, I would be amused by government lawyers with limited computer skills—and an even more limited grasp of the actual inner working of software—trying to dictate policy to a marketplace that literally changes every day. If the slakes weren't: so high.

As an active an informed citizen, I have a thorough understanding of the roles the branches of government are to play in our society, and the businese, of choosing winners and losers in the marketplace is not a function of government, in belongs to the American consumer. Sign off on the proposed settlement before you in this case and lot us do our work Sincerely,

Loras Schulte
In His ??

MTC–00029928

NASH FINCH COMPANY
Cedar Rapids Distribution Center
Rob Reinert
Regional Pricing Manager
319–743–4245
Ms. Ronata Hesse
U.S. Department of Justice, Ami-trust
601 ''D'' Street NW, Suite 1200
Washington, DC 20530

Ms. Hesse:

I have been informed that under the Tunney Act you are accepting public comment on the United State's agreement with the Microsoft Corporation. I am writing to offer my views on this matter. I work for a company called Nash-Finch that is based in Minneapolis and operates a large chain of grocery stores in the upper Midwest and wholesale operations in more than thirty states. As Regional Pricing Manager I have seen first hand the benefits of computer innovations. It seems that we are constantly being presented with new tools that allow us to maintain better control of our inventory and maintain/improve gross margins:

The future holds many exciting things for consumers and lousiness when it comes to technology. The last few years have taught us theft almost anything is possible when technicians are allowed to freely ?? and create. Future innovations will allow businesses to operate more efficiently and help our economy as we work out of our current recession.

This case has cruised questions throughout the entire industry as it watches to see if the government will successfully gain new power to regulate this industry. It is clear in the reports that I have read that the settlement currently on the table is fair. It appears that any allegations against Microsoft that have been shown to have merit in court are fairly remedied in the settlement.

This settlement provides a good resolution and it allows the technology industry as a whole to get on the move again.

Your consideration is appreciated.
RO. Box 549
Cedar Rapids, IA. 52406
1201 Blairs Ferry Rand N.E.
Cedar Rapids, IA 52402.
Ph. 319–393–1880
Fx. 319–393–2223
Sincerely.
Rob Reinert
Customer Satisfaction is ACWAYS First

MTC–00029929

January 22, 2002
Ms. Renata Hesse
Department of Justice, Antitrust Division
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse.

Like so many Americans, I am an investor in the stock market and have been financially hurt by the downturn this past year. As an individual investor, I have made every effort to do my part to prevent an even greater drop in the markets by maintaining my holdings without over-reacting. While we enjoyed a relatively minor upswing recently, the markets once again dropped following the national media attention of the Enron bankruptcy. In the face of so much negative news, it is getting more and more difficult for investors to optinistically believe the markets have hit the bottom and are in a recovery.

From an economic standpoint, you have the ability to send a message which can only be construed as good by the media and the American public. I am referring to the Microsoft lawsuit. A proposed settlement in this case is before you. Most of the parties involved in this case are in agreement to settle this case based on the proposal presented. Please take this opportunity to do your part and sign on to the proposed settlement. By putting and and to this lawsuit, you allow the tech industry the chance to move forward. You will also create

much needed oprimism for a ?? point in our times of economic struggles.

Thank you.

Sincerely,

Keith ??

4815 Grand Avenue

Des Moines, Iowa 50312

515 255–8328

MTC–00029930

ERIG J. KFOURY. EGQ.
January 24, 2002
Honorable Colleen Kollar-Kotelly
U.S, District Court, District of Columbia
C/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice
Suite 1200
Washington, DC 20530–0001

Dear Judge Kollar-Kotelly:

Please accept this letter of concern with regard to the terms of the settlement being proposed by the United States Department of Justice and Microsoft Corporation. Acceptance of this settlement will not dissuade Microsoft from continuing to pursue its established objective of market dominance, and, more importantly, will encourage other businesses to follow the lead in new and different markets without fear of any reprisals or Interference from the government, in all, it is a seemingly toothless me measure of exactitude that undermines the historical good achieved by the antitrust regulations of which Microsoft was duly found to be in violation.

The settlement purports to force Microsoft to share key information with competitors as a way of braking the stranglehold the company enjoys with its Windows product. Howover, it need only do so if Microsoft, itself, determines such divulgence would not hurt its security or product licensing. Further, the continued market dependency c Windows created by the fact Microsoft can bolt it to financial and cable services, as wall as, the internet will adversely affect the affordability of new software being developed by other companies. As such, any potential competition will be priced out of the market and Microsoft will stand alone—the essence of a true monopoly.

Though there are other areas of the settlement that are problematic, the final concern sterns from the notion that there can be a limit to the amount of time (e.g., five years) an antitrust violator should be subject to enforcement. If the government agrees to terms with a corporation to correct conditions set by monopolistic practices, there should be no expiration data with regard to the commitment to those terms.

An antitrust violation has been established. Irrespective of penalizing the violator, an equitable resolution must be found that opens up the market and ensures it remains a place where other businesses and entrepreneurs have a chance to succeed. This proposed settlement does not amount to such a resolution.

Very truly yours,

Eric J. Kfoury, Esq.

Co: Honorable Thomas Reilly, Attorney General Commonwealth of Massachusetts

MTC–00029931

JAN-25–02 14:31
FROM:
ID: PAGE 2
SALOMON SMITH BARNEY
A member of Columbia
Ho??orable Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
C/o Renata B. Hesse
A?? Division
U.S. Department of Justice
601 D Street NW Suite 1200
Washington, DC 20530–0001

Dear Judge Kollar-Kotelly,

I am writing with regard to the settlement between the Department of Justice and Microsoft in U.S. v Microsoft. It appears to violate antitrust law. Microsoft has a monopoly now and will be permitted to expand it with regard to emerging markets.

The fact that Microsoft is free to bolt financial services, cable services or even the internet to its Microsoft Windows is appalling. As companies develop software they will be unable to address the issue of affordability in working to help consumers find a lower priced product due to the dependency on Windows technology to function.

Microsoft may not pay a vendor to keep them from developing or distributing software, which would compete, however Microsoft is the determining body when an exception is identified, Likewise, Microsoft must stare technological information unless Microsoft determines the information may harm Microsoft security or software, In addition, Microsoft, due to its monopoly and dominant market share, dictates the technologies, which will be compatible with Windows. Governments and corporations will be unable to choose high value systems they need for privacy and security if that compatibility does not ??.

The three person technical committee, which will be appointed is inordinately weighted in favor of Microsoft as the department of Justice and Microsoft each appoint one member while they must agree on the third member. There is no question that companies will be less inclined to take on a monopoly when their future business may well depend on that company. Given that Microsoft will continue to be able to charge whatever it wants for its products, prices will skyrocket.

The technical committee of three must identify violation, of the agreement. No lindings may be admitted into court in enforcement proceedings and compliance is only for five years. This seems a short time for such a flagrant violation of antitrust law.

After many years of examining this important issue, I would think a better solution could be found, I appreciate your interest. If there is any additional information with which I may be of assistance, please contact me.

Sincerely,

Karen I, Macdonald

Financial Consultant

SALOMON SMI?? BARNEY A member of citigroup

28 State Street

Beaten, MA 02109

617–570–9430 / 800–235–1205 / 617–570–945R fax

e-mail Karen ??mac??onald@rssmb.com

MTC–00029932

HOUSE OF REPRESENTATIVES
STATE HOUSE, BOSTON O2133??1054
RONALD MARIANO
STATE REPRESENTATIVE
SRD NORFOLK DISTRICT
DISTRICT: (??17) 328–5166
E-Mail: Rep.RonaldM??riano@hou.state.??.us
Chairman
Committee on Insurance
STATE HOUSE, ROOM 254
TEL. (617) 722–2220
FAX (617) 722–2821
January 25, 2002
The Honorable Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
C/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice 601 D Street NW
Suite 1200
Washington, DC 20530–000t

Dear Judge Kollar-Ketelly,

I am writing with regard to the settlement between the Department of Justice and Microsoft in U.S. v Microsoft. It appears that this settlement will enable Microsoft to continue to expand its monopoly with regard to emerging markets and may violate antitrust laws.

Microsoft's ability to bolt financial services, cable services and the Internet to its Microsoft Windows program is of great concern. As companies develop software, they will be unable to address the issue of affordability due to the dependency on Windows technology. Microsoft is required to share technological information unless they determine the information may harm their security or software. Additionally, Microsoft dictates the technologies, which will be compatible with Windows. As such entities will be unable to choose high value systems they need for privacy and security if that compatibility doesn't exist.

As I feel that this agreement raises significant questions affecting the equity and fairness of the settlement, I ask for your consideration of a more appropriate solution to this matter. Thank you for your time mad attention to this matter.

Sincerely,

RONALD MARIANO
State Representative
Cc: The Honorable Thomas Reilly,
Massachusetts Attorney General

MTC–00029933

FROM:
FAX NO.:Jul. 26 2001 06:26PM P1
Wake Forest Town Commission
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

As a member of the Wake Forest Board of Commissioners, I am concerned that the Microsoft antitrust lawsuit has dragged on too long and we need to settle it now. I am elected to represent all the people in Wake Forest, and I am concerned that everyone's jobs are being threatened by the recession. Microsoft products are the backbone of business and industry—and they help offices run efficiently throughout our community.

I am opposed to prolonging the lawsuit in any way. The suit needs to be resolved... and resolved now] Many of our commuting citizens work in the Research Triangle Park. High tech solutions for health care, business and communications firms are developed here in the Triangle. However, the ability of these companies to be innovative in creating solutions, and productive in the creation of jobs, hinges upon moving beyond excessive litigation.

Let's face the fact that both parties want the suit to end. Microsoft and the federal government are in agreement on all points of the settlement. I want to strongly urge Judge Kollar Kotelly to promptly approve the settlement. This lawsuit has cost businesses and local governments untold millions in lost revenues. Let's stop the bleeding.

Let's move beyond this case and move the economy forward.

Sincerely,
Kim Marshall
Mayor Pro Tempore
401 Owen Avenue- Wake Forest, NC 27587

MTC–00029934

Jan 28 02 02:38p p. 1
U.S. Department of Justice, Antitrust Division
Attention: Renata Hesse
601 D Street, NW, Suite 1200
Washington, DC 20530

Dear Judge,

It is time for the Anti-trust lawsuit'' against Microsoft to end.

Our antitrust laws were designed and enacted in order to protect the citizens and consumers of the United States.

The Microsoft Antitrust lawsuit was originally pushed by its competitors and their claims they were working in the interest of consumers. I do not believe that the consumers were clamoring for this lawsuit. I wonder how prolonging these proceedings will benefit consumers?

The Federal Government has spent millions of dollars on this antitrust case. Microsoft has probably spent several times as much defending itself against this claim filed by the government.

These costs will no doubt be passed on to the consumer, the same consumer the antitrust laws are supposed to benefit.

I believe this case has cost enough and should be settled once and for all.

Thanks for your consideration and your acceptance of my comments as part of the public comment period for the case.

Sincerely,
Ruth Mellen
21000 West 180th Street-
Olathe, KS 66062

MTC–00029935

15 Riverpoint Road
Hannibal, MO 63401
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I understand that Microsoft and the Justice Department have reached a proposed settlement of their antitrust case, and I want you to know that I support the settlement.

I wish my letter were sent for the purpose of thanking you for dismissing the case. Microsoft has incurred substantial expenditures of time and money for no reason other than to defend the fact that they are big and they are successful. It is a shame that Microsoft's ability to defend itself in Court was thwarted by a judge with an axe to grind. The case should have been thrown out before evidence was ever presented.

The settlement proposed clearly addresses the allegations of anticompetitive behavior by promoting greater consumer choice and opening areas to greater degrees of competition from non-Microsoft software programs. After implementation of the settlement agreement, Microsoft Windows operating systems will be subject to competition in areas such as messaging and the Internet from non-Microsoft programs.

In addition to responding to the allegations of antitrust violations, Microsoft has placed a settlement on the table that makes concessions regarding products and practices that were never even at issue in the suit. I fail to see the need to punish Microsoft by continuing the Case.

Thank you for the opportunity to speak on this matter.

Sincerely,

MTC–00029936

January 28, 2002
Attorney General John Ashcroft, DOJ
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear AG Ashcroft,

While I agree that this settlement appears better than a perpetuation of this ill-advised lawsuit, I believe that the settlement goes too far. In spite of the fact that Microsoft has agreed to its terms, I do not see the necessity of forcing them to release any more of their source code to developers than they had previous to the suit. This code is proprietary and Microsoft is entitled to keep it so. This consideration aside, I am at least pleased that the lawsuit and all that it entailed will soon be over. On the whole, however, I am hopeful that our government will not be as quick to interject itself into the private marketplace in the future as it has here. If Microsoft supports this suit, than I will.

I am appreciative of the opportunity afforded me to voice my opinion of this settlement, and I must stress here that this opinion is my own. However, the issue of forcing a company to relinquish even a small piece of its proprietary intellectual property, simply because its competitors cannot develop better products on their own, is of some concern.

Sincerely,
Charlie Butler
St. Exchange Engineer
Agilera, Inc.
Cc: Senator Strom Thurmond
1400 Browning Road
Suite 150
Columbia, South Carolina 29210
PHONEú 803.770.1800
www.8gilera.com

MTC–00029937

804 Stirling Road
Silver Spring, MD 20901
January 28, 2002
Attorney General John. Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The Microsoft Corporation and the Department of Justice agreed to terms on a proposed settlement that will bring an end to the three-year antitrust lawsuit filed against Microsoft. I support this settlement because it ends the litigation against Microsoft, and allows them to focus even more on producing innovative products.

The settlement goes further than k should have, in particular as regards intellectual property, which Microsoft will have to disclose to its competitors. In order to end this messy litigation process, Microsoft has actually agreed to give to its competitors source code and other design information that is critical to the internal structure of Windows. While that does not fit the mold of a free market economy, it enables Microsoft's competitors to do more, and to produce software that is compatible with Microsoft's. This will foster competition in the IT industry, and the economy will benefit as a result.

I support this settlement. Now the economy can regain its former level of success, and we can put this costly litigation behind us.

Sincerely,
Sunil Chatterjee

MTC–00029938

1–28–02
Tried to email—mo luck used address microsfot.atr@usdoj.gov.
fax.
RE: Microsoft Settlement

To the Dept of Justice

We believe the settlement between Microsoft and the movement is fair for both sides. At this time to put this to behind us and move forward for the good and all, especially economy

Sincerely.

MTC–00029939

Ken Graham
7531 Aberdon Road
Dallas, TX 75252
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am highly opposed to excessive government intervention in the business world. It is no surprise, then, that I am opposed to the antitrust lawsuit that was brought against Microsoft three years ago. Now that a settlement has been reached in this case, I hope you will support it, as well, and allow Microsoft to put this episode behind them.

Microsoft has offered many compromises as part of this settlement. The company has agreed not to have any contractual restrictions with companies it deals with regarding the sale of non-Microsoft products. Microsoft has also agreed to build all future operating systems in such a manner that non-

Microsoft products can easily be promoted on them.

Despite the fairness of the settlement and the compromises made by Microsoft, some opponents want this case brought back to court. I believe it is your duty to make sure they do not succeed.

Sincerely,
Ken Graham

MTC–00029940

DBM Associates
Computer Systems & Services
One Salem Square,
Whitehouse Station, NJ 08889
January 28, 2002
Attorney General John Ashcroft,
Justice Dept.
950 Penna. Avenue
Washington, DC

Dear Mr. Ashcroft:

I am glad that the litigation in this matter with Microsoft has ended with a settlement. Settling in this case is better for all. There has been a noticeable uncertainty in the IT industry over the threat to break Microsoft up, and this settlement at least will end this talk and help us all get back to business.

Progress in the IT industry, and the strength of this country's IT infrastructure, depend upon both innovation and some semblance of standardization. The prevalence of Microsoft software has greatly aided the exchange of information both within and between organizations. This prolonged legal action is hurting this country by slowing progress to a crawl.

I can appreciate that Microsoft's competitors are unhappy with this prevalence, but that's the way it has worked out. To them I say, there are plenty of other problems to be solved and they should put their resources into solving them instead of counter-productive efforts directed against Microsoft.

For their part, the evidence indicates that Microsoft has engaged in unfair business practices and abused their monopoly position. I see that penalties and restrictions on their future behavior are part of the settlement. I hope that the settlement terms were negotiated in good faith by both parties to effectively address the issues.

I am writing in support of the settlement of the Microsoft case, and the sooner the better. I am hopeful that with it, some uncertainty in the IT industry will be resolved, and we can all put this behind us.

Sincerely,
David Weston
Vice President

MTC–00029941

FAX COVER LETTER
To: attorney ??
Fax No. 1–202–616–9937
From: ??
Fax No. 1–740–482–2126
Date: Jan. 28, 2002
Re: ??
Number of Pages 2
??
Comments:
See attached letter
Rodger and Carol Carpenter
140 T.H. 70
Bucyrus, OH 44820
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

This is to give our support to the antitrust settlement between Microsoft and the Department of Justice. This antitrust suit has gone on for far too long, crippling our economy and holding our country back from further innovation in the technology industry. Furthermore, I do not believe the government should have been brought into what is competition between technology companies. Microsoft became the dominant force in computer software, creating the first compatible software programs. Before Bill Gates nothing worked, nothing was compatible. Through hard work and creativity, Bill Gates met the needs of consumers. The company became successful because of tiffs, and unfortunately, created a lot of jealousy with other rims, who were unable to compete. This was the real cause behind the antitrust suit against Microsoft.

The case has been settled. Even the federal judge wanted to see an end to it, ordering round-the-clock dialogue. Microsoft has agreed to a uniform price list, and to design future versions of Windows with a way to make it easier for computer makers to promote non-Microsoft software such as different startup screens; Microsoft has also agreed to help companies reach a greater degree of reliability with regard to then competing networking software. The company has gone the extra mile to end this case and satisfy the demands of the Department of Justice. We think we should honor that decision.

We urge you to give your support to this agreement and not give in to the pettiness of those whose only concern seems to be the destruction of Microsoft.

Sincerely,
Rodger Carpenter and Carol Carpenter

MTC–00029942

Scott B. Glynn
3205 Poppleton Ave. # 2
Omaha, NE 68105
402–932–6535
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I am writing with regards to the pending settlement between the Department of Justice and the Microsoft Corporation.

In my opinion, the finding of fact in the case of the federal government versus Microsoft, overlooked the most important point: whether or not there has been harm to consumers. We hear conflicting reports—(a) that the company's dominance in the market has resulted in higher prices and (b) that their dominance has produced a trend of prices dropping lower than cost for consumers.

How do consumers feel? In even the most recent public opinion polls, most consumers express their approval of Microsoft and the company's products. The reality of it is that the high-tech industry develops and changes so rapidly that since the trial began the face of the industry has changed, Linux has made great strides in the market with their operating system and several software companies have closed the gap between themselves and Microsoft.

I am sure that most consumers would be in favor of ending the lawsuit against Microsoft. The proposed settlement would end the suit and that is exactly what consumers are looking for. I urge the Judge to approve the settlement.

Sincerely,
Scott B. Glynn

MTC–00029943

Planning Enterprises
David A. Kulle
P.O Box 8019
Jupiter, FL 33468–8019
(800) 447–3660
(561) 335–3077
Fax (561) 335–0009
Robert C. Kulle
P.O. Box 601481
?? 75360–1481
(714) 361–5707
?? (214) ??-3110
fax (214) 378-??
January 26, 2002
Attorney General
John Ashcroft
US Department of Justice
Washington, DC 20530

Dear Mr. Ashcroft,

I have been a firm supporter of Microsoft for many years and my philosophy as far as this settlement goes is that I will support anything that is in Microsoft's best interest. As far as the settlement reached in the antitrust case, I am willing to express support for it in the interest of closure. I feel this entire lawsuit was unwarranted and a complete contradiction to the spirit of free enterprise. Bringing closure to this as soon as possible will be in the best interest of consumers, the economy, and the IT industry on a whole.

It is very hard for me to imagine why there are still States that wish to pursue this matter when one considers the severity of our economic situation. What exactly is the issue? Microsoft has made several concessions in this settlement that will doubtless have adverse effects on their own competitiveness. For example, Microsoft has agreed not to obligate third parties to distribute or promote Windows technology exclusively or at a fixed percentage. Also, Microsoft will make no attempt to obligate software developer to only create Windows-compatible software. I am very pleased with the Microsoft's obvious compliance and hope that you will aggressively pursue means that will pacify the concerns of the dissatisfied states and bring this matter to close immediately.

Sincerely,
Cynthia Kulle

MTC–00029944

TIM GOLBA
13G24 S. S?? STREET

??. KS 66062
January 23, 2002
MS. Renata Hesse
Trial Attorney
Anti-trust Division
U.S. Department of Justice
601 ''D'' Street NW,
Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

Our country is experiencing a recession like we have not seen in decades. Many factors have contributed to our shaken economy, but the onset of the Microsoft antitrust case really bit into the NASDAO, shaking confidence of investors and consumers. It is important to remember that for the first time in history, more than half of American citizens are invested in the stock markets. I am pleased to see the significant steps President George W. Bush has taken to offset the panic of the American consumer in the form of tax rebates and tax cuts. We are fortunate to have such a proactive in office.

Information regarding the lawsuit is readily available through every imaginable media source, and I couldn't help but notice that tech stocks parked up a little with news of the ?? settlement. I appeal to your sense of good ?? and ask you to endorse the settlement. I fear that further litigation and regulation will further damage our economy and morale. Rest assured that an end to this lawsuit would result in a collective sigh of relief from the entire nation.

Sincerely,
Tim Golba

MTC–00029945

January 28, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street N W, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

I live and work in a Midwestern state that is constantly battling to keep our citizens here to work and raise their families. One of the most important incentives we have to offer is a growing technology industry, which we affectionately refer to as ''Silicorn Valley.''

I've watched with much interest the progress of the Justice Department's suit against Microsoft. I understand the issues involved, but more importantly, I've felt the impact of the lawsuit on my own pocketbook. As a young investor, I have a portion of my retirement savings invested in the technology sector and have watched my returns deflate along with the sinking economy and can't help but assume that this lawsuit has some bearing on my poor returns.

Common sense tells me tells me that the quicker we can ?? this issue ?? the better off all Americans will be, particularly those Americans whose livelihood is directly dependent on the technology industry and those whose retirement savings could use a shot in the arm.

Please give your utmost consideration to the settlement before you. An approval of the settlement will go far in jump-starting the economy and actting America back on the road to prosperity.

Thank you for your consideration.
Sincerely,
Susan Severino
Office of the Speaker
?? House of ??
State Capital
Des Moines, IA 50319

MTC–00029946

34–20 l2th Street
Long Island City, NY 11106
January 22. 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing you to express my opinion in regards to the Microsoft settlement. The settlement that was reached in November is fair and reasonable, and I am extremely anxious to see this settlement finalized. This three-year-long litigation against Microsoft has been expensive and a waste of resources.

Microsoft has agreed to all terms and conditions of this agreement. Microsoft has agreed to document and disclose for use by its competitors various interfaces that are internal to Windows'' operating system products. Microsoft has also agreed not to enter into any agreements obligating any third party to distribute or promote any Windows technology exclusively or in a fixed percentage, subject to certain narrow exceptions where no competitive concern is present. This settlement will create more opportunities for other companies and make ''it easier for these companies to compete against Microsoft. Please support this settlement so this company can remain together and continue benefiting our society, with inventive software that makes our lives easier. Thank you for your support.

Sincerely,
Stefanos Evangelinos

MTC–00029947

January 28,2002
Attorney General John Ashcroft
Department of Justice
950 Pennsylvania Avenue
Washington, DC 20530

Dear Mr. Ashcroft,

The pending settlement between Microsoft and the federal government presents an opportunity to bring this case to a close. This suit has distracted Microsoft and the nation from more pressing priorities for too long, and this settlement will allow us to get back to business.

The settlement will, in effect, force Microsoft to treat its competitors in a more sympathetic way. For example, Microsoft has agreed to avoid retaliation against any computer makers who ship software that competes with anything in Windows. This alone will increase competition among software developers. Additionally, Microsoft has agreed to share its code for the Windows operating system that will enable its competitors to configure software that is fully compatible with Windows. Most vexing, however, is the provision that places Microsoft under the oversight of a government mandated technical review committee. As the president of a business, I can say that I would not relish the idea of my company being watched by the government at all times.

This lawsuit has drained resources on both sides for more than three years. The settlement can stop the resource drain, and at the same time make the IT sector more competitive. I support it wholeheartedly, and believe that it is in the best interest of the nation. Thank you for your time and efforts in Washington.

Sincerely,
Carol Conway
President

MTC–00029948

Renata Hesse
Department of Justice, Antitrust Department
601 D St NW
Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

I am writing as a Kansas State Representative and Vice Chairman of the House Business, Commerce, and Labor Committee. As settlement in the Microsoft suit hangs in the balance, I write with genuine concern for the future of our industry.

The Microsoft Antitrust suit was brought to fruition due to antiquated rules and regulations written during the development of the railroads, Microsoft's harm to the consumer has yet to be proven; point in fact, there is a discrepancy in claims that Microsoft: has undercut the competition by under pricing, yet there are contradicting claims that Microsoft has overcharged the consumer.

Microsoft is primarily guilty of supplying a terrific product for a huge niche market. A market they actually helped to grow due to high demand for the technology they pioneered. The prosecution of Microsoft for giving the consumer what they ask for is absurd. Like an>, business, Microsoft has tried to protect the details of their products from competitors and tried to maintain their market share.

The real meat of this lawsuit lies in the antitrust laws themselves. Microsoft's competitors have merged and aligned in a full attack in hopes of gaining Microsoft's market share through court orders rather than through the free market system. It's as if these laws are allowing the competition to monopolize Microsoft with protection of the courts.

In the time since the lawsuit was introduced, the software and tech industries have ?? into a living, breathing organism, changing daily with each new advance. Paid far by leggy long for State Representative, Rayburn, Treasure. PO Box 546—Madison, KS 66860–0546 (620) 437–283—peglong@ink.org

There are no linear changes here. Each new advance seems to drive the consumer toward a different direction. This reality holds no marker share security for Microsoft. In your consideration of the settlement of this suit, please be thoughtful as to the root of the problem, outdated antitrust law. Prompt settlement will appease the competition, but more importantly let industry move on without such slowing scrutiny.

Cordially,
Representative Peggy Long

MTC–00029949 LARRY McKIBBEN

9STATE SENATOR
Thirty-second District
Statehouse (515) 281–3171
e mail Larry mekibben@legis.state.la.us
HOME: ADDRIESS
P.O. Box 618
Marshulltown, lowa 501.58
The Senate
State of lowa
Seventy-ninth General Assembly
STATEHOUSE
Des Moines, Iowa 50319
Appropriations
Business & labor Relations
local Government
Ways and means, Chair
Transportation, ?? &
Capitals Appropriations ??
January 28,2002
Judge Kollar Kotelly
c/o Ms. Renata Hesse LI.S, Department of Justice, Antitrust Division
601 D Street NW, Suite 1200
Washington, DC 20530

Your Honor,

The new economy has been the source of an economic and technological renaissance in America and Microsoft has been a part of that from the beginning. At the dawn of the Information Age, there is no denying the importance of the technology industry to America's prosperity in the 21st century.

As an elected official, I need to ensure an environment that allows the technology industry's entrepreneurial freedom to innovate and reinvigorate our economy. We need a return of the self-regulating competition that has built this industry into the most vibrant and successful in the world. The U.S. economy stands to grow by leaps and bounds in coming years, all due to the innovation, competition, and customer-focused attitude of our high tech community.

This case opened a Pandora's box of litigation and regulation that is already stifling competition, cramping innovation, and haring consumers and investors. Microsoft's presence in the market increased competition and innovation driving down costs for consumers, Microsoft helped set a high standard in the market and raised the bar for competitors many of whom have stepped up to the plate and become viable competitors to Microsoft.

Considering a snapshot of the high-tech industry when this case started compared to one from today, it is a much different picture Aside from the fact that the industry has outgrown this case, the proposed Final Judgment would decidedly help our economy and hopefully close the lid on the Pandora's box it opened. I urge you to approve the settlement.

Sincerely,
Larry Mekibben

MTC–00029950

Bonnie Wood
116 Timber Springs Lane
Exton, PA 19341
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Fax 1–202–307–1454
Page 1 of 1

Dear Mr. Ashcroft:

This letter is to give my support to the Microsoft and Department of Justice settlement. Microsoft is one of our greatest companies and I resent the government interference in what is basically competition between technology companies. I doubt whether Microsoft has done anything that the other firms have not. More likely, the other firms could not compete and have gone crying to the government. They just want a bigger piece of the pie.

You don't have to look any further than AT&T to see the havoc that can result from breaking up certain so-called monopolies. AT&T was deemed a monopoly while we had the best service in the world. Now, no one can understand the half-dozen phone bills received each month from strange sounding phone companies. Phone companies come and go with alarming frequency, and those that stay in business seem to be merging all back together. I often wonder if I would have been better off if AT&T had been left alone.

The same may be true for Microsoft. In any event, Microsoft and the Justice Department have reached an agreement. Microsoft has agreed to open the company up to third party, innovation; has agreed to disclose internal source codes for Windows; and agreed to an oversight committee. This is more than fair.

I urge you to give your approval to this agreement.

Thank you for your consideration of my views.

Sincerely,
Bonnie Wood
cc: Senator Rick Santorum
202–228–0604

MTC–00029951

THE HENRY HAZLITT FOUNDATION
Free-Market.Net: The Freedom Network
40t N. Franklin St., Sulte 3E
Chicago, IL 60610
(312) 494–9440
fax (312) 494–9441
e-mall: info@hazlltt.org
http://www.free.market, net
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Virginia Postral
Reason magazine
Andrea Millen Rich
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Dr. Jeremy Shearmur
Australian National UniverSity
Dr. Thomas Szasz
SUNY Health Science Center
Dr. Walter E. Williams
George Mason University
January 25, 2002
Renata Hesse
Department of Justice
Antitrust Division
601 D St NW, Ste 1200
Washington, DC 20530

Dear Ms. Hesse,

The settlement before the court in the Microsoft antitrust case is not ideal. The premise for this case was unwarranted to begin with. The antitrust laws being applied are subjective and left to regulators to interpret—in this case not even for the benefit of consumers. All things considered, I still write you today to encourage Judge Kolar Kottely to support the proposal.

The settlement gives the government most of what they wanted, stopping short of breaking up the company. Among other measures, the company is required to disclose significant proprietary information to its competitors. This is a significant and meaningful punishment. To enforce the terms of the settlement, Microsoft engineers will have to put up with a team of three on-site, full-time monitors. The monitors will have access to all of the company's records and personnel, and Microsoft will even have to pick up the tab for their offices and up-keep. Again, this is a significant and meaningful punishment that provides ample ground for the state to make the case to the public that justice has been served.

The end of the conflict between Microsoft and the federal government will restore a much-needed measure of ''certainty in the marketplace,'' as the Justice Department itself has claimed. Consumers and business partners will no longer have to fear the dismemberment of a major player in the software industry. I, as a Microsoft customer, won't have to worry about dealing with more vendors to get the same goods and services. People will be able to make plans for the future with a somewhat reinforced sense of confidence.

But real certainty in today's marketplace requires a knowledge of what's legal and what's illegal. While the Microsoft settlement seems to put a high-profile conflict to rest, it doesn't deal with the larger problems that sparked that battle. As long as legislation that means whatever bureaucrats say remains on the books, conflict will continue between frustrated businesses and arbitrary regulators.

So, I urge you to take this needed step toward bringing this chapter to an end. And I encourage the Department of Justice to work with the legislative branch to carefully re-examine and restructure, or, preferably, repeal the Sherman Antitrust Law.

Thank You,
Louis James
President

MTC–00029952

January 28, 2002
Attorney, General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am the controller of a diamond wholesale company writing to give my support to the recent Department of Justice and Microsoft antitrust case. This settlement was reached after three months of intense, round-the-clock negotiations endorsed by a federal judge. Ongoing persecution of one of the strongest companies m our country is unfair, and stands in stark relief to how much positive difference Bill Gates has made in the computer industry.

When I first started using computers, interoperability was virtually nonexistent, and computers were not user-friendly at all. Now, with Windows, I can install everything myself. I am not a computer expert by any means, but bemuse of Microsoft's simple programs, I have been able to customize my computer to my specifications.

The envious competitors who foisted this lawsuit on America now claim that the settlement is not strict enough. Any objective view of the settlement, however, shows that Microsoft is more than fairly reprimanded. Microsoft has agreed to change Windows so that it will be even easier to install programs, and Microsoft has agreed to share any interfaces that Windows uses to communicate with other programs. This alone is more than enough, and should placate even the shrillest of the competition.

I urge you to continue your support to this agreement.

Sincerely,
Irene Chin
Controller
FULLCUT
M?? Inc.
MAK?? BIRN??ACH)
CHAIRHAN
?? FIFTH AVENUE
NEW YORK. N.Y. 10017
(212) 681–00??0
January 28, 21302
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft;

I am writing on this last day of the comment period to express my full support of the recent settlement in the antitrust case between Microsoft and the US Department of Justice. The lawsuit dragged on too long and now it is definitely in the best interests of the American public to end litigation against Microsoft.

I am a Microsoft supporter. I do not think my rights as a consumer have been infringed upon. In fact, 1 think that Microsoft has standardized the industry and made it mush easier for users. The terms of the settlement are fair. Microsoft has agreed to increase its relations with computer makers and software developers, design future Windows'' versions so that competitors can more easily promote their own products and form a three person team to monitor compliance with the settlement.

I hope your office implements the settlement as soon as possible. Our nation needs Microsoft as the cornerstone of the tech sector. Please suppress the opposition from the nine states and make this thing a reality.

Sincerely
Max Birnbach
President

MTC–00029953

Mrs. Victoria Jenson
32710 WEST ??IST TERRACE
DESOTO, KS 66018
January 19, 2002
Ms, Renata Hesse
U.S. Department of Justice, Anti-trust
601 ''D'' Street NW, Suite 200
Washington, DC 20530

Ms. Hesse:

I appreciate the chance to comment under the Tunney Act on the settlement that has been proposed to end the Department of Justice's anti-trust suit against Microsoft.

I am in favor of settlement of the suit. I believe the suit should be brought to an end. as soon as possible. In my opinion, the case should not have been brought in die fiat place. The fact that nine states and the Department of Justice trove found common ground with Microsoft to settle the case is a very positive development for the entire nation,

It seems to me that the laws governing anti-trust suits are not designed to -keep up with a constantly changing industry like high technology. That said, the proposed settlement does reach a solid middle ground that cakes measures to ensure competition without over-reaching the role of government regulators.

The settlement is a fair and reasonable way to end this suit. I urge the judge to approve it.

Sincerely,
Victoria Jenson

MTC–00029954

165 E 32nd Street
Apt. 2B
New York, NY 1 0016–6054
January 17, 2002
Atty. Gen. John Ashcroft
950 Penn. Ave., NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing in regards to the antitrust settlement reached between Microsoft and the Department of Justice. I am in favor of bringing the litigation process to an end immediately, and I support the current settlement. The antitrust suit with Microsoft has been going for three years now, and with a settlement proposed is the time to put this issue to bed once and for all.

Under the terms set forth in the current settlement, Microsoft has agreed to make several major changes in the way it operates and interacts with other companies, consumers, and in particular with its competitors. Microsoft has agreed to license its Windows products out to the 20 largest computer manufacturers on identical terms and conditions, Additionally Microsoft will no longer enter into any agreements with third parties to exclusively distribute or promote Windows family products, unless there are no competitive concerns present in the particular situation.

While I feel that many of the aspects of the settlement are too restrictive on Microsoft I am still in favor of the settlement as a whole. Now more then ever we need companies such as Microsoft, leaders in the industry, who are financially able to weather our current economic storm. At a time when the economy is dwindling and layoffs are prominent we should not be penalizing successful companies. For these reasons I urge you to support the antitrust settlement and take no further action against Microsoft.

Sincerely,
Jorge Godoy

MTC–00029955

AMERICA
GENERAL
FINANCIAL GROUP
MOORE FINANCIAL GROUP

Please deliver the following documents to the person or department listed below as quickly as possible. Thank Your
NAME: Renata Hesse
COMPANY: 1/28/01
DATE:(202) 616–9937
PHONE NO.:
FAX NO.:
COMMENTS:
PERSON SENDING THIS FAX: Bill

Should there be any difficulty reading this document or if all pages have not been received,
please call (337) 261–1006 for assistance.
William E. ''Bill'' Moore
Registered Representative
P.O. Box 92802
Lafayette, LA 70509
(337) 261–1006
Fax: (337) 236–5566
January 23, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington DC 20530
FAX: 202–616–9937
RE: Settlement of U.S.v. Microsoft

I share the government's concern about consumer harm in the fast growing technology industry. However, I am aware that the settlement agreement provides resources, access, and authority to respond to complaints about Microsoft's compliance.

I am aware that the negotiators have worked out a settlement that may not satisfy, anyone, but includes something for everyone. Usually that is the sign of a fair settlement.

Therefore I believe that it is time to settle this case. As our economy begins to try to rebound, finality in this case would be a great boost. I appreciate your consideration of this important matter.

Sincerely,

MTC–00029956

Anne G. Pullin, President
AAA, FRICS, GG
2887 Wright Avenue
Winter Park, FL 32789
Personal Property Appraisals & Consultations Fine & Decorative
Arts—Antiques
January 28,2000
Attorney General John Ash??? Sales—Art Market Research
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC20530
Phone: (407) 644–2156 jimannep@worldnet.att.net

Dear Mr. Ashcroft:

I am concerned about the states and now AOL currently seeking litigation and more litigation against Microsoft They all seem to be operating only on a basis of greed and without a firm foundation for claims. Or else, they are suffering from sour grapes because they have not been able to bring to the market a product that was as good or as easily usable by people like me. I have used Microsoft products since Word Version One came out. In fact I bought my first computer because research indicated that it would be the best and easiest product to use. Time tins proved me correct.

Microsoft has helped me in so many ways to improve my business: I can exchange information without telephone calls and long retyping of material. Everything is less expensive to operate and buy—from computers to all the software.

I tried Netscape -what a pain it was to use. And AOL is the only E-mail service that I have not been able to exchange images with Microsoft walked away with the business because they had better products and were good about customer service. They have always been able to get me operating—and I am a complete novice to the technical end of this business. I cannot say this for many other software products.

As an example of their products: I took my old DOS with the Multiplan spreadsheet to Europe. Used the old DOS computer because the battery had 6 hours, and I was working in an ancient library. Recorded my data. Brought the data home into Excel and then into Access. It all worked like a charm.

Sincerely,
Anne Pullin
CC: Representative Ric Keller

MTC–00029957

True Blue—Freedom
January 26, 2002
Board of Adojsors
Hon.john A. ??
R??? 8ty ???istrict Ohio
Hon John Kastoh, For??? Chai???
Congressional ???dget ???
???hn S. Dowlin, Co???ssion???
Han??? Couny
Wayne ??? Prestent
Data Rank Cerp
Gregg Schole Ventech
Ranata B, Hesse
Fax 202–616–9937

Dear Renata:

While I am pleased that the Tunney Act allows me to make an input on behalf of True Blue'8 membership across America In regard to the proposed Microsoft settlement, I want to be candid. The federal government's pursuit of Microsoft damaged consumers and the economy, as follows:

. Consumers paid more than $30 million in taxes to sue a company that has consistently created and marketed better products at a lower cost.

. Investors lost millions more as the tech sector of the stock market sagged under the Impact of the threat to break up Microsoft, adding Impetus to a recession.

. Taxpayers, whose Interests are the key priority of lawmakers, paid lawmakers and attorneys'' salaries to work on behalf of the competitors of Microsoft. (Personally, I'm not sure I'll ever want to buy products from companies that whine to the Papa Fools to secure taxpayer funding of their marketplace fights.)

Asking Microsoft to hire a staff and provide offices for a bureaucracy to enforce the settlement is simply using a socialist mechanism to control an Industry. At best, such an office should exist no longer than 12–18 months, and then be completely terminated, If Congress determines a need for such an agency, we can place the idea before Congress, debate the law, and vote. The Court must not become a bureaucracy-creating and bureaucracy-enforcing entity.

Every State Attorney General who continues in this suit clearly morphs his/her office into collection arm grabbing for taxpayer dollars. It is disturbing that the Attorneys General, who are funded by taxpayers at the state level, are grasping for families'' earnings at the federal level, too We urge you to end this matter and allow Microsoft to return to what it does best: Innovating to serve consumers. Consumers will see that Microsoft offers flexibility and demonstrates its resolve to become an ever better industry leader.

Yours truly,
Patricla R. Cooksey, President

MTC–00029958

Attention: Renata Hesse
U.S. Department of Justice, Antitrust Division
601 D Street. NW, Suite I200
Washington, DC 20530

Dear Ms. Hesse.

I often encourage my students to speak up when they have, an opinion on a current event. I decided recently to heed my own advice and speak up on the proposed proposed Microsoft settlement during this open comment period.

As a teacher in a small rural school. I am encouraged by the possibility that Microsoft has offered to donate millions of dollars of computer equipment to schools like the one where I teach. Many times, rural schools have a hard timer keeping up with technological advances and opportunities available at larger, more urban schools. I believe the settlement proposed by the Bush administration would go a long wary toward leveling the playing field for students who attend rural schools by allowing them access to cutting edge computer technology. Thank you for your work on this important case. I urge you to approve the settlement

Sincerely
Connie Morris

MTC–00029959

Jim Waldo
1202 April Lane
Green Bay, WI 54304–4106
(920) 494–4628 (Voice & Automatic Fax, if our fax does not recognize ≤yours, dial # 11 during ringing
Cell Phone: (920) 362–3623
EMAIL: JIMWALDO2@CS.COM
January 27, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to say that I fully support the Microsoft settlement. I feel that if Microsoft is going to comply with all the terms and conditions of the settlement agreement, then the Justice department should conclude their investigations in this matter. The country needs to go on with it business of production and development in regards to the tech industry.

One way in which Microsoft has agreed to comply in regards to the settlement, is the three expert technical committee, which was formed to make sure that Microsoft will not step out of the bounds of the agreement. If another group finds Microsoft acting inappropriately, that group can take up a formal grievance with a number of individuals appointed by the government and who are associated with this case.

I know that you will make the right decision for all Americans. End this case now, and let the country keep moving.

Sincerely,
Jim Waldo
cc: Representative Mark Green

MTC–00029960

TO: John Ashcroft
Department of Justice
202616–9937
FROM: Calvin A. Jordan
3800 Meredith Drive
Greensboro. NC 27408
January 28, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue. NW
Washington. DC 20530–0001

Dear Mr. Ashcroft:

For a long time I have followed the antitrust, suit being brought on Microsoft by the Justice Department. After more than three years of litigation, a settlement has finally been reached. The purpose of this letter is to show my support for this settlement. This case has simply gone on far too long.

Unfortunately, some powerful opponents of Microsoft would like to see this settlement, revoked, and are pressuring the Justice Department to withdraw this offer. They believe that the settlement does not go far enough. This is where I distinctly disagree. Under the terms of the settlement, Microsoft will allow easy access to its operating systems for competing software firms. Also under the terms of the settlement. Microsoft will be monitored full-time by the government, and can still face lawsuits from competing companies.

The government at the State and Federal levels must fully support, the settlement for it t come to fruition. After three years and millions of dollars, isolated opponents should not be allowed to spoil the work of the DOJ to settle this case. I stand behind the settlement 100%, and appreciate this outlet to have my opinion count.

Sincerely

Calvin A. Jordan

cc: Representative Howard Coble

MTC–00029962

Post-it Fax Note 7671 Date ??? 2
To ZEN???A HESSE From ZOB??? HAUS
Co./Dept. Dos Go.
Phone # Phonb #
Fax #202 616 9937 Fax #
Robert J. Haus
5501 Harwood Drive
Des Moines, IA 50312
(515) 277–3098 (horne)
(515) 490–0538 (office)
January 28, 2002
Renata Hesse
U.S. Department of Justice, Antitrust Division
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms, Hesse,

I am writing to take advantage of the opportunity to weigh in on the Microsoft antitrust settlement decision by the U.S. District Court. Thank you for this opportunity. Microsoft has been a leader in the technology industry with its software, operating system, and Internet browser. They are accused of being a monopoly, yet the companies fueling the case are identified as Microsoft's ''competitors''—seems like a contradiction.

Linux operating system (OS) is growing at an astounding pace taking a larger share of the market every day. It's able to capture more of the market because consumers are choosing the Linux OS over Windows. The customer is deciding which product best suits their needs—not the government.

Bill Gates took Microsoft to unforeseen levels with unmatched speed. His vision and business savvy made the company ''king of the hill''... for now. However, the high-tech industry grows at such rapid rates that no company will be ''king of the hill''... for long.

In the meantime, Microsoft's position in the market has not caused harm to the consumer. On a professional and personal level I appreciate the ease with which Windows works and my children would agree...it is simply the most user friendly software on the market today. Whether or not Microsoft is the best system for me is, and should remain, my own decision.

The settlement that the parties in this suit have come to is reasonable and delivers the government much of what it sought including a way to enforce the requirements set forth in the agreement. I respectfully request that you support the settlement in this ease.

Thank You,

Robert Haus

MTC–00029963

Kellene Walker
Route 4
??. KS 66736
January 22, 2002
Renata Hesse
Trial Attorney, Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DO 20530

Attorney Hesse,

I find it interesting that Apple is objecting to Microsoft's settlement offer, perhaps due to Microsoft's offer of cash, software, and computer equipment to schools in need, I think Apple pioneered the idea of discounting computers to schools and teachers in the 1980's, possibly in a smart strategy of gaining youth loyalty and influencing future sales, No matter, fair is fair. When Bill Gates and company were working out era garage, they had no more opportunity than any other person or company. Microsoft was literally built from nothing to an empire due to hard work, innovation, and by recognizing an untapped market.

Microsoft's biggest edge is that they pioneered the industry, and to date, they do it better than anyone else. Their business model is studied internationally. Of course Microsoft is a fierce competitor, there are no laws against that.

The bottom line is that freedom to innovate is there for everyone. This lawsuit borders on hindering that freedom. I strongly encourage you to approve the current settlement offer in a move to protect free commerce.

Sincerely,

Kellene Walker, RN

MTC–00029964

FORRESTST H. MUIRE, JR.
908 PRINCETON
MIDLAND, TEXAS 79701–4159
915–682–5097
email, ??uire.@swbell.net FAX 685–4091
January 23, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

Please accept the proposed settlement of the Microsoft anti-trust case. As a long-time user of Microsoft products, I see this agreement as the most practical solution for competitors to thrive, short of a break up that would risk consumers losing a quality, stable presence in the software industry.

Seemingly inspired by a lack of monetary support from the last administration, this government intervention into the business world has been off base from the start. With this deal, Microsoft's market position is clearly weakened, so any further litigation would be an even more misguided attempt to manipulate the marketplace on behalf of the ''consumer.'' Microsoft will allow computer manufacturers broad freedoms to configure Windows with the software of their choice without preference in future licensing deals and will provide competitors with extensive access to its internal code, among other agreed measures to expand competition. Considering the constant verification by a committee of experts to monitor the deal, I ask for you to support for this overly fair settlement. The IT industry and the economy will greatly benefit from the return of stability to the software marketplace. Thank you very much for your support.

Sincerely,

Forrest Muire

MTC–00029965

SEAN GALVIN
Renata Hesse, Esq.
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Via Facsimile 202–616–9957

Dear Ms. Hesse:

I am writing to express my support for Microsoft case's settlement with the federal government. Considering the poor state of the economy, the last thing consumers need prolonged litigation resulting in additional oppression of the high tech industry.

Consumers, on the whole, were harmed by the case far more than they were ever harmed by the conduct described by it. It's been a long time since the high tech industry was truly free to compete and innovate without fear of repercussions from the government, but now that that time has come again. I believe we will see great results in short order that could turn this economy around.

Sincerely,

Sean Galvin

MTC–00029966

Eric Movassaghi
1765 Coliseum St. #314
New Orleans, LA 70130
January 22, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington DC 20530
FAX: 202–616–9937
RE: Settlement of U.S.v. Microsoft

As the owner of a private business I know how fierce competition can be out in the open market. And I do appreciate the government's role in protecting consumers against monopolistic activities. However, this case has gone on long enough and I am hopeful that the proposed settlement will be approved.

It is important to my business that our economy begin to turn around and I think the technology sector is important to the rebound. A final settlement in this case will provide that boost and protect consumers at the same time. I am hopeful that the settlement is approved soon.

Thank you for your consideration of my views.

Sincerely,

MTC–00029967

Inwoodola
Jan 28, 2002
Attn U.S. Department of Justice.
Regarding the lawsuit Against Microsoft

I think it is time to settle this and get it behind us so we can proceed with more important things such as economy and terrorists. I feel this Company is being punished for being successful and that most libly have not done anything more out of their time than those that are bringing

charges against them. Lets get on with it and say it is done!

Sincerely,

Mark Hanson

MTC–00029968

FACSIMILE TRANSMISSION COVER SHEET
Transmission Date: 2/28/02
Total Pages: 2(Including cover page
FROM: Attorney James R. Graves
TO FAX NO: (202) 307–1454
TO THE ATTENTION OF: Renata B. Hesse Antitrust Division
RE: Letter to Attorney General John Ashcroft
January 28, 2002
Attorney General John Ashcroft
United States Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

As a Microsoft supporter, I would like to point out some reasons why the antitrust case should be closed at the federal level. The settlement is fair and reasonable, and has been extensive enough for nine states to approve. I fear that the states pursuing further litigation will never be satisified. Under the terms of the agreement, Microsoft will make significant changes in the way it develops and licenses its software. The corporation has agreed to more or less open its inventions to the competition, allowing them to use the success of Windows to launch their own competing products. For instance, Microsoft has granted broad new rights to software engineers and computer makers to configure Windows so that competing programs can be promoted on Windows itself.

Although these concessions make antitrust precedent, Microsoft has been willing to change in an effort to bring this case to a close. As long as the industry leader is giving away market share, there will always be those that want more. I hope you will pay attention to the merits of this case.

If so, you will see fit to end this matter.

Very truly yours,

James R. Graves Attorney-at-Law

MTC–00029969

2 High Stepper Court, Apt, 406
Pikesville, MD 21208
January 17, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to ask that you give your support to the settlement reached between Microsoft and the Department of Justice I am a retired electrical engineer. I know computers, and I know Microsoft. I believe Microsoft was all right; in no way did it monopolize the market. Bill Gates'' main strength was that he was simply quicker and smarter than the other fellows. Bill Gates recognized the need for standardized software programs and filled it. Then he marketed it brilliantly. There are any number of firms out there in other industries whose product is not necessarily better, it's just that they are smarter in promoting it and changing to fulfill public need. MBAs are taught this very lesson Bill Gates was hauled into court out of jealousy, not any unfair business practices.

I also understand from the settlement, Microsoft will be opening up its source codes for the Windows operating system. This is a lot more than other firms would do Microsoft has also agreed to a technical committee that will oversee Microsoft's compliance. Microsoft has more than paid for any sins it may have committed. I urge you, for the good of the county, for business, for the general public, to give your support to this settlement. Thank you.

Sincerely,

Bernard Gerber

MTC–00029970

WILCO VETERINARY CLINIC
RR 4. BOX 188. FREDONIA. KS 66736
January 14, 2002
Judge Renata Hesse
U.S. Department of Justice Anti-Trust Division
601 ''D'' Street Northwest, #1200
Washington, DC 20880

Dear Ms. Hesse:

The purpose of this letter is to add my comments to the record regarding the anti-trust lawsuit filed against Microsoft.

As a veterinarian and businessman, I believe in as little interference as possible in the operations of a private company. Though I see the value of having anti-trust statutes in place to protect the public from, anti-competitive practices. I also believe that in this case, those statutes have not been properly applied.

While it is true that Microsoft is a large company and has earned a great share of the computer and software marker, I believe that has happened because Microsoft offers great products at reasonable prices. I do not believe it has been demonstrated that Microsoft has been engaging in anti-competitive practices that would warrant an anti-trust lawsuit of this type. I further believe that to continue pursuing this lawsuit will only sap state and federal resources that are already in short supply and cause unnecessary damage to a company that has contributed a great deal to the American economy and way of life.

I urge you to affirm the settlement proposed by the Bush Administration and agreed to by many state Attorneys General.

Sincerely,

Dr. Charles Fox

MTC–00029971

2800 Blue Spruce Lane
Silver Spring, Maryland 20906
January 13, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania A venue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

After a long, difficult three years, the Department of Justice has settled its antitrust suit against Microsoft. Microsoft did not get off easy. The firm went far beyond what was originally mentioned in the antitrust case. Microsoft has substantially opened up the company to competitors of Microsoft. Something I do not think any other firm would have done. But it is time to move on. It should be over. We cannot keep dragging the case on. Congress is arguing about a stimulus package, but keeps one of our major companies tied down with litigation. I support the settlement, and look forward to the boost ending this case will give our economy. Thank you for your time and consideration,

Sincerely.

Eldridge Parks

MTC–00029972

East 1751 Riverview Drive
Postfalls, Idaho 83854
January 17,2002
Attorney General John Ashcroft
US Department of Justice
950 Pert??is Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The antitrust law was designed to Protect consumers from abuse by a company. Not to monitor competition between businesses, which is what happened with the antitrust case brought against Microsoft by the Department of Justice. A settlement has been reached and I am writing to ask that you give your rapport to this agreement. The original antitrust suit against Microsoft was badly misinterpreted. Microsoft has not harmed consumers; on the contrary, Bill Gates has helped consumers enormously in understanding the technological revolution that has descended upon us. He has made software easier to understand, easier to imegrate, and much more affordable. What he has not done is pay court to the powers that be in Washington, or appeased his competitors by not being too successful. Hence, we have our antitrust lawsuit against Microsoft. However, the case is over, and it is time to move on.

Microsoft has met the demands by the Department of Justice by agreeing to configure its Windows program to allow competing software to be inserted; Microsoft his agreed to help companies achieve a greater degree of reliability with their networking software, and Microsoft has agreed to terms that extend well beyond the products and procedures ?? in the original lawsuit. Whatever ''sins'' Microsoft may have committed, they have more than paid for. I urge you to give your support to this agreement. It is time to get back on track. We have been through some rough times and now need to concentrate on getting our ??my going again.

Microsoft can help us to this, if we allow it. Thank you.

Sincerely,

James Rocca

cc: Senator Larry Craig

MTC–00029973

Attorney General
Department of Justice
Washington, DC
FAX 1–202–307–1454 or 1–202–616–9937

Please settle the Microsoft case with the current findings.

We feel the prosecution of Microsoft has been and is detrimental to the entire economy. The public has been penalized by actions of the federal government in this unreasonable prosecution by the government,

Microsoft competitors, various states where the competitors reside and a prejudice judge. We feel Microsoft has a better product and should not be prosecuted for making the best successful economy in history and its prosecution led to the recession. It appears the other giants, i.e. Exxon and Mobile, merging banks, merging lumber companies, etc., manage to merge and be monopolistic to the detriment of the regular citizen causing increased prices and the federal government does not interfere.

While Microsoft gets punished for going it alone (without political aid) and the other giants lobby Congress, we (everyday citizens) have to pay the higher prices. Please settle this matter with the current decisions and do not carry it out any longer. Forcing Microsoft to help their competitors is unAmerican.

Sincerely,
Joe Brennan
Betty Brennan
FAX 206–878–1681
January 28, 2001

MTC–00029974

January 26, 2002
Attorney General John Ashcroft
US Dement of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–000

Dear Mr. Ashcroft:

I have taken this opportunity to write and express my opinion of the settlement that has been reached in the Microsoft antitrust case. I believe that we need to concentrate on issues of greater importance. I am pleased that a settlement has finally been reached in this case and that Microsoft will be able to continue doing business as a whole entity.

It is apparent to me that the people pursuing this litigation on are not looking for a good judgment in this case but rather the perpetuation of their own personal agendas. When government becomes involved in business, socialism becomes the rule of the day. I feel that this case has been fueled by jealousy and that until we reach a conclusion to this litigation free enterprise is stymied. The terms of the settlement are fair: Microsoft has agreed to design all future versions of Windows to be compatible with the products of its competitors, and they will also cease any behavior that may be considered retaliatory.

Please support this settlement. I trust that you will do all that is within your power to protect American businesses.

Sincerely,
Vanessa I. Castagliola, Leonard D. Castagliola Jr.

MTC–00029975

January 24, 2002
Attorney General John Ashcroft
US Justice Department
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am tired of the Justice Department using my tax dollars to fund litigation against Microsoft. No other company has provided the amazing tools that have helped businesses around the globe to produce their work faster and better.

The litigation was shaped and formed in the Clinton administration under the guidance of Microsoft's competitors. Had they put as much passion and energy into developing products that were worth using, they would not be in this fight.

Please, let's put the American machine to work protecting our people from terrorists inside and outside of America. Let the free market economy decide who has the better product. At the end of the day, it really doesn't matter what is loaded onto a computer. I can strip it down and build it back with whatever programs I so desire. To date, the competitive products have not been worth the effort.

I am a business owner who has a product that is so great; my clients won't go elsewhere ever again. Does that make me a monopoly too? By the way, I intend to make a profit this year. Is it cause for litigation by the Justice Department?

Sincerely Yours,
Laurie J. Mitchell, Director
EventForce, Inc.
1323 102nd Avenue NE
Bellevue, WA 98004
(425) 635–7696

MTC–00029976

J C BOATRZGIIT
1395 N Falkenburg Road
Tampa. FL 33619
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to you today in support of the settlement that was reached in the Microsoft antitrust dispute. I believe that this case needs to come to a close, and indeed, never should have been brought in the first place.

The settlement is reasonable, under its terms Microsoft will disclose information about the internal interface of its Windows operating system, this will enable its competitors to create new products that will work within the system. Microsoft will also design all future versions of Windows to be compatible with the products of other companies. Finally Microsoft will not engage in predatory business tactics, or exact revenge against any of its competitors. The company will be monitored the by a government appointed technical committee which will ensure that Microsoft complies with the terms of this settlement.

Microsoft is one of this nations greatest corporate assets. Attacking this company will not benefit the U.S. economy, the IT industry, or the American consumer. Thank you for doing all that is within your power to see this settlement pass. Thank you for your consideration of my position.

Sincerely,
J.C. Boatright

MTC–00029977

January 18, 2002
Ms. Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001

Dear Ms. Hesse,

The settlement of the Microsoft antitrust case can help our nation's struggling economy begin to improve.

Employers are challenged by the downswing in the economy. Many workers are seeking employment after being laid off. NASDAQ and technology stocks have been directly affected by the Microsoft lawsuit since the spring of 2000. It is imperative to draw closure to this litigation. I see that this is important to improve our economy and to encourage consumers. I urge you to agree with the settlement of the proposed Final Judgment antitrust case against Microsoft Corporation.

Sincerely,
Jack & Mary Woelfel
4346 $E Maryland
Topeka, KS 66609

MTC–00029978

EQUITRRC
THE TRACKING COMPANY
January 21, 2002
Attorney General John Ashcroft
U.S, Department of Justice
950 Pennsylvania Avenue
Washington, DC 20530–0001

Dear Mr. Ashcroft,

Your decision to settle the Justice Department's lawsuit against Microsoft offers every party involved in the matter the best of both worlds; Microsoft will cease its alleged unfair business practices to the immense benefit of its competitors while at the same be allowed to stay in tact as a company.

Microsoft certainly was penalized with more than a rap on the corporate knuckles. The settlement was arrived at after extensive negotiations with a court-appointed mediator. Important to note is Microsoft's agreeing to terms that extend well beyond the products and procedures that were actually part of the suit; it demonstrates how much Microsoft is committed to settle this lawsuit. Even though they may not realize k right now, Microsoft's biggest adversaries will benefit from the terms of the settlement. First of all, Microsoft has agreed to share its patented code for its Windows operating system with competitors. Second, Microsoft has agreed not to retaliate against computer makers who ship software that competes with anything in its Windows operating system. These two measures will significantly increase competition.

I hope the settlement process is quickly concluded and that the settlement is implemented as soon as possible.

Sincerely,
Gid Yousefi
836 Ponce de Leon Boulevard, Coral Gables, Florida 33134, (305) 442–2060, Fax (305) 442–0687

MTC–00029979

1449 Chelmsford Street NW
North Canton, OH 44720
January 27, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC
20530–0001

Dear Mr. Ashcroft:

Three years ago, Microsoft was brought to trial in the federal courts. Up until six months ago, absolutely no progress was made it was just a waste of time and money. Now, a settlement has been proposed and is currently awaiting approval. Microsoft's opponents believe that the settlement lets Microsoft off too lightly and that Microsoft holds a dangerous monopoly over the consumer. They are wrong. Microsoft did not get off lightly in the settlement, they do not hold a dangerous monopoly, and the only thing that is harming the consumer is the litigation itself. The economy has been crippled over the past several years, arid this is due in large part to the antitrust case, the amount of money that has been spent in litigation, and the panic of stockholders pulling out of their Microsoft shares. I do not believe it is in the best interest of the consumer to continue litigation against Microsoft. It can only do more damage to the economy and the technology industry.

The settlement needs no further deliberation or modification. Microsoft has been more than generous to its competitors, agreeing to terms that cover aspects of Microsoft technology and procedures that were not found to be in violation of antitrust laws. The settlement requires Microsoft to refrain from retaliation should software be introduced into the market that directly competes with Microsoft technology. Microsoft has also agreed to license the Windows operating system to twenty of the largest computer makers on identical terms and conditions, including price.

I can find no reason for litigation to be continued against Microsoft. As I see it, only more harm can come to the public if this drags on for much longer. I ask you to support the settlement as it now stands.

Sincerely,

Richard Miller

MTC–00029980

Senator W.Tom Sawyer, Jr.
3 State House Statum
Augasta, ME 04333–0003
(207) 287–1505
S?? Valley Ave.
Ranger, ME 04401
TEL (207) 942–1771
FAX (107) 943–3073
January 17, 2002
Renata Hesse, Trial Attorney
Antitrust Division—department of Justice
801 D Street NWW, Suite 1200
Washington, DC 20530
Fax 202–616–9937

Dear Ms. Hesse,

I am writing in regards to the proposed settlement negationed with Microsoft. As the former owner and CEO of a Maine Company that employed over 250 people and relied on negotiations with state and local governments for much of my business, I can appreciate first hard the complexity of dealing with issues that effect the public good. In fact that was a significant factor in why I chose to run for both local and state offices in my home town. I also have been involved in litigation and know the enormous drain it is on a business, and even its employees, many of whom are also stockholders, both financially and emotionally. That is why I feel it is in the best internet of the public and the government to accept the proposed settlement negotiated with Microsoft and move on. Having need a considerable amount surrounding the proposal, I feel it to be a beneficial arrangement for the general public in several ways.

It provides for the introduction of technology resources into the education system that will be functional and integrated. It offers the potential for widespread benefit because it includes money for teacher training and support as well as sorely needed hardware and software. These have proven to be more critical to the successful integration of technology than the latest version of computers and associated programs.

I also like the matching greats aspect of the proposed foundation. I have always felt in dealing with various nonprofit groups and charities with which I have been involved, that some contribution on the part of the recipient provided for appreciation of the items or services received. It just makes sense to me.

Fax (201) 287–1527 * TTY (207) 287–1858 * Message Service 1–800–423–6900 * Web Site: http://www.state.me.sul/legis/s??sts E-MAIL: S??@aol.com

MTC–00029981

Ms. Renata Hesse, Esq.
January 17, 2002
Page Two

To return for a moment to the matter of litigation, I am of the opinion that a civil case of prominence benefits our society in that it causes both parties to become more sensitive and responsive to issues that resulted in the suit to begin with. However, there comes a time where the need to resolve the case becomes crucial as it starts to drain productive resources from both parties. Our government's case has reached such a stage. Timing is always of the essence for all parties.

The legal actions to date have forced Microsoft, and many other large corporations, to rethink and modify their business practices if they have half a brain, which can only benefit the general public. Microsoft's willingness to reach a settlement of this magnitude demonstrates a responsive attitude and finally it brings to a productive conclusion a very expensive and burdensome lawsuit which has had adverse effects on the company's value and productivity during the period of the lawsuit and this too has an adverse effect on many citizens as well. As we have seen in the Enron debacle, stockholders are real people too.

At a time when the economy and our nation are in recovery, I feel settlement of this case to be in the general public's best Interest and urge the Attorney General to convey this message to all parties involved.

Thank you for consideration of my comments.

Enthusiastically,

MTC–00029982

HEADQUARTERS
6033 W. Century Blvd.
Suite 950
Los Angeles, CA 90045
(310) 410–9981
Fax: (310) 410–9982
POLICY CENTER
126 C Street, NW
Washington, DC 20001
(202) 479–2873
Fax: (202) 479–2876
www.urbancure.org
January 24, 2002
Ms. Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
SUBJECT: Microsoft Settlement

Dear Ms. Hesse:

I am writing to urge acceptance of the proposed Final Judgment offered by the U.S. Department of Justice and endorsed by nine state attorneys general to resolve the antitrust case against Microsoft Corporation.

I am president of the Coalition on Urban Renewal & Education (CURE), a 5-year-old independent nonprofit organization based in Los Angeles. CURE produces research and commentary on a wide range of public policy issues impacting America's inner cities and the poor. CURE promotes faith-based and free-market solutions on issues of race and poverty. CURE works with policy leaders, inner city pastors, entrepreneurs, college students and ex-welfare recipients to create an environment for self-government and free-enterprise.

This lengthy litigation has cost my fellow taxpayers and me more than $35 million, and after reviewing the terms of this Judgment, final approval is clearly in the public interest. Perhaps of greatest benefit to the American people, the Department of Justice (DO]) and the settling states will avoid additional costs and now be able to focus their time and resources on matters of far greater national significance—the war against terrorism, including homeland security. As noted by District Court Judge Colleen Kollar-Kotelly, who pushed for a settlement after the attacks of September 11, it is vital for the country to move on from this lawsuit. The parties worked extremely hard to reach this agreement, which has the benefit of taking effect immediately rather than months or years from now when all appeals from continuing the litigation would finally be exhausted.

The terms of the settlement offer a fair resolution for all sides of this case the DOJ, the states, Microsoft, competitors, consumers and taxpayers. Microsoft will not be broken up and will be able to continue to innovate and provide new software and products. Software developers and Internet service providers (ISPs), including competitors, will have unprecedented access to Microsoft's programming language and thus will be able to make Microsoft programs compatible with their own. Competitors also benefit from the provision that frees up computer manufacturers to disable or uninstall any Microsoft application or element of an operating system and install other programs. In addition, Microsoft cannot retaliate against computer manufactures, ISPs, or other software developers for using products developed by Microsoft competitors. Plus, in an unprecedented enforcement clause, a

Technical Committee will work out of Microsoft's headquarters for the next five years, at the company's expense, and monitor Microsoft's behavior and compliance with the settlement.

Most importantly, this settlement is fair to the computer users and consumers of America, on whose behalf the lawsuit was allegedly filed. Consumers will be able to select a variety of pre-installed software on their computers. It will also be easier to substitute competitors'' products after purchase as well. The Judgment even covers issues and software that were not part of the original lawsuit, such as Windows XP, which will have to be modified to comply with the settlement.

This case was supposedly brought on behalf of American consumers. We have paid the price of litigation through our taxes. Our investment portfolios have taken a hard hit during this battle, and now more than ever, the country needs the economic stability, this settlement can provide. This settlement is in the public interest, and I urge the DOJ to submit the revised proposed Final Judgment to the U.S. District Court without change.

Sincerely,
Star Parker
President

MTC–00029983

FACSIMILE TRANSMITTAL SHEET
TO: Ms. Renata Hesse
FROM: Rep. Jeff Plale
COMPANY: Department of Justice
DATE: 01/28/2002
FAX NUMBER: (202)616–9937
TOTAL NO. OF PAGES INCLUDING GOVER:2
PHONE NUMBER:
SENDER'S REFERENCE NUMBER
RE: U.S. v. Microsoft
YOUR REFERENCE NUMBER:
NOTES/COMMENTS:
Please call with any questians.
Thanks,
Rep. Jeff Plale (608) 266–0610
Jeff Plale
State Representative
21st Assembly District
OFFICE
State Capitol
P.O. Box 8953
Madlson, WI 53708–8953
(608) 266–0610
1–888–534–0021
Fax:
(608) 282–3621
E-Mall:
Rep.Plale@legis.state.wl.us
HOME
1404 Eighteenth Avenue
South?? 435
(414) 764–5292
Fax:
5404 18?? Avenue
(414) 571–0035
Printed on recycled paper
January 28, 2002
Ms. Renata Hesse
Trial Attorney
Department of Justice—Antitrust Division
601 D Street NW, Suite 11200
Washington DC 20530
Dear Ms. Hesse:

I am writing to encourage your swift approval of the settlement of the U.S. v. Microsoft case. As you are aware, Microsoft has been a worldwide leader in groundbreaking technology. This has been a tremendous benefit to consumers. Prompt settlement of this case is in the best interest of the state of Wisconsin, and my constituents in the 21st Assembly District. Microsoft's leading technology is of great advantage to our school children and the future of America. By file Department of Justice settling this case, Microsoft could again assist less fortunate school districts with much needed help in technology. To date, over $30 million dollars in taxpayer dollars has been needlessly spent on this case. It is time for the Department of Justice to move forward and approve the settlement of the U.S. v. Microsoft case.

Sincerely,
Jeff Plale
State Representative
21st Assembly District

MTC–00029984

JOSEPH TARTAGLIA
88 FARRELL DRIVE
WATERBURY, CT 06706
Renata Hesse, Esq.
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Via Facsimile 202–616–9937
Dear Ms Hesse:

This letter is to articulate my support for the proposed settlement in the Microsoft case. The fact that over $30 million in taxpayer dollars has been spent in this case during these trying economic times is proof enough that this case has gone on far too long. Hopefully, the settlement will signal a return to innovation without the threat of government intervention. The Department of Justice has done a commendable job in putting together an agreement that is fair but won't put Microsoft out of business. It is a reasonable conclusion to this case and I support it wholeheartedly.

Sincerely,
Joseph Tartaglia

MTC–00029985

ASSOCIATED BROKERS
OF SUN VALLEY, LLC
Real Estate
January 28, 2002
Mike Sampson
P.O. Box 2004
Sun Valley, ID 83353
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

I am writing in support of Microsoft and believe this whole antitrust case has become political. I don't see how this benefits consumers and businesses—especially at the expense of the economy. The tech stocks are down. The technology sector is down. The employment numbers are down. Let Microsoft get back to work and the government get on with worthwhile business. The only people I see benefiting from this case are the lawyers.

I am a small businessman who employs 25 people. I have greatly benefited since 1982 from the products Microsoft produces and feel they have been more than fair to me. If their competitors can't put out a better product with competitive pricing and service that's their problem. I don't see why I should suffer as a small businessman. After years of extensive negotiations and mediation, Microsoft has gone out of their way to settle this case. They went well beyond what would be required in any antitrust case. They agreed to design future versions of Windows, starting with an interim release of XP, to provide a mechanism to make it easier for computer companies, consumers and software developers to promote their software within Windows.

Let's end this litigation so that we can focus on what's really important. Thanks,

Sincerely,
Mike Sampson
cc: Senator Larry Craig
P.O. Box 186, Sun Valley, Idaho 83353
Sun Valley Road & Main Street,
Ketchum, Idaho
208–226–5300 . Fax 208–726–4311

MTC–00029986

2724 Gladstone Avenue
Ann Arbor, MI 48104–6431
January 15, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, N-W
Washington, DC 20530–0001
Dear Mr. Ashcroft:

As a citizen of a state party to the pending Microsoft settlement, I would like to offer my support to the Justice Department approving the current deal and ending further legal action in this case. The seemingly envious reaction of the government to Microsoft's growing power and dominance in the technology industry, led to a lawsuit, then a misguided judgment, that far over-reached the right of government to manipulate the marketplace. This agreement seems like a reasonable compromise and should be approved, or risk alienating the public and hurting the economy. Based on the terms of the settlement, it would seem that Microsoft has made great strides to offer competitors more opportunities to succeed. They have agreed to not retaliate against computer makers who ship competitive software, offering broader fights to promote non-Microsoft programs within Windows and providing the top 20 manufacturers a uniform price structure to back up that promise. Starting with Microsoft XP, they will begin to provide a mechanism to make it easy to add access to competitive software, such as those from AOL or Real Networks, or even remove features within Windows. These steps seem like a major opportunity for competitors to show they can thrive in the Windows environment.

I ask for your approval of this very fair settlement, as both sides have proven able to compromise through negotiation with a court-appointed mediator and that work should be upheld. I appreciate your time and look forward to an intelligent decision.

Sincerely,
Vernon Kempfert

MTC–00029987

THE REGION'S CHAMBER
PRINCE WILLIAM REGIONAL CHAMBER OF COMMERCE
4320 Ridgewood Center Drive,
Prince William, Virginia 22192 ??
Tel. 703–590–5000 ??
703–590–9815
email: pwrcc@RegionalChamber.org ??
Internet: www.RegionalChamber.org
FAX COVER SHEET
To
DATE
BUSINESS FAX #
FROM
PAGES (??)
MESSAGE
PRINCE WILLIAM REGIONAL CHAMBER OF COMMERCE
VISION
To be the leading organization for businesses in the Prince William Region.
MISSION
To promote and improve the business climate through initiatives that stimulate economic growth, effect legislative change and enhance the region's quality of life.
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THE WATERS GROUP, INC.
FORT BELVOIR FEDERAL CREDIT UNION
Jan 3rd, 8:00 am Legislative Kick-off Breakfast, Manassas
Jan 10th, 5:30 pm BAH at the Hampton Inn Woodbridge
Jan 16th, 11:30 am Membership Meeting Luncheon at Montclair Country Club
Topic: State of the County
Sponsor: Washington Gas
Jan 18th, 12 pm Lunch Bunch at Burger King, River Oaks
Jan 22nd, 9:00 am New Member Orientation at River Run Senior Apartments
Jan 24th, 8:00 am Business Before Hours at the Chinn Center
Jan 26th, 6:30 pm Chairman's Dinner & the Silver Salute at Montclair Country Club
Happy New Year !
JOIN THE REGION'S CHAMBER NOW—DON'T MISS ANOTHER OPPORTUNITY!
Call (703) 590–5000 for Reservations/Directions/Information
January 28, 2002
Ms. Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street, Suite 1200
Washington, DC 20630
RE: Comments on the Microsoft Proposed Settlement Agreement
Dear Ms. Hesse:

The Prince William Regional Chamber of Commerce is writing this letter to express its support for the settlement reached by the U.S. Department of Justice, nine state attorneys general and Microsoft in the long-running antitrust lawsuit initiated by the federal government. The Region's Chamber is critically aware of how important it is to our national economy that all businesses be able to ''get back to business.'' There were many knowledgeable people guided by an internationally recognized mediator to reach the Microsoft settlement. We believe that additional litigation, following on the heels of many years of costly legal proceedings and on the subsequent work of those in mediation would serve only to prolong the negative impact on our economy of the Microsoft litigation.

Therefore, the Prince William Regional Chamber of Commerce, an organization of more than 800 businesses in the Prince William area, respectfully encourages the U.S. Department of Justice to urge the Courts to adopt the agreement with all due speed so that business and our national—and even international—economy can move forward again with certainty.

Sincerely,
Carol A. Kalbfleisch Laurie C. Wieder
Chairman of the Board President

MTC–00029988

MARLANE R. TAYLOR
4600 Laurel Ave.,
Grants Pass, OR 97527
541.471.4126
uscchirp@terragon.com
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Ave., NW
Washington, DC 205301–0001
Re: Comments on Microsoft Antitrust Settlement
Dear Mr. Ashcroft:

It has been well over three years that I have watched the litigation debacle among the Department of Justice, states and other lawsuits against Microsoft. I have been dismayed that Judge Thomas Penfield Jackson's decision was allowed to stand in the first place, when it was obvious that he was biased before the trial ended and his ruling ought to have been tossed out in its entirety. That the litigation continues to date without settlement is egregious.

I am indignant that millions of our tax dollars have been wasted in pursuit of Microsoft, a tax-paying corporation that employs over 40,000 workers worldwide. In the past twenty-five years, it has been known for its software advances and innovation. It has established industry standards where there were none, advanced computer science, and single handedly has been the catalyst of the technological boom. They are only guilty of ''being very successful'' in what they do.

The DOJ's lawsuit has and continues to financially injure retirees, mutual funds, PERS state retirement funds, individual investors, and anyone who has invested in Microsoft. ''How in good conscious can the department justify this?'' So far, the DOJ has done more to disrupt business, injure the public, damage the economy and technology sector, and financial markets combined than what you claim Microsoft has done to the consumer.

Finally, it appeared there would be a settlement with Microsoft offering to undergo close scrutiny and willing to spend a billion dollars on computer science, hardware and software, teacher training and on-going assistance in the most needy schools. It is an innovative idea and adequate settlement offer, all of which is geared to help our youth become computer literate, as the business world will demand and expect of them for entry-level positions.

However, Judge Motz denied the offer, since he believes it gives Microsoft an unfair advantage and allows them to expand their market share into the school system. The judge fails to recognize that he alone is denying impoverished school districts, and the children therein, access to a computer education they will need in order to compete for jobs in the real world. He would rather have children computer-illiterate, because Microsoft might just benefit in some way. What's wrong with this picture?

His ruling is notably without justification, denying Microsoft's good faith offer to settle. Even in a perfect world, the judge's decision would still be wrong, very wrong. This litigation is a perfect example of an imperfect legal system. The ease has gone on far beyond anyone's imagination, and has become a virtual nightmare. The DOJ has seemingly painted itself into a corner, looking very inept. From my viewpoint, it seems the entire justice system needs a complete overhaul, because of its anti-business bias, and predilection against what constitutes normal and free competition in the business world. Judges need to be knowledgeable in the law, of course, but they also need to understand business, economics, capitalism, and who succeeds in business and why. Innovation is not a dirty word. Until now, our country has led the world in creativity and innovation thanks to Microsoft. Take a good look at all the companies that have stood on the shoulders of Microsoft and have ably competed in the marketplace for the last twenty-five years. The list is huge.

That Microsoft is willing to follow the provisions set forth, it should satisfy every one. It is past time to end this debacle. The states that are holding out simply want to pan for gold in Microsoft's deep pockets. There isn't one rational reason not to grant Microsoft's substantial offer of settlement, because, it IS in the public's interest.

The litigation has already cost millions of tax dollars for nothing. Moreover, the DOJ is directly responsible for the untold millions that it has cost Microsoft for its legal defense and representation—not to mention the financial fallout affecting millions of investors.

Enough of this: Settle the case.
Sincerely,
Marlane R. Taylor

MTC–00029989

1001 NW 63rd Street Suite 280
Oklahoma City, OK 73116
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

I am writing to support the implementation of the recent settlement between the U.S.

Department of Justice and Microsoft. There is no sense in continuing litigation against a company that is the only bright in our sorry economy. I do not think the lawsuit should have begun in the first place. Microsoft has made a good offer and the nine states opposing the settlement should accept it. Microsoft is giving away technological secrets, granting broad new rights to computer makers to configure Windows so as to make it easier for non-Microsoft products to be promoted, and a three-person team will monitor compliance with settlement.

I urge your office to finalize the settlement and to make sure that further unnecessary lawsuits against Microsoft do not occur. Thank you. My losses in the stock market during the past year have been in excess or $2,000.000 and Microsoft is the only bright spot I have left in my technology portfolio. I urge you to get this lawsuit settled and allow Microsoft to work on behalf of the stockholders and America.

Sincerely,
George Platt
CC: Senator Don Nickles

MTC–00029990

From the Desk of Rick Bagley
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

I wanted to write to Judge Kollar-Kotelly to encourage her to approve of the settlement that has been reached between Microsoft, nine of the attorneys general and the Department of Justice in Washington. If you have a consensus like this with so many interested parties, it is hard to see what is standing in the way of approval of this settlement.

As a member of the school board in Forsyth County and a former employee of one of the largest law firms in the Southeastern United States, I am more than aware of what happens when the government gets involved in lawsuits. The effects of a lawsuit on any company, school or just an individual is chilling enough. But in this case, the effect of forward movement in the Microsoft lawsuit was devastating to millions of investors throughout America who were heavily invested into Microsoft stock. During this period and while many high-tech firms were losing ground, Microsoft continued to be strong and show good earnings. Yet, by facing a court trial and possible break up, Microsoft stock suffered a great deal as did investors as, at that time, Microsoft was the No. 1 held stock in pension and mutual funds. The reason that I would like to see a quick settlement in this case is to get the matter out of the courts so that Microsoft and the other parties can get back to business.

Thanks for your consideration of my views

Sincerely,
Rick Bagley
1195 Whispering Pines Dr.,
Kernersville, NC 27284

MTC–00029992

11234 NE 87th St.
Kirkland, WA 98033
January 28, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing today to encourage the Department of Justice to accept the Microsoft antitrust settlement. The entire case was uncalled for from the beginning. Now that there is a settlement that is fair I would like to see the government accept it and move on.

Many people think that Microsoft is getting off easy, this is simply not true. Microsoft has given up much to reach the settlement. Microsoft has agreed to allow computer makers the flexibility to install and promote any software that they see fit. Microsoft has also agreed to not enter into any agreement with any computer maker that would require them to use Microsoft software in any set percentage. Microsoft has also agreed to license Microsoft software at a set price no matter what kind of software the computer maker installs or promotes.

Microsoft has agreed to much in order to put the issue behind them. The government needs to accept the settlement and allow Microsoft to move forward. The only way to move forward is to put the issue in the past. Please accept the Microsoft antitrust settlement.

Sincerely,
Kenneth Jerome

MTC–00029993

CENTRAL CALIFORNIA
HISPANIC
CHAMBER of COMMERCE
Serving the Central Valley Business
Community from Stockton to Bakersfield
Since 1984
Fax
To: RENATA HESSE
From: ANTONIO GASTELUM
ANTITRUST DIVISION
EXECUTIVE DIRECTOR
DEPARTMENT OF JUSTICE
CENTRAL CALIFORNIA HISPANIC
CHAMBER OF COMMERCE
Fax: 202–616–9937
Pages: 2
Phone:
Date: JANUARY 28, 2002
Re: DOJ v. Microsoft Settlement
CC: BECKY DARLING
· COVER PAGE PLUS 1
ADDITIONAL PAGES FOLLOWING
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
801 D Street NW, Suite 1200
Washington DC 20530
January 26, 2002

Dear Me. Hesse,

Pursuant to the Tunney Act in anti-trust cases, we are writing to strongly urge you to support the settlement reached by the Department of Justice and Microsoft. It is time to put this issue to rest, Nearly four years and 35 million dollars is enough!

Microsoft is a true American business success story and doesn't deserve to be penalized for it. Fair business guidelines are sometimes necessary, and have been already incorporated into the settlement agreement. Let Microsoft get back to the business of creating new and useful computer software. Every part of the economy feels the affects of this issue. As we are in the middle of a hard-hitting recession, it is time to do what is necessary to get the nation back on its financial feet.

Again we strongly urge you to support the settlement reached by the Department of Justice and Microsoft.

Sincerely,
Antonio Gastelum
Executive Director
Central California Hispanic Chamber of Commerce

MTC–00029994

FAX COVER PAGE
FROM THE OFFICE OF
ASSEMBLYMAN JOSEPH D. MORELLE
132ND ASSEMBLY DISTRICT
716 Legislative Office Building
ALBANY, NEW YORK 12248
(518) 455–5373 FAX (518) 455–5647
TO:
FAX #:
FROM:
DATE:
RE:
PAGES: INCLUDING COVER PAGE
REPRESENTING BRIGHTON AND
IRONDEQUOIT AND THE EAST SIDE
OF ROCHESTER.
JOSEPH D. MORELLE
Assemblyman 132nd District
Monroe County
THE ASSEMBLY
STATE OF NEW YORK
ALBANY
CHAIRMAN
Committee on Tourism,
Arts and Sports Development
CHAIRMAN
Subcommittee on Manufacturing
COMMITTEES
Economic Development, Job Creation,
Commerce & Industry
Higher Education
Local Governments
Libraries & Education
Technology
January 28, 2002
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
Re: Comments on the Microsoft Proposed
Settlement Agreement

Dear Ms. Hesse:

The United State government negotiated a meaningful settlement with Microsoft that is in our nation's best interest. The settlement places sanctions on Microsoft without destroying the company. These sanctions will foster greater competition in the software industry and give consumers greater choice when they purchase and enhance their computers. This settlement will also help define the direction of government's role in the high-tech industry. This is a just, not punitive, resolution that will help the economy and promote new investment in

technology. I am encouraged by the actions of the Department of Justice and support you in your efforts to settle this case.

Sincerely,
Joseph D. Morelle
MEMBER OF ASSEMBLY

MTC–00029995

Tom A. Schatz, President
Citizens Against Government Waste
13Ol Connecticut Avenue, NW, Suite 400
Washington, DC 20036
I am in gavor oh this mio TM. Herrick
Ms. T. M. Herrick
1500 Terrace Ave, Apt. 112
Liberal, KS 67901–5702

Dear Ms. Herrick,

Your response to this letter today will not only put a stop to $35 million in government waste, it may also be the single best way you can help stimulate America's economy and protect this nation's and your own financial future. I need to ask you today to send an urgent message to the U.S. Department of Justice (DOJ) that you support the proposed settlement of the Microsoft lawsuit,

Under a federal antitrust law called the Tunney Act, there is a 60-day period for public comment before the U.S. District Court decides whether to accept the settlement. This period will expire on January 28th.

By sending your message to DOJ, you can help put an end to the government's long-running legal assault on Microsoft, which has cost taxpayers more than $35 million and undermined one of the primary engines of America's economic growth. Let me tell you what's going on and why it's urgent that you send DOJ a message right away that you support the Microsoft settlement.

On Noyember 6, 2001, Microsoft reached, a proposed settlement with DOJ and nine states in the antitrust lawsuit against the company. The terms of the settlement, briefly, are as follows: Computer manufacturers would be free to include non-Microsoft software in their products. Microsoft would alter its products, including the new Windows XP, to make it easier for consumers to substitute non-Microsoft programs in the Windows operating system. Microsoft would be required to share its programming code with competitors so their software for video streaming, digital photography and other features would be compatible with Windows. In addition, a three-member Technical Committee would be established, at Microsoft's expense, to monitor the company's behavior and enforce the settlement for the next five years. Should the company be found in violation of the terms of the settlement, it can be extended for another two years.

The proposed settlement is a win-win for all concerned. It's fair to:

- Microsoft, which will continue to be able to provide new software that integrates new products;
- competitors, who will have more access to the Windows platform to incorporate their products or make them compatible;
- software manufacturers, who will get back to the business of creating innovative products;
- Consumers, who will have more choices among software products; and,
- investors, who will have stability in the marketplace.

Opponents of the settlement—primarily Microsoft's well-heeled competitors who lobbied DOJ and the states to bring this lawsuit on the backs of taxpayers in the first place—have launched a massive campaign to prevent the court from accepting the agreement. They want nothing less than the dismantling of Microsoft, and they want taxpayers to continue to pay to secure a competitive advantage they couldn't win in the marketplace. That's why I urgently need you to send a strong message to DO! today that you support the Microsoft settlement.

By visiting CAGW's website at www.cagw.org, you can e-mail a letter to DOJ, telling the government that you support the settlement. DOJ has specifically stated that they would prefer to receive comments electronically, so that's why I'm talcing the extraordinary step of asking you to visit our website today and send an e-mail to DOJ. All you need to do is go to CAGW's homepage at www.cagw.org, click onto the ''Approve the Microsoft Settlement'' link on the top fight-hand side of the page, and follow the instructions to e-mail your letter. It will just take a few minutes of your time.

If, however, you prefer to fax your comments in support of the settlement to DOJ, you may fax them to the attention of Ms, Renata B. Hesse at (202) 307–1454 or (202) 616–9937. The most important point is that you tell DOJ you support the Microsoft settlement and that you do it right away before the comment filing period ends on January 28th. To date, the Microsoft lawsuit has cost taxpayers more than $35 million. As the District Court Judge presiding over the case has said, ''In light of the recent tragic events affecting our nafion...the benefit which will be'' derived from a quick resolution of these cases [is] increasingly significant.'' Please tell DOJ to approve the settlement today. Thank you.

Sincerely,
Thomas A. Schatz
President, CAGW

P.S. Help put an end to $35 million in government waste. Tell DOJ that as a taxpayer and consumer you support the Microsoft settlement, and please get your message off to them today.

Time is nmning out.

MTC–00029996

Jesse L Clay
1205 Ridgecrest Drive SE
Albuquerque, NM 87108
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I would like to take some time to express to you my feelings about the proposed settlement that was reached between Microsoft and the Department of Justice. It is about time that the antitrust suit ended, and I feel that the terms in the settlement, although harsh on Microsoft, will be for the betterment of the computer industry and the economy.

I am pleased with the prospect of the case being resolved, but I think it was initiated for all of the wrong reasons. Microsoft's competitors had a major role in initiating the litigation, because they could not bring to the market a product that matched Microsoft's own. The competition should be happy though. The terms of the settlement require Microsoft to turn over to their competitors source code and design data that are crucial to the internal makeup of Windows. Enough is enough. This settlement needs m he approved so the industry can get back on its feet, and with competitors working more closely with one another, the industry will benefit. I feel the proposed settlement will benefit all parties involved, including Microsoft's competitors.

Sincerely,
Jesse Clay

MTC–00029997

Carol Morse Sibley
92 Overlook Terrace
Bloomfield, NJ 07003–29t7
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

The antitrust lawsuits against Microsoft have gone on for too long. They are also not very well justified. Microsoft has not only created jobs and wealth for our country, but also has made technological breakthroughs that have revolutionized the IT sector. I do wish that when they come out with new versions of software they would always make it compatible with previous versions, which they didn't do, for instance, with PowerPoint.

Still, it's clear that the settlement seems to only help competitors gain an edge they were not able to gain beforehand. It forced Microsoft to disclose interfaces that are internal to Windows operating system products, and also grant computer makers broad new rights to configure Windows so that non-Microsoft software can be promoted more easily.

It is in the best interests of the American public to finalize the settlement. Our nation cannot afford further litigation so I urge your office to use its influence to try to rein in the nine states that want to drag this case out for even longer. Thank you for your time.

Sincerely,
Carol Morse Sibley

MTC–00029998

1–23–02
Mi. Renata B. ??
?? (202) 307–1454 02 (202) 616–9937 (FAX)
Ms. ??

This Letter is intended to Conform that I am in favor of the ?? settlement between Microsoft and The U.S. Dept. of Justice.

This is the ?? settlement of november 6,2001.

Sincerely ??

MTC–00029999

4911 Bainbridge Court Southwest
Lilburn. GA 30047
January 24,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The lawsuit that has reached a tentative agreement between Microsoft and the US Department of Justice was flawed from the start. The initial aim of settlement was to break up a perceived monopoly and stop Microsoft from infringing in consumer rights. First off, Microsoft does not fall under the terms of he definition for monopoly because it does not sell poor quality goods at inflated rates. Microsoft in fact has consistently delivered user-friendly products that far outdo their competitors. They have also not infringed on our rights, because all consumers made a conscious decision to purchase Microsoft. The terms of the settlement violate Microsoft's intellectual property rights as they force them to disclose for use by competitors interfaces that are internal to Windows'' operating system products. I urge your office to take a firm stance against the nine states that want to continue litigation. Put an end to this dispute so that the cornerstone of the IT sector can continue to innovate as it has in the past. It is in the public's best interests to settle.

Sincerely,

Ralph Knight

MTC–00030000

FRANK W. BROWN
REALTON
POST OFFICE B0X 215.
ORANGE PARK, FLORIDA 32067–0215
—TELEPHONE
904–264–0504
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear General Ashcroft:

If the public spends time listening to Microsoft's opponents, we all would be under the impression that this industry icon was the bad guy in this entire case. These same opponents would like us to think that Microsoft got off easy in this settlement. The truth, however, is the very opposite. Since the company's inception, Microsoft has set the standard for innovation and quality. Their products are accessible, easy to use, arid affordable. They have been seen as the ''bad guy'' because they are being blamed for their competitor's inability to innovate and keep up with Microsoft's rapid changes. How fair is that?

As far as Microsoft getting off easy in the case, this is simply not true, Microsoft has basically opened their operation doors to their competitors by allowing them access to Windows interfaces, protocols, and intellectual property. They have even agreed to create future versions of Windows within which non-Microsoft products may function. In addition to all these damaging concessions, Microsoft has also agreed to terms that were not even found unlawful. I hope that you will make every possible attempt to bring this matter to an early close.

Sincerely,

Frank W. Brown, Jr.

MTC–00030001

320 Tanglewood Trail
Wadsworth, OH 44281–2355
(330) 334–1097
January 14, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Attorney General Ashcroft:

I would like to express my support for settling the antitrust suit against Microsoft. I do not feel that the case should ever have been taken as far as it was. It is time to move on to more pressing concerns.

While I recognize Microsoft's market dominance, I also feel that they are operating legally, and as such no further action should be taken. With the economic downturn of the past year, ending the case and letting Microsoft generate further technologies is important. Competitors of Microsoft will gain a lot from the settlement, including disclosure by Microsoft of the internal interfaces of the Windows operating system Microsoft development with its own personnel and capital.

The longer the government keeps Microsoft's hands tied, the more the economy will suffer. Please finalize the settlement agreement as soon as possible. Thank you.

Sincerely,

Jenny Wallace

MTC–00030002

Janurn7 28, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The Microsoft antitrust settlement agreement should be finalized. I am opposed to this lawsuit.

We operate h≃ a free enterprise system where competition is the driving force behind a prosperous economy. Lawsuits of this nature punish a company for being competitive. Despite my opposition to the lawsuit, I believe the terms of the settlement are reasonable. Microsoft has agreed to begin designing Windows with mechanisms to make it easier for consumers to add or remove features of Windows, and instead replace them with non-Microsoft software. They also agreed to not to enter into contracts that would obligate third parties to exclusively promote or distribute Windows products. With these types of concessions, consumers will have greater choices, and any so-called anticompetitive behavior wilt be curtailed.

I am hopeful the Department of Justice will continue in its efforts to settle this case. Thank you.

Sincerely,

MTC–00030003

CarrierChoice
January 28, 2002
Attorney General John Ashcroft
US Department of Jusnce,
950 Pennsylvania, Avenue, NW
Washington. DC 20530

Dear Mr. Ashcroft:

I am writing you this brief note to encourage you to help end the Microsoft antitrust case. This nearly four-year-old case has dramed Microsoft and the government of millions of dollars. It has been the subject of controversy and litigation to no one's discernable benefit. It has had a debilitating affect on Microsoft, the entire ?? industry and the national economy at a nine when we can least afford it. It is tune to resolve this matter.

At present, the major parties and the majority of compl??ant states have reached a tentative settlement agreement. The agreement allows Microsoft to retain its present corporate structure in return for committing itself to a radical change in its marker philosophy and practices. Microsoft will now actively encourage ''competition'' by reconfiguring its Windows platforms to readily accept and even promote non Microsoft software. The company will now no longer requite exclusive Windows software be in agreements of computer manufacturers to whom they license their basic platforms. These and other concessions prove the sincerity of Microsoft's commitment to ameliorating its in intimidating marker dominance.

Microsoft is a great, inventive and productive player in our economy and its own industry. We need Microsoft up and running full time. Please support this settlement

Sincerely,

Chick ??earberstone
Director of Carner Relations
CarrierChoice
cc Senator Rick Santorum

MTC–00030004

THE CENTER FOR THE
MORAL DEFENSE
OF CAPITALISM
VIA FAX
January 28,2002
From: Nicholas Provenzo
Chairman
Center for the Moral Defense of Capitalism
To: Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001

Re: Microsoft Settlement

Pursuant to the Antitrust Procedures and Penalties Act, 15 U.S.C. § 16, the Center for the Moral Defense of Capitalism respectfully submits its evaluation of the proposed Final Judgment resolving U.S. v. Microsoft Corporation (Civil Action No. 98–1232) and State of New York ex. ref Attorney General Eliot Spitzer, et al., v. Microsoft Corporation (Civil Action No. 98–1233). The mission of the Center for the Moral Defense of Capitalism is to promote the social welfare of the nation by presenting to the public a moral foundation for individualism and economic freedom based on a philosophical analysis of humanity and human nature. Specifically, we seek to apply Ayn Rand's philosophy of Objectivism to the understanding of human action and human relationships.

As the cornerstone of a free, capitalist system, we argue that human life requires thought and effort and that the free market springs from the trade of one's thoughts and efforts with others. We make the argument that human minds and bodies must be left free of coercion, that all human interaction must be voluntary and that the initiation of

physical force must be banished from human relationships. We see a proper government as the agent of its citizens, charged with one mission: the use of retaliatory physical force in defense against the initiation of physical force. Our organization has followed the Microsoft antitrust case from its initial filing—we have opposed the case from the outset, seeing it as an abridgement of the freedom of production and trade and an interference with the right to acquire and possess property. We disagree with the essential factual component of this case-that Microsoft's integration of its Internet Explorer Web browser with its Windows operating system was a coercive act against Microsoft's competitors and customers. Instead, we see a company that accordin9 it its evaluation of the marketplace saw the commercial value of product integration and acted accordingly. In exercise of Microsoft's right to control its property, the firm set terms for the sate of that property that it believed was in its own self-interest. Microsoft's subsequent commercial success after this integration affirms the wisdom of Microsoft's actions—Microsoft's customers themselves chose to reward the firm with increased sales and increased market share. Rather than serve an impediment to the free market, Microsoft's actions personified them.

Yet, obviously, Microsoft's success has made it into the target of the government's wrath via the current antitrust case. Our organization closely followed the District Court case, writing several published evaluations of the case and its subsequent rulings (see Appendix t & 2). Our organization also participated in the US Court of Appeals for the District of Columbia Circuit appeals proceedings as an amicus curie. Our amicus brief relied on two major arguments in opposing the government's case: 1.) that the antitrust laws are unconstitutional laws that fail to provide with clear and concise guidance necessary to avoid sanctions under the law; and 2.) that the antitrust laws are unconstitutional laws because they require the government to initiate force against innocent citizens.

Today, our view of the Microsoft antitrust case and its proposed settlement is as follows: While we respect the desire of the parties to seek a resolution to this case, particularly that of Microsoft, which has had to endure a 3½ year crusade against its property rights and its right to conduct its business in a profitable manner, we are wary of any settlement that legitimizes any aspect of this unjust assault against a successful, innovative business

We consider the case against Microsoft to have been defective at every level, from the fundamental claim that the entrepreneurial actions of a successful business are a threat against others, to the claim that a monopoly can exist where there is no legal barrier to entering a market, to the claim that the citizens of the United States are too ignorant or incompetent to exercise their individual power of choice when in the marketplace and therefore require the government to make their personal choices for them. We consider it a failure that the court saw no distinction between the earned success of a business in the free market and the coercive power of a government favorite and we consider it a failure that the court did not ultimately throw out the case against Microsoft.

Considering that this case was initial brought not at the insistence of individual consumers or with Microsoft's business partners, but at the insistence of Microsoft's unsuccessful competitors, this entire case reeks of business failures asking the government to step in and give them the commercial success they could not achieve in the marketplace. Failed businesses must not be allowed to set the rules for the markets in which they failed.

In evaluating the proposed settlement, we find that it specifically threatens the right to private property. A key component of the proposed remedy is a requirement that Microsoft make its source codes available to a government-sanctioned oversight committee, which in turn is supposed to ensure these same source codes are made available to non-Microsoft ''middleware'' producers, so that these companies can create products to compete with Microsoft. Since under the proposed judgment, the United States would retain the right to determine and enforce the scope to which these source codes are to be made available, the final judgment constitutes a de facto seizure of private property—the source codes—and its subsequent conversion to a public good. Such a taking is wholly incompatible with the Constitution of the United States.

Accordingly, we reject the notion that this settlement serves the public interest, or that any punishment of Microsoft for its business practices will be of benefit to any consumer. Eroding Microsoft's property rights serves no one. We hold that no antitrust case, including the Microsoft case can withstand rational scrutiny, and we ask that no sanction be placed on Microsoft as a result of its antitrust conviction.

Appendix 1:

Judge Jackson's Findings of Fiction

By Dr. Edwin A. Locke, Ph.D.

Senior Policy Analyst

The Center for the Moral Defense of Capitalism Judge Thomas Penfield Jackson has released his ''findings of fact'' in the Microsoft antitrust case. While his report did contain some correct information—such as the truism that a successful company tries to defeat its rivals—the central claims of his report are blatant falsehoods Let us examine five of these fictions

Fiction #1: Microsoft is a ''monopoly. ''There is no such thing as a private monopoly. Only the government can forcibly prevent competitors from entering a market. Microsoft has attained dominance in the software industry, but dominance is not monopoly. Market dominance has to be earned through a long struggle, by providing better products and better prices than anyone else Dominant companies who falter (as did Xerox, IBM, General Motors and Kodak) will find their market share eroded, sometimes very quickly. There is no threat from these dominant players so long as their competitors are legally permitted to enter the field, invent new products, and combine with each other to gain the needed market power.

In a free market, a dominant position can only be sustained by continually providing new products and services that are better than other firms'' products. Paradoxically, Judge Jackson recognizes this fact but condemns it. Microsoft's innovation, its continual product upgrades, its millions spent on research and development, are cited by Jackson, not as evidence that Microsoft has earned its position, but only as evidence of a conspiracy to ''stifle'' its competitors.

Fiction #2: Microsoft's ''monopoly power'' allows it to ''coerce'' its customers. A private company has no power to force consumers to do anything. Did Judge Jackson find that Microsoft threatened to beat people up or throw their bodies into the East River if they bought the wrong Web browser? Of course not. The only ''leverage'' Microsoft has is the leverage it has earned by producing a product that people want to buy.

This economic power, the power of voluntary trade, is fundamentally different from political power, the power of the gun. Yet Judge Jackson is eager to erase this distinction. Thus, such actions as upgrading a product to match the features offered by a competitor, distributing a product for free, or negotiating favorable terms with business partners—all of them normal and beneficial business practices—are presented by Judge Jackson as if they are a nefarious, mafia-like conspiracy to oppress the public.

Fiction #3. Microsoft harmed consumers. This is certainly news to the millions of people worldwide who value Microsoft products enough to make the company and its founders rich. Most bizarre is Judge Jackson's claim that Microsoft harmed consumers by giving away its Web browser, making it unprofitable for other firms to sell their browsers Any sane consumer would be delighted to get a product for free rather than paying money for it. To speak of receiving free software as a ''harm'' is Orwellian doublespeak.

Fiction #4: Microsoft is a threat to consumers because it ''could'' raise its prices. Under this criterion, anyone could be prosecuted for anything. Do you own a kitchen knife? Then you might stab somebody—so should the government put you in jail?

Microsoft has the right to sell its product for any price it chooses—but anyone familiar with the history of business and with Economics 101 knows that market leaders have a selfish interest in keeping their prices low. Why? Because they make a lot more money by creating a mass market than by creating a product only the rich can buy. Henry Ford understood this. So did Bill Gates.

Clearly, Judge Jackson does not. The only basis for his conclusion is the caricature of the successful corporation as a vicious ''Robber Baron'' which, even if it is not ''exploiting'' consumer now, is merely waiting for the opportunity to do so

Fiction #5: Blocking Microsoft's ability to compete will foster greater industry innovation. A private company, with no power over consumers but the power conferred by offering a useful product, is branded by Judge Jackson as dangerous. But far-reaching government intervention in the software industry, including the massive use of force to shatter Microsoft and control its

business practices, is presented as an attempt to spur innovation. Only those who believe Al Gore invented the Internet could take this argument seriously.

What Judge Jackson really objects to is the fact that Microsoft defeated its competitors, i.e., that it was successful. The real meaning of his ''findings of fact'' is that the best brains must be crippled, so that lesser brains will not have such a hard time succeeding. He and the government prosecutors whose arguments he is echoing do not want to foster innovation; they want to sacrifice the best and the brightest in the name of egalitarianism. They want the playing field leveled by coercion so that no one can rise to the top.

What consumers need is an antidote to the fictions peddled by Judge Jackson: the recognition that businessmen have a right to succeed by trading their products in a free market Dr. Edwin A. Locke is Dean's Professor of Motivation and Leadership at the Robert H. Smith School of Business at the University of Maryland and is affiliated with UMD's Department of Psychology. An internationally renowned behavioral scientist, Locke's work is included in leading textbooks and acknowledged in books on the history of management.

Appendix 2:

Altruism in Action: An Analysis of Judge Jackson's Finding of Fact and the Antitrust Assault on Microsoft by Adam Mossoff

Policy Analyst

The Center for the Moral Defense of Capitalism United States District Court Judge Thomas P Jackson is crystal clear in his recent ''findings of fact'': Microsoft is marked for destruction. But why does Judge Jackson want to punish one of the most successful corporations in American history? Because Bill Gates proclaimed that he wanted ''to prove that a successful company can renew itself and stay in the forefront'' [i] and he proceeded to do just that.

By the early 90s, Microsoft had gained a dominant position in the software industry by creating Windows, the first commercially viable graphical operating system that could be used on PCs. But in the mid-90s, Gates realized that the Internet represented the next step in the ongoing computer revolution; thus, he created a business plan to ''stay in the forefront'' of this revolution. In so doing, he set into motion the same technological and commercial innovation that had led to Microsoft's leading market position in the first place.

Microsoft began by investing a staggering $100 million each year in Internet research and development, and in four years the company expanded its Internet division from only six people to more than one thousand. These investments, in the words of Judge Jackson, paid ''technological dividends.[ii] (Paragraph 135) Microsoft developed a Web browser called Internet Explorer, and ''after the arrival of Internet Explorer 4.0 in late 1997, the number of reviewers who regarded it as the superior product was roughly equal to those who preferred [Netscape's] Navigator.'' (Paragraph 135)

But Gates took Microsoft even farther. He integrated Internet Explorer into Microsoft's Windows operating system so that it would be easier to incorporate the fast-growing Internet into all aspects of personal computing. In fact, Judge Jackson partly acknowledges the groundbreaking work performed by Microsoft in this regard:

The inclusion of Internet Explorer with Windows at no separate charge increased general familiarity with the Internet and reduced the cost to the public of gaining access to it, at least in part because it compelled Netscape to stop charging for Navigator. These actions thus contributed to improving the quality of Web browsing software, lowering its cost, and increasing its availability, thereby benefiting consumers. (Paragraph 408)

Concurrent with its technological innovation, Microsoft put into practice novel business services and licensing arrangements. Just one of many examples addressed by Judge Jackson is the Internet Explorer Access Kit (IEAK), a service that permits an Internet access provider (IAP), such as America Online or Earthlink, to accept a license agreement on the Web and then download and customize Microsoft's Internet software. When Microsoft began offering this service in September, 1996, it was the first time an Internet access provider could create a distinctive identity for its service in as little as a few hours by customizing the title bar, icon, start and search pages, and ''favorites'' in Internet Explorer. The IEAK also made the installation process easy for IAPs. With the IEAK, IAPs could avoid piecemeal installation of various programs and instead create an automated, comprehensive installation package in which all settings and options were pre-configured (Paragraph 249)

More than 2,500 access providers—representing more than 95% of the Internet subscriber market in the US—used Microsoft's IEAK service. (Paragraph 251) Notably, Netscape did not create a similar service until nine months after Microsoft introduced IEAK, and Netscape charged almost $2,000 for something Microsoft offered for free. (Paragraph 250)

Microsoft blended technological innovation with business acumen and thus offered its business partners an integrated package of new technology and new business opportunities. In exploiting these opportunities: Microsoft often offered ''valuable consideration''—such as special discounts-to companies like Compaq, IBM, and Intel as an incentive to adopt its Internet Explorer and other Microsoft technology In fact, Judge Jackson uses the term ''valuable consideration'' eight times to describe Microsoft's business agreements with other companies—leaving the honest reader to conclude that Microsoft's dealings were not some form of coercion but rather value-for-value trades.

For instance, Microsoft beat Netscape in developing a special type of browser that America Online (AOL) required for its Internet service As a result, the two companies entered into several agreements in 1996. In exchange for AOL's commitment to use Microsoft's Internet software, Microsoft promised to provide AOL with unprecedented access to Internet Explorer source code, extensive technical assistance, ''free world-wide distribution rights to Internet Explorer,'' an assurance ''that future versions of its Web browsing software would possess the latest available Internet-related technology features, capabilities, and standards,'' and the placement of an AOL icon in a special folder on the Windows desktop. (Paragraph 288)

This relationship has been advantageous to both parties. Overall usage of Internet Explorer has risen dramatically, and as a result of this agreement AOL registered almost one million new users in a single year—11% of its total membership—through its icon on the Windows desktop. This fact alone prompted AOL to state in 1998 that its business arrangement with Microsoft was an ''important, valued source of new customers for us.'' (Paragraph 302)

Microsoft's achievements should be held up as a model of how to create and maintain a highly productive, innovative company. Yet Judge Jackson is unable to view any of these facts in a positive light. While Judge Jackson recognizes many of the concrete facts that demonstrate Microsoft's productive achievement, he is incapable of praising the innovation and business acumen that led to Microsoft's success.

Instead, his descriptions are clouded by slanted, inflammatory terms that attribute vicious motives to Gates and his company. When Microsoft created new technology to compete with its rivals, Judge Jackson describes the company's motivation as ''fear'' and ''alarm.'' When Microsoft offered incentives to its business partners, Judge Jackson decries this as the ''quashing'' and ''stifling'' of rivals. When Microsoft licensed its products only under conditions favorable to its long-term success, Judge Jackson describes these actions as ''threats'' and ''force.'' (Judge Jackson uses variations of ''threat'' no fewer than twenty times and of ''force'' no fewer than sixteen times to describe Microsoft's actions.) When Microsoft refused to support its competition, Judge Jackson calls this ''punishment.'' When Microsoft ingeniously melded technological and business strategies to convince consumers that its products were the best, Judge Jackson sees the company as ''seizing control'' and trying to ''capture'' the market.

Even worse than his slanted terminology are his substantive arguments, in which he sets up impossible standards according to which no successful business could escape prosecution For example, Judge Jackson writes early in his ruling that:

It is not possible with the available data to determine with any level of confidence whether the price that a profit-maximizing firm with monopoly power would charge for Windows 98 comports with the price that Microsoft actually charges. Even if it could be determined that Microsoft charges less than the profit-maximizing monopoly price, though that would not be probative of a lack of monopoly power, for Microsoft could be charging what seems like a low short-term

[i] Bill Gates, The Road Ahead 64 (1995).

[ii] US v Microsoft, No. 98–1233 (TPJ) D.D.C. Nov 5, 1999) (findings of fact). All references to the findings of fact hereafter will refer only to the paragraph number.

price in order to maximize its profits in the future for reasons unrelated to underselling any incipient competitors (Paragraph 65) (Emphasis added.)

Judge Jackson admits that it is not possible to tell whether Microsoft is in fact charging a monopoly price. Yet he dismisses this lack of evidence as irrelevant because Microsoft could simply be using low prices today in order to ''capture'' the market and charge exorbitant prices at some future date. In other words: Microsoft is a monopolist if it charges prices that are deemed ''too high''—but it is also a monopolist if it charges prices that are too low. By virtue of its dominant position in the industry—that is, by virtue of its success—Microsoft is damned if it does and damned if it doesn't.

Judge Jackson's visceral antagonism to business is also revealed by his condemnation of Microsoft for winning the browser battle against Netscape when ''superior quality was not responsible for the dramatic rise [in] Internet Explorer's usage share'' (Paragraph 375) Note the implicit premise in this condemnation: If Microsoft hasn't produced a product that is technologically superior, then only commerce can explain its success. Jackson is repulsed by the notion that successful computer companies require both technological savvy and business skills; in his ideal world, Silicon Valley would be populated solely by computer scientists with nary an ''alarming'' venture capitalist or ''threatening'' businessman in sight.

Judge Jackson's praise for innovation, however, might seem to contradict his overall attack on successful businesses. Technological innovation is a source of business success, is it not? Although Judge Jackson recognizes that technological innovation causes businesses to succeed, he believes that this innovation has another, more legitimate, function. He writes: In many cases, one of the early entrants into a new software category quickly captures a lion's share of the sales What eventually displaces the leader is often not competition from another product within the same software category, but rather a technological advance that renders the boundaries defining the category obsolete. These events, in which categories are redefined and leaders are superseded in the process, are spoken of as ''inflection points.'' (Paragraph 59) (Emphasis added.)

Innovation appeals to Judge Jackson not because it leads to the creation of wealth, but rather because it tends to tear down the market leader. He argues that the emergence of the Internet in the mid-90s was one such ''inflection point.'' (Paragraph 60) Thus. the nature of his support for innovation explains his disgust with Microsoft's defeat of Netscape: By introducing its browser product sooner, Netscape should have replaced Microsoft—if only Microsoft had not engaged in the ''vicious'' commercial competition that ensured its continued leadership in the computer industry.

These beliefs ultimately lead Judge Jackson to conclude that Microsoft's ''monopoly power'' has ''harmed consumers in ways that are immediate and easily discernible?'' (Paragraph 409) What are these alleged harms? Judge Jackson claims (wrongly) that the integration of Windows 98 and Internet Explorer does not allow employers to block employees from surfing the Web He asserts that vast ''confusion'' reigns among consumers—but beyond one or two offhand references throughout the rulin9, he never explains this vague allegation Moreover, he claims, the integration of Windows and Internet Explorer has created slower computers with more bugs—as if computers are slower and less dependable than they were two years ago! One might regard such mythical ''harms'' as the laughable allegations of a Luddite—if they did not come from a judge who wields the coercive power of the federal government

Regardless of how trivial these alleged harms may be, Judge Jackson seems sincerely to believe that Microsoft is acting as a vicious monopolist Why? He answers this question in the last few sentences of his ruling: ''Microsoft's past success in hurting such companies and stifling innovation ... occur for the sole reason that [other companies and their innovations] do not coincide with Microsoft's self-interest.'' (Paragraph 412) (Emphasis added.) It takes Judge Jackson more than 200 pages, but in the end he names the essence of his disgust for Microsoft—and the essence of the antitrust laws In so doing, Judge Jackson exposes the fundamental moral premise dictating his factual distortions, his fallacy-ridden arguments, and his illogical conclusions: a hatred for any form of self-interest The morality of altruism or self-sacrifice is often presented as a form of benevolence, as if it simply means being nice to other people. But the actual meaning of this philosophy is a hatred of success. Under this morality, anyone who achieves some extraordinary wealth or distinction owes it to his fellow men to sacrifice what he has earned—including giving away his whole fortune, as and when it is demanded by others. (This is essentially what has been demanded of Bill Gates) But what about those who have not achieved anything? They are entitled to welfare programs, private charities, protective legislation, and a host of other unearned benefits to be paid for by those who have succeeded. In this system, anyone who earns success through his own effort is to be punished, while anyone who hasn't exerted any effort and hasn't attained any success is to be rewarded.

Far from standing for benevolence or good will, such a moral outlook stands for destruction. This code of sacrifice demands an assault on a Microsoft or a Bill Gates. By amassing so much money and achieving so much success, they must be shirking their duty to sacrifice to others. But it does not demand the destruction of the Netscapes of the world because, by virtue of having faltered, they are the ''have-nots'' who are entitled to benefit from the sacrifice of their more-successful competitors.

Note that the ultimate standard of this moral outlook is not the well-being of the poor, the weak, the downtrodden; has the welfare state ever achieved these aims? Instead, the goal is the sacrifice of the rich, the strong, and the powerful—not to achieve any positive aim, but simply to punish them because they are rich, strong, and powerful.

The altruist connection to antitrust is evident in the mere fact that Judge Jackson could have applied the antitrust laws against Microsoft without finding any harm at all. Although the ostensible purpose of antitrust is to ''protect consumers'' from alleged ''monopolists,'' court decisions consistently belie this fiction. In one of the first cases defining the doctrine of antitrust, a large railroad trust defended itself against prosecution by arguing that its price-fixing plan resulted in lower prices for consumers. Since the stated purpose of the 1890 Sherman Antitrust Act was to protect consumers, and since consumers actually benefited in this case, the defendant logically concluded that the antitrust laws should not apply to its practices. The Supreme Court rejected this argument and ruled that the railroad trust was guilty. In an illuminating statement, Justice Peckham declared: ''in this light it is not material that the price of an article may be lowered. It is in the power of the [monopolist] to raise it.'' [iii]

(Interestingly, Justice Peckham was an ardent conservative who was one of the principal advocates of ''freedom of contract'' in the 19th century—just as Judge Jackson was a Reagan appointee. This proves once again that conservatives are not reliable friends of freedom.) Continuing to apply the underlying anti-success principle of antitrust, the Supreme Court ruled in 1968 that a newspaper company violated the Sherman Antitrust Act when it fired a distributor for charging rates above an allowable maximum price. The Court found that the newspaper ''would not tolerate over-charging'' of its customers, and that it even agreed to rehire the distributor if he ''discontinued his pricing practice''—that is, if he charged lower prices. Nonetheless, the Court held that the benefit to consumers was irrelevant in finding that the newspaper company acted in ''conspiracy'' with its other distributors to set prices—thus its actions were ''an illegal restraint of trade under Section 1 of the Sherman Act.'' [iv]

Harm to consumers has nothing to do with the purpose of antitrust. The antitrust laws are intended only to punish ''power''—but since economic power is earned on the free market, this means that the purpose of antitrust is to punish successful business practices. Antitrust case law is replete with examples of companies being punished, not for any alleged harm, but simply for having the acumen to remain successful in their industries. A ski resort in Aspen, Colorado, was not only found guilty in 1985 of violating the antitrust laws because it successfully competed against its only rival; it was also held to a ''duty under antitrust law to help a competitor.'' [v] In the famous case against ALCOA in 1945, Judge Hand declared that ''the successful competitor,

[iii] United States v. Trans-Missouri Freight Association, 166 US 290, 324 (1897), emphasis added.

[iv] Albrecht v. Herald Co., 390 US 145, 153 (1968).

[v] ''Olympia Equipment Leasing Go. v. Western Untion Telegraph Co.. 797 F.2d 370, 377 (7th Cir. 1986), citing Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 US 585 (1985) (holding that monopolist has a duty to help a competitor).

having been urged to compete, must not be turned upon when he wins.''

But he contradicted himself in the very next paragraph, concluding that ALCOA insists that it never excluded competitors: but we can think of no more effective exclusion than progressively to embrace each new opportunity as it opened, and to face every newcomer with new capacity already geared into a great organization, having the advantage of experience, trade connections, and the elite of personnel.[vi] ALCOA's ability and success, by Hand's reasoning, was the deciding factor for finding it guilty of violating the antitrust laws.

Given this legal context, Microsoft was doomed before it even set foot in the courtroom. The media, in an anti-Microsoft feeding frenzy, often highlighted mistakes made by Microsoft's counsel during the lengthy (and ongoing) trial. Yet Microsoft's attorneys could have performed flawlessly, and Judge Jackson would still have produced the same ruling. The reason is that Microsoft is an extremely successful company; Gates is a unique combination of technological genius and businessman, reminiscent of earlier American giants like Thomas Edison Thus, it was irrelevant how hard Microsoft's attorneys worked or how much intellectual vigor they brought to their legal briefs and courtroom arguments. These things were irrelevant because no army of lawyers could hide a single, essential fact—the only fact necessary for applying the antitrust laws: Microsoft succeeds at what it does.

The punishment doled out for success is paralysis. Judge Jackson makes it clear that Microsoft must not be permitted to capitalize upon its well-earned success. Because it has created values, it must now relinquish them. Does it matter that Microsoft has earned its success by producing a better product, by offering better incentives to its business partners, and by providing better service to software developers and Internet access providers? No.

Such facts do not matter to a man who believes that a successful company has a moral duty to sacrifice to its lesser rivals—especially when that man has the legal power to coerce the company to obey its alleged duty. With every slanted term and with every absurd conclusion, Judge Jackson practically screams his unstated moral premise: Since Microsoft is a leader in the computer industry, it must sacrifice the values it has created because it has created them In his ruling, Judge Jackson claims to set out the objective facts underlying his impending application of the antitrust laws to Microsoft. But the only thing he manages to establish is his own animosity towards commercial success. What drives this animosity is the underlying moral justification for antitrust: altruism's hatred of success.

The basis for Judge Jackson's ruling is not any ''monopoly'' allegedly controlled by Microsoft; it is the monopoly commanded by the morality of altruism over our culture. That monopoly can be seen, unfortunately, in Bill Gates's sanction of his own destruction in a comment immediately after the ruling, in which he declares that ''because of our success, we understand that Microsoft is held to a higher standard, and we accept that responsibility.'' [vii] vii As long as this moral monopoly remains unchallenged, legal doctrines such as antitrust will continue to punish successful businesses.

MTC–00030005

Henry R. Ochel, Jr.
1155 East 2100 South
Salt Lake City, Utah 84106
January 28, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

As a yahoo Internet user I would like to voice my opinion concerning the Microsoft lawsuit. I urge you to support the settlement and encourage the various companies to get back to the business of technology research. It is my belief that millions of dollars are being spent to stifle competition when these companies should be focused on new markets and technology. Please do what is in the best interest of consumers through out the United States and settle this costly suit.

Sincerely,
Henry R. Ochel, Jr.

MTC–00030006

2035 Harbert Avenue
Memphis, TN 38104–5329
January 22, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

The intention of this letter is so that I may go on record, per the Tunney Act, as supporting the settlement that was reached between the Department of Justice and the Microsoft Corporation. The court battles between these two entities went on for over three years, and cost millions of dollars. This is time and money that could have been put to much better use.

Microsoft did not get off easy by any stretch of the imagination, and has had severe restrictions placed upon it. For example, Microsoft will now have to turn over data and source code that makes up internal interfaces in Windows' products. This is a first in an antitrust settlement, and is not fair in that it makes them forfeit their intellectual property. I think this goes too far. Plus they will have to deal with a technical oversight committee watching over Microsoft's every move and testing their compliance with the terms of the settlement.

Enough is enough, this has gone on too long, cost too much money, and is too harsh on Microsoft. End this now. I support any settlement, even though it is not 100.*,'o fair, which ends the litigation against Microsoft.

Sincerely,
Vincil C. Bishop, Jr

MTC–00030007

568 Scenic Hills Drive
North Salt Lake, UT 84054
January 21, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I have been following the Microsoft antitrust case for quite some time now, and quite honestly this is getting a little out of hand. I am pleased that a settlement has been reached in the matter, and I believe it is in the best interest of the public to have the settlement finalized rather than dragged out any longer. The economy has suffered as a result of this seemingly endless suit, as has; the technology industry. Naturally, consumers have begun to suffer as well. Time is getting to be of the essence in this case, and I see no reason to reject this settlement.

After extensive negotiations, Microsoft and the Department of Justice reached an agreement on various terms that would prevent antitrust violations on Microsoft's part in the future and allow Microsoft's competitors more of an edge in the market. Microsoft has, for instance, agreed to reformat future versions of Windows so that non-Microsoft software will be able to be introduced and supported within the Windows operating system. Microsoft has also agreed to refrain from retaliation should sofa, are be introduced into the market that directly competes with Microsoft programs. I believe that these terms are fair; in fact, Microsoft has agreed to conditions that extend to products or policies that the Court of Appeals did not, in fact, find to be unlawful.

This settlement is, I believe in the best public interest. No further action needs to be taken at the federal level. I urge you to support the settlement and allow the Justice Department to move on.

Sincerely,
Hao Chen

MTC–00030008

Name: James W. Putt
Company: PFE Management
Voice Number: 445–2590
Fax Number: 445–2590
77 Mary Ann Lane
Wyckoff, NJ 07481
Date: Monday, January 28, 2002
Total Pages: 2
Subject: Microsoft Settlement
Name: Attorney General
Company: US Government
Voice Number:
Fax Number: (202) 3071454
Note: Please include my attached letter in you decision making process.
Jim Putt
James W. Putt
77 Mary Ann Lane
Wyckoff, NJ 07481
January 28, 2002
Attorile3, General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I would like to see the antitrust lawsuit against Microsoft settled. I feel that the case has been active long enough, and that ending it according to the settlement reached in

[vi] US v. Aluminum Co. of America, 148 F.2d 416, 431 (2d Cir. 1945).

[vii] ''Statement by Bill Gates on the Findings of Fact,'' www.microsoft.com/presspass/ofnote/11

November is fair. An important reason I would like to see the case settled is because of the concessions Microsoft is agreeing to. I have not felt positively about the company bundling Windows-related programs onto computers, and the new removal features will give users and computer manufacturers a wider range of choices. Microsoft's competitors will now be able to more easily place their own programs on the Windows platform. Because of that and the other provisions in the settlement, I believe settling the suit is in the best interests of the public.

Microsoft is approaching the settlement reasonably, and I urge you to do the same. Please end the case without additional delay.

Sincerely,

James Putt

MTC–00030009

5235 W Pershing Avenue
Glendale, Arizona, 85304
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 205301

Dear Mr. Ashcroft:

I have long been a Microsoft supporter and was angry to see a case being brought against them in the first place. Microsoft is a company that is being punished for simply being too successful and the government simply needs to keep their hands off of business. The settlement, that has taken three long years to work out, I think adequately covers many off the issues that people had with Microsoft. Because of the terms of the settlement, Windows will have greater compatibility with a wider array of products and relations with other software developers won't be tarnished because of this case. I feel that this case will improve things overall in the software industry, if that is it is ever over and done with.

I know that there will he many letters coming in concerning this issue, but I also know that a good deal of them will support Microsoft. Please pay attention to how much the average person care about Microsoft and end any further Federal litigation.

Sincerely,

Beverly Goyen

MTC–00030010

LTC Bernard R Buchta (US Army, Ret)
5100 Cameron Drive
Troy, Michigan 48098
.. E-mail: MrBuchta@home.com
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

As a six-year teacher of PCs and the Windows operating system, I would like to voice my strong support for settling the pending Microsoft case.

My experience as a PC instructor and my 26-year's as a military logistics officer has taught me the great value of standardization. Standardization buys everyone a lot. And, after standardization is achieved, ''the payback is forever.'' Witness: When we go to war, we want our bullets to fit into our allies' guns and rifles, and want theirs to fit into ours. We want to be able to share, substitute and interchange their artillery rounds, fuel, and rations, etc., with ours. It's called being ''Interoperable.'' It's a great force-multiplier and keeps costs down.

Standardization, by definition, creates efficiency. It also makes for convenience and ease of use. Now, today, we need standardization and efficiency more than ever. Therefore, the proposed solution seems like a fair compromise that will provide the most effective long-term results for consumers.

As seen with the International Standards Organization, the uniformity of Windows* and its supporting products is an asset to all computer users. This includes business and industry, schools, home users, . .. just everyone!

Technology is complicated enough for the average person, so the advantages Microsoft provides with the scope of their software presence is immeasurable in the form of America's almost seamless transition into the information age with young and old alike. Though I did not respect the government's case, the restrictions imposed with this deal are far more favorable than the possibility, of a corporate break up and chaos within the computer world. Based on the new, more even-handed approach of Microsoft toward competitors, and those who do business with competitors, plus the implementation of an objective technical committee of experts to ensure compliance, it seem to me it would be in the best interest of all parties involved to proceed with this agreement. This will save the consumer a great deal of heartache. It will also permit continued interoperability in future systems and software programs.

Thank you very much for your consideration.

Sincerely,

LTC, OrdC
US Army (Ret)

P.S.

You're doing a great job in the War on Terror.

Don't let them grind you down!

MTC–00030011

651 North Washington Street.
Wilkes Barre, Pennsylvania 18705
January 9, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to express my opinion in the recent settlement between Microsoft and the US Department of Justice. While I am glad to see Microsoft is not being broken up, I do believe some of the concessions Microsoft are making axe not in the best interest of the public. Microsoft must integrate their software with different software makers' products to allow for more effective development of windows interfaces and technology. But other concessions such as contractual restrictions and windows design obligations seem to go against intellectual property fights and patent laws.

I think that the IT sector is hurt badly enough without any further litigation brought against Microsoft by the nine states who oppose the settlement. I look forward m seeing Microsoft focusing on business and watching one of the premier companies in the world keep on thriving.

Sincerely,

Hudson Zhu

cc: Senator Rick Santorum

MTC–00030012

1651 Nocatee Drive
Miami, FL 33133–2540
January 28, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

We are writing to urge you to accept the pending deal in the Microsoft case. This agreement offers the competition plenty to work with to gain ground in the software market and should mean an end to this costly government action.

Microsoft is one of the great success stories in the history of U.S. business and should not be disbanded because their competitors can't gain consumer support and market share. With the pending settlement, the company has made extensive moves to give their rivals more opportunities to succeed, from licensing its technologies to disclosing its internal code for the Windows operating system. The added verification of a three-person group of experts to monitor the deal should provide added assurance of the plan's long-term effectiveness.

Please make sure to confirm this court-mediated compromise at the soonest time possible, as these steps provide plenty of options for computer makers and give software developers more than enough chance to compete. Any further action is unnecessary. Please make the right decision.

Sincerely,

Daniel Riemer
Rebecca Weymouth

MTC–00030013

Brian Showalter
14713 W. 149th Court
Olathe, KS 66062–4623
bshowalter@sbcglobal.net
January 28, 2002
U.S. Department of Justice
Antitrust Division
6O1 D Street, NW
Suite 1200
Washington, D* 20530–0001
Attn: Renata B. Hesse
Re: Comments regarding the Proposed Final Judgement
United States v. Microsoft
Civil Action No. 98–1232

As a United States citizen and experienced computer professional who has at times been compelled to work with Microsoft products, I would like to express my opposition to the settlement that has been proposed for the USDOJ's antitrust lawsuit against Microsoft. I feel that the terms of the settlement as currently specified are weighted far too heavily in favor of Microsoft, and that they will do nothing to prevent Microsoft from continuing to abuse its monopoly position to stifle competition and lock customers into its

products. The terms also significantly underestimate the lengths to which Microsoft has shown it is willing to go to root out loopholes in any agreements it enters into and exploit them in such a way that any intended restrictions on its behavior are effectively neutralized, T also feel that the terms will do literally nothing to ease the market barrier to entry for new products, particularly open-source products such as the Linux operating system, which may happen to directly compete with Microsoft's offerings.

There are a number of problems with the settlement which others have outlined and on which I will not 9o into further details. However, I am dismayed by the extent to which the proposed settlement focuses almost completely on attempting to restrict Microsoft's behavior on the Windows desktop and middleware platforms, to the virtual exclusion of server platforms and other operating system products that are offered or soon to be offered by Microsoft. In particular, the name ''Windows'' is mentioned 56 times in the document, yet no mention is made of the embedded operating system market or of Microsoft's explicitly stated intention to replace the Windows desktop and server platform with the .NET initiative. Furthermore, the definitions of ''operating system,'' ''personal computer,'' ''Microsoft Platform Software,'' and ''Windows Operating System Product'' in the document refer entirely to desktop operating systems intended for use by a single user at a time. This loophole would have the effect of rendering Section III.A moot in its entirety should Microsoft attempt to retaliate against an OEM that is attempting to market a competing SERVER platform on its products. Additionally, the proposed settlement does nothing to preclude Microsoft from dropping the Windows brand name altogether and continuing their customer lock-in, competition-stifling and monopoly-extending behavior on a similar but differently named platform.

Dan Kegel has done an excellent analysis which may be found online at (http://www.kegel.com/remedy/remedy2.html). Mr. Kegel's site also contains links to several other very compelling analyses. Due to the flaws which I and others have pointed out, the settlement as it is currently written does not serve the public interest and should not be accepted without considerable revisions to ensure that the market is not tilted unfairly in Microsoft's favor. Thank you for your time and for considering my point of view.

Sincerely,
Brian Showalter
Programmer/Analyst

MTC–00030014

Joyce Newell, M.S.W.
Licensed Clinical Social Worker
facsimile transmittal
Joyee Newell L.C.S.W
2729 Blair Stone Lane
Tallahassee. Fl. 32301
Phone (850) 871t-0279
Fax (850) 878–0459
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

It has been three long years of litigation between Microsoft and the Department of justice and quite frankly it is tirr a to put this issue to rest. I am an avid supporter of Microsoft and am very pleased that the settlement is acceptable at the federal level hut am puzzled as to the persistence of the nine remaining states, Is it not obvious to them the negative effects that this continued litigation has on the economy and on the Technology industry? I trust that; my views and those of others will contribute to the expeditious settlement of this matter.

Microsoft's innovations have done much to enhance productivity both on and off the job and is doubtless an Industry icon. This company has made significant contributions to the economy and the overall growth of our country and the sooner this matter is settled the sooner Microsoft is able to rededicate their full attention to doing what it does best—innovate Looking closely at the details of the settlement, we will see that Microsoft has already done very much to honor the terms. They have agreed to make their protocols and intellectual property license available to competitors and have made it easier for competitors to promote non-Micro, soft software within windows. The list of measures taken by Microsoft goes on and on and is a direct indication of their willingness to comply.

Sincerely,
Paul Newell
1362 Grovaland Hills Drive
Tallahassee, FL 32311

MTC–00030015

Mail Boxes Ete.
330 Old Steese Hwy
Fairbanks. AK 99701
(907) 452–2221 Phone
(907) 45%8329 Fax
Facsimile Transmission
481 Valley View Drive
Fairbanks, AK 99712–1327
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
January 24,2002

Dear Mr. Ashcroft:

Winter greetings from Fairbanks!

I am sending you this e-mail to register my support on behalf of the settlement in the Microsoft antitrust case. This is the best resolution available to America now due to a bad situation. The settlement required Microsoft, the attorney generals from the states involved, and the Department of Justice, to state their differences, make concessions, and reach compromises in front of the Federal judge appointed in an effort to avoid countless days of court battles and appeals. In the settlement, Microsoft basically kept itself intact in exchange for giving up its legal rights. Microsoft will release from copyright the software codes of the various internal interfaces and protocols allowing servers to interoperate for its Windows operating system programs. Microsoft must license its other software copyrights and patents to any company that wants to use them on reasonable terms. The ability of a business to enter into exclusive marketing agreements is often very important to its success. Microsoft will no longer be able to contract with computer builders to use its Windows operating system exclusively. Monitoring of the settlement terms by software engineering experts will make sure that the agreement is followed.

The settlement is in the best interest of America. Please use your best efforts to see that the Federal judge approves it. Thank you for your consideration and support.

Sincerely,
Bill Moberly

MTC–00030016

PO Box 1419
Missoula, MT 59806
Ph: 406–541–4545
Fax: 406–54.1–4543
To: Attorney General John Ashcroft
From: Larry D. Williams
Fax: 1–202–307–1454
Date: 1/28/2002
Re: Microsoft Settlement
CO:
PO Box 14-]9
Missoula, MT 59806
Certified Technologies Incorporated
Phone: 406–541–4545
Fax: 406–541–4543
Toll Free: 866–541.-4545
620 W Addison
Missoula, MT 59801
January 16,2002
Attorney General 3ohn Ashcroft
Justice Department
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

Microsoft revolutionized the computer age with the advent of its Windows operating system. The standardization and user-friendly operability offered by Windows has a wide appeal and is what pushed Microsoft to the front of the pack. Microsoft's success is due to great innovation and clever products, not surreptitious antitrust activity.

I am content with the pending settlement reached by Microsoft and the government because it is fair. The settlement provisions, such as Microsoft agreeing to share its Windows source code with competitors, represent a very positive development. It is important because they are also interconnected and comprehensive. Microsoft not only will avoid retaliating against software developers who promote software that competes with Windows, but also the computer makers who ship the aforementioned software are also covered. Together, these measures will lead to an increase in competition and therefore remedy the government's primary ''beef'' with Microsoft.

Everyone wins! Thanks.
Sincerely,
Larry Williams
Controller
Certified Technologies, Inc.

MTC–00030017

HIMALAYA ENTERTAINMENT
Renata H??
The Attorney, Antitrust Division

Department of Justice
801 D Street, NW, Ste, 1200
Washington, DC 20530

Dear Ms. Hesse:

I am writing in support of proposed consent decree between the D??trment of Justice and I believe It represents a fait ??ment for both sides.

The lawsuits here been dragging along for nearly four years now and have cost taxpayers $36 million—enough is enough. Let's move forward with this agreement good of the country. Please feel free to contact me for more information, but my position is clear—let Microsoft get back to work and stop w??ting any more tax do?? in pu?? of these lawsuits.

MTC–00030018

Renata Hesse
Trial Attorney, Antitrust Division
Department of Justice
601 D Street, NW, Ste. 1200
Washington, DC 20530

Dear Ms. Hesse,

This letter is to express my strong support for the proposed settlement between the Department of Justice and Microsoft, It is a fair settlement to the antitrust lawsuit. Fair means that it is a compromise which all sides can live with.

This issue has been going on for more than three years. It has gown into multiple lawsuits and the millions of dollars. The proposed settlement gives the opportunity to close part of the issue. If both the DOJ and Microsoft have reached an agreement, let's move forward for the good of the economy and in the bigger picture, the good of the country.

Sincerely,
Katteena Salgado

MTC–00030019

January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

During these times of economic strain, it is important for us to watch our spending, and to focus on production. After hearing that the recent Microsoft settlement may be even further delayed, I felt the need to write you. After years of well thought out negotiations, it is time to let the terms of the settlement speak for themselves. I support the settlement as it stands

The terms of this settlement have teeth. Not only does Microsoft make various concessions to help promote non-Microsoft software, but they have also agreed to be monitored throughout the entire process. The settlement will require Microsoft to share information detailing the internal interfaces in Windows with its competitors, allowing them to more easily install their own software on machines that use Windows It is obvious Microsoft is willing to work with the many companies in the IT sector so that everyone can get back to business.

I urge you to help get the economy back on track. The delay of this settlement can only slow down our growth in the technology industry. The finalization of this settlement would be a step in the right direction.

Sincerely,
Paul W. Budd

MTC–00030020

January 22, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I would like to go on record as supporting the settlement that has been reached between the Department of Just?? a and Microsoft. The settlement finally brings an end to the three-year-old antitrust law suit that has been partly responsible for the sharp decline in America's economy. I can remember three years ago when the antitrust skill against Microsoft was first announced.

The stock market and economy immediately started to go down, and now we are in the middle of a recession I have no idea how economists working for the government did not notice the correlation between these two events. In any case, the settlement is fair. The increased information shoring and non-retaliation provisions should be enough to satisfy even Microsoft's harshest crities.

The settlement is the best thing that has come out of the ??titrust su?? between fi?? Department of Justice and Microsoft, and I fully su?? pert it.

Sincerely,
W??mda Bel??

MTC–00030021

January 22, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Attorney General Ashcroft:

As an active computer user, I would urge you to settle the case against Microsoft. I have heard repeatedly of the unfair advantages that Microsoft has over its competitors and believe this to be a ploy on the part of Microsoft's competitors in the industry.

I have owned a Palm Pilot for over five years while using Microsoft Outlook on my desktop computer. I have never had any synchronization problems with the two software programs. The charge that Microsoft is trying to squash its competition by making software that does not work with other programs is unwarranted. Please work to settle this case as quickly as possible so that all companies involved can focus their time and efforts on software not law suits.

Sincerely,
Barney Chapman

MTC–00030022

Holme Roberts & Owen LLP
Paul F. Moxley most VP@hro.com
Attorneys at Law
111 Last Broadway Suite !100
Salt Lake City; Utah 841I? ''5233
Tel (??1)521–5800 Fax (??01)521–9639
www.??ro.com
Salt Lake City
Den??r
Bou??er
Colorado Spring,
London

January 28, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoj.gov
VIA FACSIMILE COPY TO: (202) 307–1454
or (202) 616–9937
1ST CLASS MAIL TO:
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

My comments are made with regard to the proposed settlement in the Microsoft v. DOJ case. I believe it would be improper to allow Microsoft to enter a settlement agreement that does not guarantee that future antitrust violations will be prevented. Microsoft has been adjudged to have violated antitrust laws. Its conduct was so pervasive that the original trial court judge determined that break-up was the only remedy. That decision, but not the decision that Microsoft violated antitrust laws, was reversed on appeal to the Court of Appeals. The case is now back before a new trial court judge following the U.S. Supreme Court's decision not to review the case. The purpose of the remand is to determine the proper sanctions to penalize Microsoft for past conduct and to prevent future violations.

This determination should be made by the court and not by the parties. I am informed that the proposed agreement contains critical provisions that do not go far enough or that place too much discretion into Microsoft's hands. Failure to impose proper and adequate sanctions will set an unfortunate precedent for future antitrust cases and will do little to resolve the issues in the Microsoft litigation.

The court should resist the urge to adopt a settlement and hold hearings to make a proper determination.

Respectfully,
Paul T. Moxley
cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030023

Casey Jones
January 28, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

The Justice Department and State Attorney General offices' case against Microsoft was arguably unwarranted from its commencement.

As a concerned and active voting citizen, I am focused on how to keep taxes at a minimum in our state as well as serving as somewhat of a watchdog for the use of taxpayer money at the state level.

There has been no proof of consumer harm from the monopoly behavior of which this technology company is being accused. Yet, this suit continued seemingly gaining steam with every new wave of national media attention that came with it. At present,

consumers are no better or worse off than when it all started. Unless you consider their position as taxpayers, in which case they are much worse for the wear.

More than $I million has been spent by Iowa's state attorney office alone. Millions of tax dollars have also been spent cumulatively by the other states involved in the case and tens of millions more by the federal Justice Department.

Now after cycling through mediators and various bumps in the road toward bringing this case to an end, there is now a settlement proposed. The proposal is one that gives enough to satisfy both sides and addresses the consumer concerns. I urge you to accept it for the sake of the American taxpayer.

Sincerely,
Casey Jones
Attorney at Law
7216 Wilton Drive NE
Cedar Rapids, IA 52402

MTC–00030024

Angie Weible-Jones
January 27,2002
Renata Hesse
Trial Attorney
Anti-Trust Division
US Department of Justice
601 D Street, NW
Washington, DC 20530

Dear Ms. Hesse:

As an individual who owns her own business, I am very interested in seeing the Microsoft case brought to Its end. I congratulate the US Department of Justice for working hard to find a sound way to close this chapter In American legal history. One of the most amazing things about the technology industry Is that we are only just beginning. The innovations and great strides yet to come should be exciting to all of us. However, the costs and risks of Innovation are extremely high. Investors and creators must have the confidence and the will to move forward,

When the move was made against Microsoft, It was felt throughout the entire industry, This action coincided with falling technology stocks and loss of investment capital for start-up companies. The entire Industry felt the blow and its suffering is detrimental to our nation, When our economy was booming there was much talk about the New Economy and the leading role technology stocks had this economy. But this all ended about the time the government threatened Microsoft. This action raised a cloud of uncertainty around the technology industry and many Investors decided it was best to wait it out. It is interesting that when technology stocks began to slide, it hurt the entire market, If tech stocks rebound it can only be a positive sign for our economy, Investors may regain their confidence if the government ends Its case against Microsoft,

Additionally, when the technology industry slows down if no longer has the free??? case brought to an end. It is In all of our best Interests.

Sincerely,
Angie Weible-Jones
7216 Wilton Drive NE
Cedar Rapids, Iowa 52402

MTC–00030025

Ronald Skaggs
22801 N Briarwood Drive
Edmond, OK 73003.9425
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I think the three-year lawsuit against Microsoft is flawed and unjustified. Microsoft has not done anything that can be called monopolistic. Instead, Microsoft has done wonderful things for our nation, including creating jobs and wealth, as well as making technological breakthroughs. I think it is ridiculous that Microsoft is being forced to disclose interfaces that are internal to Windows operating system products. Microsoft has spent vast amounts of time and money to develop and innovate. They should not be penalized for being the most successful company in the IT industry.

I urge your office to finalize the settlement, although it is flawed, because the alternative of further litigation would be detrimental to our nation's IT sector and economy. I believe it is time to discard the liberal Democrat notion that every competition has to end up in a tie. Thank you.

Sincerely,
Ronald Skaggs
cc: Senator Don Nickles

MTC–00030026

BOB L JOHNSON
4276 EAST SOUTH SHORE DRIVE
ERIE, PENNSYLVANIA 16511
8995380
January 8, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr, Ashcroft:

I would like to tell you how I feel about the Microsoft antitrust case. I am in favor of the settlement and do not agree with the federal government's role in this whole issue. Under the settlement, Microsoft will have to share information with its competitors regarding the internal workings of Windows, allowing them to install their own programs on the operating systems. I am retired and use computers to communicate via email. Microsoft has done a fine job of'' bringing technology into the homes of everyday people, not to mention the thousands of jobs that the company has created. This lawsuit is a waste of tax dollars and I urge you to put an end to any federal action against Microsoft.

Thank you for hearing my opinion on this matter, and again, I support the settlement and hope to see it implemented as soon as possible.

Sincerely,
Bobby Johnson
cc: Senator Rick Santorum

MTC–00030027

STA America
225 Lennon Lane. Suite 110
Wa??nut Creek, CA 84588
FAX 925.955–9993
January 23, 2002
Renata Hesse Trial Attorney, Antitrust Division
Department of Justice
601 D Street, NW, Ste. 1200
Washington, DC 20530

Dear Ms. Hesse:

I write in support of the proposed comet decree between Microsoft and the Department of Justice, After four years and $35 million spent pursuing the lawsuit, it is tune that the country move On to more pressing business.

Microsoft is being adequately reprimanded by the proposed agreement, as the settlement would address many of the major charges against Microsoft. The company would be required to provide technical details to help rivals make products compatible with the Windows operating system. It also bans exclusive* contracts with computer makers that put rival software vendors at s disadvantage.

Prolonging the settlement would deliver a severe blow to California's already shaky financial situation, as our state is expected to pay the lion's share of the remaining trial costs. This is a fair deal—but more importantly, it is time to put tiffs lawsuit behind us for the good of taxpayers. I urge you to move forward with the agreement.

Sincerely,
Robert Branzuela

MTC–00030028

CENTRAL CALIFORNIA
HISPANIC
CHAMBER of COMMERCE
Serving the Central Valley Business Community from Stockton to Bakersfield Since 1984
Renata Hesse
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

Our chamber finds the ongoing pursuit of Microsoft through litigation a very bad precedent to set for business in America Microsoft has succeeded on a global scale and revolutionized the way America, and the world does business.

The business community has always supported the government in actions that best serve the interests of the nation. With that in mind we ask you to take the settlement now on the table between Microsoft and the Federal Government. Ultimately, this long and expensive law suit is proving detrimental to Microsoft, tax payers and for the business community at large. You have the opportunity to bring it to a close. Again we strongly urge you to accept the settlement.

Thank you for your time on this issue.

Sincerely,
Antonio Gastelum
Executive Director
Central California Hispanic Chamber of Commerce
1900 Mariposa Mall, Suite 105. Fresno, California, 93721
(559) 485–6840 office . (559) 485–3738 facsimile . (559) 977–7030 mobile/m??g
cchispanicchamber@sbcglobal.net

MTC–00030029

Fernandez Translation Services
January 23, 2002
Renata Hesse
Trial Attorney, Antitrust Division
Department of Justice
601 D Street, NW, Ste. 1200
Washington, DC 20530

Dear Ms. Hesse:

I am a translator and a bilingual aide in the Alhambra School District, and have been working in education for more than 15 years. I know the problems of our school system first hand, and know that increased funding can go a long way towards improving the quality of education our children receive.

That's why I can't believe our federal government has spent $35 million of taxpayer dollars on the antitrust lawsuit against Microsoft. That money is sorely needed in our schools, and could have gone to solve real problems facing our children. The only positive note is the proposed consent decree between the company and the Department of Justice. If the government and Microsoft have come to an agreement, I say let's ratify it and get on with Solving real problems facing real people. I support the proposed consent decree not only because it addresses the major charges against the company; it allows our leaders to get back to work on the greater issues affecting ordinary citizens.

Sincerely,
Sylvia Fernandez
304 N. Hidalgo Ave., Alhambra, CA 91801
(626) 300–0810

MTC–00030030

Gino's Primo Pizza
''Serving, Southern California for Nearly 20 Years''
January 23, 2002
Renata Hesse
Trial Attorney, Antitrust Division
Department of Justice
601 D Street, NW, Ste. 1200
Washington, DC 20530

Dear Ms Hesse:

As a small business owner, I don't want the government telling me how to run my business—but I understand the validity of the antitrust lawsuit against Microsoft. I also understand that the lawsuit has stretched out to four years—and has cost taxpayers $35 million.

I don't want my tax money going to waste—I want to see it go to help our schools and our healthcare system. I would also like to see it help end the energy crisis—something that directly impacts my business. So that's why I'm writing to support the proposed consent decree between Microsoft and the Department of Justice.

From my understanding, it has a little something for everyone—the major issues against the company are addresses without preventing Microsoft from innovatin8 new technology or responding to the needs of its customers.

Let's put this lawsuit behind us and get on with the nation's business. Feel free to call me if you have any questions.

Sincerely,
Joseph Harvey
Owner
717 W. Las Tunas Dr., San Gabriel, CA 91775 626.576.5945

MTC–00030031

Thea Perrino, MPH
206 Chumalia St., Ste. 3F
San Leandro, CA 94577
510.483.6143
January 23,2002
Renata Hesse
Trial Attorney, Antitrust Division
Department of Justice
601 D Street, NW, Ste. 1200
Washington, DC 20530

Dear Ms. Hesse:

As an alcohol prevention specialist working with at-risk youth, I am deeply concerned that taxpayer dollars have been used to draw out the antitrust lawsuit against Microsoft for almost four years. The $35 million spent pursuing the suit could have gone a long way towards funding youth programs throughout the country.

I understand that a proposed consent decree has been reached between the Department of Justice and Microsoft. I support this agreement—it's time that we let everybody get back to work solving the real problems facing our nation.

Please feet free to call me if you have any questions.

Sincerely,
Thea Perrino

MTC–00030032

Jennifer Zago, RN
360 S. Euclid Ave., #332
Pasadena, CA 91101
626.584.6769
January 23, 2002
Renata Hesse
Trial Attorney, Antitrust Division
Department of Justice
601 D Street, NW, Ste. 1200
Washington, DC 20530

Dear Ms. Hesse:

As a registered nurse, I have firsthand knowledge of our nation's woeful healthcare system. Many of my colleagues are confronted with shortages and inadequate supplies on a dally basis, That Is why I am deeply troubled by the federal government's continued pursuit of the Microsoft lawsuit. These lawsuits have been drawn out for four years, costing taxpayers upwards of $35 million. That money is sorely needed in our healthcare system, and could have been put to good use by doctors and nurses throughout our country.

I understand that there is now a proposed consent decree on the table between Microsoft and the Department of Justice that would address many of the major charges against the company. I support this agreement. It's time that we let everybody get back to work solving the real problems facing our nation, like fixing our healthcare system and getting more funding to hospitals,

Please call me if you have any questions.

Sincerely,
Jennifer Zago

MTC–00030033

Edward D. Failor, Jr.
2610 Park Avenue
P.O. Box 747
Muscatine, Iowa 52761
Renatta Hesse
Antitrust Division
Department of Justice
601 D Street, NW—Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

I am writing to express my support for the settlement Judge Kollar Kottely is considering to end the US Department of Justice's antitrust suit against Microsoft.

As Vice President of Iowans for Tax Relief, I have monitored the suit against Microsoft from its inception. I stand in stark opposition to my Attorney General Tom Miller's dogged pursuit of it. I believe this case has been a waste of taxpayer dollars at the state and federal level. It has also been an albatross around the neck of the technology industry, making it unattractive to investors and uncertain for companies making long-term decisions.

It is important to the high tech industry, taxpayers and investors to end this case as soon as possible. The settlement that the DOJ, nine states and Microsoft have agreed to is a very good deal for the government and achieves what is most important: ending the lawsuit.

Taxpayers have been bearing the negative impacts of this case from the beginning. They have been funding the suit at the state and federal level—without their consent. They have seen their retirement funds suffer through the downturn the stock market has taken since the ruling for a breakup of Microsoft was made back in the Spring of 2000.

I urge Judge Kollar Kottely to approve the proposed settlement in this lawsuit in order to stop the needless damage done to American taxpayers throughout this process. Thank you for accepting my comments as part of the court record.

Sincerely,
Edward D. Failor, Jr.
Vice President
Iowans for Tax Relief

MTC–00030034

Jamie Hopkins
2610 Park Avenue
P.O. Box 747
Muscatine, IA 52761
Renatta Hesse
Antitrust Division
Department of Justice
601 D Street, NW—Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I support approval of the proposed settlement Judge Kollar Kottely is reviewing that would bring closure to the federal government's antitrust case against Microsoft Corporation.

As a grassroots taxpayer advocate, I know firsthand that ending this suit is a priority for taxpayers across Iowa. It is an issue that comes up at many meetings and in telephone conversations with activists on a regular basis.

Taxpayers want to see the suit ended, not just to end the waste of their money, but also to send the message that the marketplace is where decisions about the success and failure of businesses should be made and not courtrooms.

I am hopeful that the judge will approve the settlement and bring an end to waste of federal taxpayer dollars that have been spent on this suit. I appreciate the opportunity to register my opinions on this important issue.

Sincerely,
Jamie Hopkins
Development Director
Iowans for Tax Relief

MTC–00030035

Jeffrey R. Boeyink
EXECUTIVE VICE PRESIDENT
IOWANS FOR TAX RELIEF & TAX EDUCATION FOUNDATION
2610 PARK AVENUE
MUSCATINE, IA
52761 319–284–8080
January 28, 2002
Renata Hesse
Trial. Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I am writing to submit my position on the Microsoft antitrust case. There was no outcry from taxpayers for action in this, case. Rather, competitors implored the * federal government to make sweeping regulatory decisions picking winners over losers in the market.

Iowa attorney general alone spent more than 3,000 hours working on this landmark antitrust case filing a federal court document asking for $1.1 million to reimburse ''the. state* for the time. Altogether, 19 states tendered a $13 million tab from lawsuit expenses and it has been estimated that the federal government spent, some $30 million.

Nine of the states, the Department of Justice, and Microsoft saw fit to settle. There are many more important issues facing. America and taxpayers deserve to have their funds utilized in a responsible manner, which best serves them With a fiercely competitive technology industry Microsoft, like* any business or individual, should be afforded economic freedom.

I urge you to deliver closure for taxpayers in this case and support the proposed settlement.

Cordially,
Jeff. Boeyink
Executive Vice President
Iowans for Tax Relief

MTC–00030036

Richard R. Phillips
Attorney-at-Law
300 E. Second
Muscatine, IA 52761
January 28, 2002
Attention: Renata Hesse
Judge Kollar Kottely
U.S. Department of Justice, Antitrust Division
601 D Street, NW, Suite 1200
Washington, DC 20530

Dear Judge Kollar Kottely:

I am baffled by the fact that the Microsoft antitrust suit has gone this far. Unfortunately, the lawsuit has had serious repercussions not only on Microsoft, but also on the economy and the tech sector in particular. It is time to bring closure to this case so the economy can begin to rebuild.

Even through the economic turmoil this case has created, the public has seen a variety of new products introduced by many different companies. There is real competition in the software industry. So many of us are now plugged into the web, a service that actually bombards us with free software and offers from hundreds of software companies. Many of us have unexpectedly become dependent upon high tech in our work and personal lives and are using products from a wide variety of companies.

Just think how much more innovation and creativity there will be in software and hardware when this lawsuit is ended and the threat of government intervention in the tech marketplace is shelved. I hope you will see to it to approve the settlement in this case. I believe it to be in the best public interest.

Sincerely,
Richard R. Phillips

MTC–00030037

January 28, 2002
Ms. Renata Hesse
Trial Attorney Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

Free enterprise is what made our country a leader in so many sectors of the global marketplace. Today, the nation's has economy weakened and we are facing serious economic concerns. During this difficult time, many of us are tightening our belts and curtailing our own personal family budgets. I hope you will agree that now is the time, to do the same within our government.

In the antitrust case against Microsoft the total to the federal government as of July 2000 was an estimated $30 million dollars in taxpayer funds. The suing states spent millions of state tax dollars on top of that.

The majority of participants reached a long awaited resolution in this case. We applaud those state attorneys general who signed on to this proposed settlement—unfortunately our state attorney general is notably absent .from that list. Nevertheless, settling this case now is the right thing to do for American taxpayers.

Those who came together on this settlement have found a conclusion that will have positive effects for the industry and consumers—those for whom the case was originally brought about. I urge you to approve, the settlement before you.

Thank you for your time and careful consideration.

Cordially,
Edward D. Failor
President
Iowans for Tax Relief

MTC–00030038

DARTMOUTH HITCHCOCK MEDICAL CENTER
1 MEDICAL CENTER DRIVE
LEBANON, NEW HAMPSHIRE
03766
FACSIMILE TRANSMISSION
DATE:1/28/02
FAX #:1–202 307 1454
TO: MS ??
ATTENTION:
NUMBER OF PAGES (INCLUDING COVER):2
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SECTION OF GIM
RETURN FAX #: (603) 650–8770
RETURN TELEPHONE #: 603 ??
Mark Countermarsh
39 Evarts Read
PO BOX 37
North Hartland, VT 05052
January 27, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Attorney General Ashcroft:

This letter is to ask you to give your support to the proposed agreement between the Department of Justice and Microsoft. I understand there is a 60-day period in which public comment is allowed, and I feel it is my duty to encourage your support of this agreement. There is no need for any further Federal action.

Microsoft has provided so much to this country through creating jobs and opening the way for technological innovation in the software industry. I don't feel it should be punished for its success at the expense of weak competition. The agreed terms provide a major opening for other players to build market share and should be quite satisfactory to Microsoft's opponents. Software developers will benefit from access to Windows internal interfaces and server protocols and will even be able to license Microsoft technology while marketing themselves without obstacles due to computer maker's business limitations,

Please move forward with this plan and allow the competition to prove their worth in the software market without the industry disruption of a corporate break up. Our economy will respond, and so will the general public, to this very fair decision being implemented without further delay, I appreciate your support.

Sincerely,
Mark Coutermarsh

MTC–00030040

Microsoft''
January 26, 2002
Attorney General Ashcroft, USDOJ
950 Penna. Avenue, NW
Washington, DC 20530–0001

Dear AG Ashcroft,

I believe that your decision to settle this Microsoft suit was a wise one. Anytime that our government takes upon itself the rather extreme position of suing a private business is serious indeed. It is important for our government to encourage innovation and creativity through incentives, rather than discouraging them through convoluted, politically expedient lawsuits. It seems as if this case may have had less actual legal merit than it first appeared. In these days, we should remain especially vigilant at concentrating on far more important issues like national security and budgetary problems. It is good for us to settle this case and move on to these more important matters. The settlement does an excellent job of answering for all the problems that competitors brought against Microsoft. By

allowing manufacturers their own say in how to configure Windows and competitors more access to source code that will improve their programs'' ability to operate in Windows, Microsoft is going well beyond what has been asked of them.

Thank you for your foresight and wisdom in this matter and thank you for taking the time to review my opinion in this matter. It is about time for the Justice Department ask the people who will be most affected by this decision how it will impact them,

Sincerely,

Clark Spencer

MTC–00030041

Craig Schannaman
P.O. Box 2001—??
January 22, 2002
R?? Hesse, Trial Attorney
A?? Division
U.S. Department of Justice
601 D Street NW, Suite 1.200
Washington, DC 20530

Dear Ms. Hesse:

My interest in the antitrust case, U.S. v. Microsoft, comes from my concerns as a former state legislative leader and as a satisfied customer of Microsoft products. It is no secret that Microsoft is in an incredibly competitive and combative business climate. Microsoft has maintained its position as the number 1 creator and distributor of office systems software by making sure its customers get the most innovative systems at the best prices. Perhaps this is the reason why this four-year-old case did not show that consumers wars getting the poorly served by Microsoft's business decisions.

I am very concerned about the precedents which could be set if this settlement agreement is not approved, and the ball is again tossed in the air to see where it may land next. Would Microsoft be forced to give away its intellectual property, thus removing its technological edge over its competitors? Is the government going to begin micromanaging the affairs of information technology research and development, thus making it virtually impossible for any IT firm in the United States from maintaining a world leadership status? After four years in the courts, this case should have examined every possible aspect of Microsoft's business pr??tices. I trust that the U.S. Department of Justice and nine of the 18 states in this case used good judgment in reaching their settlement.

I hope that it is allowed to end this case and allow the benefits of the settlement to help kids in disadvantaged schools. Thank you for considering any letter in this public commentary on the settlement.

Sincerely,

Craig Schaunaman

MTC–00030042

JOHN L. WILDS
LAWYER
3RD FLOOR THREE HUNDRED BUILDING
300 NORTH ??AKOTA AVENUE
SIOUX FALLS, SOUTH DAKOTA 37104–6026
TELEPHONE (603) 332.1822
TELECOPIER (605) 332–0304
January 25, 2002
Renata Hesse, Trial A??orney
Antitrust Division
U.S. Department of Justice
601 D Street NW, Su?? 1200
Washington, DC 20530

Dear Trial Attorney Hesse:

I am submitting my comments to support the settlement in U.S. vs. Microsoft Corporation, because the settlement has answered all of the significant issues which have survived the court process so far. While there are those who oppose this settlement, it would be senseless to turn it away. I understand it has taken the Justice Department four years and about $40 million to reach this point. It is time for this case to be allowed to come to a conclusion.

No doubt, Microsoft's competitors will continue seeking any means to gain an advantage over Microsoft inside the marketplace and outside the marketplace. Bringing issues to court is an appropriate action when there are significant issues to be answered.

I think this case has answered these issues, and now it is time for the case to be ended. A decision to not accept the settlement, I believe, would be perceived as an invitation to a fishing expedition which will not serve justice for Microsoft or any other company which is involved in the creation and marketing of new software technologies.

I appreciate your attention to my remarks.

Very truly yours,

John L. Wilds

MTC–00030043

01/28/2002
Renata Hesse
Trial Attorney
Antitrust Division
U.8. Department of Justice
6Ol D Street NW—Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

The best interests of the future of Information technologies are found in the settlement agreement between the Microsoft Corporation and the U.S. Department of Justice. The antitrust case, to a large extent, plowed new ground in the development of regulating a company like Microsoft, which has moved very quickly in the development of its software systems. I have been told the settlement answers the issues that prevailed in the court process.

As a state legislator, I am particularly interested In the benefit to schools with high percentages of low-income children and families. South Dakota has a number of school districts that would be eligible for the supply of hardware, software and support in this offering. I think it is a fair method of resolving a case like this, and it will matter quite a lot to the future of the children included in these school districts.

I appreciate your attention to my statements.

Sincerely

Jim Hundstad

State Representative

Logislative District 2

MTC–00030044

South Dakota Legislature
State Capitol,
500 East Capitol,
Pierre, South Dakota 57501–5070
Senate Chamber
Renata Hesse, Trial
Attorney Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
January 28, 2002

Dear Ms. Hesse:

The settlement agreement in U.S. v. Microsoft can result in a major benefit to education in South Dakota because of the children who would be identified to receive computer systems. I understand the settlement terms seek to send the systems to school districts whore there are disproportionate numbers of children who qualify for the fedela1 school lunch aid program. In South Dakota, there are quite a few school districts which would qualify under that criteria.

State government in South Dakota has focused on making internet use ubiquitous via the Wiring the Schools Program. Our state seeks to use long distance learning technologies to make sure our rural school districts are on even ground with, the wealthier urban school districts. The availability of computer systems via the settlement will make this technique a reality for more and more children,

My letter is sent to support the settlement for the benefits it would bring children, arid to express my hopes that this four-year-old lawsuit can be allowed to be put to rest. The settlement fairly and adequately addresses the pertinent issues in the lawsuit, and the settlement will allow good things to happen to children who need the help, Thank you.

Sincerely,

John McIntyre

State Senator

Legislative District 12

MTC–00030045

South Dakota Legislature
State Capitol,
500 East Capitol,
Pierre, South Dakota 57501–5070
House of Representatives
January 28, 2002
Renata Hesse
Trial Attorney
Antitrust Division
US Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

My legislative district is home to or borders on the Yankton Sioux Tribe, the Crow Creek Reservation and the Lower Brule Reservation, as well as non-Indian school districts where you will find tow-income families and stressed financial resources for schools. The people in my district are quite diverse, not only in race, but also in terms of ethnic heritage, faith and occupation.

One cause we all agree on is the fact that a quality education will do more to equalize opportunity for children than anything else. For this reason, I am looking forward to the settlement in U.S. v. Microsoft. The installation of up-to-date computers and systems in low income school districts will allow disadvantaged children equal access to

the wonderful learning tools found in the interest.

I also support the settlement became the antitrust case has fully lived its usefulness to addressing the legal questions involved. It is doubtful that extending this case beyond it's 4-year-old lifespan is going to be productive, I hope this settlement wig. be enacted so that everyone concerned may benefit. Thank you for your attention to my letter

Sincerely,
Sam Nachtigal
State Representative
Legislative District 25

MTC–00030046

Joanne Lockner
Country Visions
301 3rd Street MW/
St. Lawrence 57373
Studio/Ho??e
605–853–2756
Renata Hesse
Trial Attorney
Anti-trust Division
US Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
January 25, 2002

Dear Ms. Hesse:

My comments are offered here to show my support for the Settlement recently obtained between the Justice Department and the Microsoft Corporation, support this settlement because it will bring an end to a case which has remained in the courts long enough to resolve the relevant Issues Involved.

Beyond the Issues, however, I strongly encourage this settlement because it will surely bring a better quality education to children who need the most help in South Dakota and elsewhere. I have served as a State Representative in central South Dakota where them are school districts in farming and ranching communities which are considered remote and low income. Pr??sentiy, the state is expanding its efforts to Improve the quality and availability of tong distance learning. I know there are plenty of rural school districts wh??ch need competent computer systems to take advantage of the Internet and the state's educational efforts. As an ?? who supports the Ar??sts in Schools P?? am excited by the possibilities of helping more ch??dren enhance their lifestyles through the arts via the Internet.

Thank you so much for allowing my comments to be considered. I think the settlement is a healthy step forward for children and for justice.

Yours very truly,
Joanne Lockner

MTC–00030047

DR. NONA LEIGH WILSON
415 Medary Avenue
Brookings, South Dakota 57006
605–688–4365 SDSU Office—
605–692–3915 Residence
January 17, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Sate 1200
Washington, DC 20530

Dear Ms. Hesse: My letter is intended to articulate my support for the settlement reached in U.S. v. Microsoft and to help complete a four-year-old antitrust case which has addressed the issues which have been deemed valid through the court process. It is plainly clear that this case has had sufficient time and enough resources to fully and fairly consider all of the pertinent issues and develop a remedy that is appropriate to the findings involved.

Any further time and financial resources expended to search for additional issues would, in all likelihood, be a wasteful effort, and not worthy of the resources of the United States government. As an educator, I am very interested in realizing the befits to education and disadvantaged children that would result from the settlement. This penalty seems to be a wise and useful result of this lawsuit. Thank you very much for considering my input on this settlement.

Sincerely,
Nona L. Wilson

MTC–00030048

H??C Galloways
Electrical Consultants
P.O. BOX 375
Black Hawk, SD 57715–0375
(605) 787–4169
Fax (605) 787–5839
January 17, 2002
Renata Hesse, Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Trial Attorney Hesse: On the issue of the settlement in U.S. vs. Microsoft, let my comments show that I support it because the settlement will have great value to Indian children throughout western South Dakota. The settlement calls for Microsoft to supply computers, equipment, software and the technical support they require to the nation's neediest school districts, as defined by the criteria for federal school lunch aid to students. The U.S. Census Bureau has shown South Dakota has three of the nation's poorest counties, all of which are located on reservations. South Dakota also has plenty of low income counties and school districts in rural counties where farm incomes have floundered.

The settlement should be the last word in the Microsoft controversy. This case has had more than enough time and money to find remedies to the issues brought before the U.S. Department of Justice Antitrust Division. I think it says a tot that nine of the eighteen states in the case (South Dakota decided to stay out of the case) and the Justice Department have declared they have a settlement with the Microsoft Corporation. It's not my intention to retry the issues in this tatter because I have faith that everything which could be done to reasonably remedy the controversy has been done. Thank you for your attention to my comments.

Sincerely,
Henry Maicki

MTC–00030049

Fax
To: Renata B. Hesse
From:
Fax: (202) 307–1454 / (202) 616–9937
Pagas: 2 (includes cover)
Phone:
Date: 01/28/02
Re: CC:
. Comments:
CREW & CREW
Attorneys at Law 141 North Main, Suite 706
P.O. Box 923
Sioux Falls, SD 57101–0923
Michael B. Crew
Karen L. Crew
Anje L. Olseth, Legal Assistant
(605) 335–5561
FAX (605)335–762l
January 28, 2002
Renata Hesse, Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
RE: Settlement agreement in U.S. v. Microsoft

Dear Ms Hesse:

Please include my sentiments in the public commentary as a supporter of the settlement agreement. The sooner this case ends, the sooner all parties involved can move on to other matters.

From what I have been able to learn, the settlement ought to be in the final chapter in this case; it has taken four years to reach this point. I understand that the issues which ,,,ere deemed important by the court have been satisfied in this settlement. I believe, the Department of Justice made a wise decision to close the book on this issue after an exhausting effort to examine all pertinent issues.

Thank you including my remarks on this commentary.

Sincerely,
KAREN L. CREW

MTC–00030050

PUBLIC
POLICY
SYSTEMS
INC.
130 Bowdoin Street, Suite 1108 ??
Boston, MA 08108
Honorable Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
c/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
RE: U.S. v Microsoft

Dear Judge Kollar-Kotelly,

I would like to express my dissatisfaction with the settlement between Microsoft and the Department of Justice.

The settlement made virtually no impact on protecting consumes from companies like Microsoft who have monopolies in the marketplace, It has many loopholes and its level of enforcement is questionable, In addition the settlement leaves Microsoft in a position to continually raise prices for their products. This does not provide consumers the level of protection they need for greater consumer choice. It is my understanding that many consumer groups have opposed the settlement.

The agreement states that Microsoft ''shall not enter into any agreement'' to pay a software vendor not to develop or distribute software that would compete with their products, but it is Microsoft that will he the final decision maker on that provision, The agreement also ??tates that Microsoft must share certain technical information, but only if it would not the their security or software licensing. Again, Microsoft will be the final decision maker regarding this matter. The settlement does nothing to deal with the effects on consumers and businesses of technologies such as Microsoft's Passport.

I find rhea, inadequacies to be too broad to accept this settlement. I hope that Microsoft will not be able to continue to preserve its monopoly while consumers and competitors are subject to the practices that are supposed to be protected by antitrust laws.

Thank you for your time,

Regards,

William A Carito, President

CC: Attorney General, Tom Reily

MTC–00030051

January 27, 2002
Renata Hesse
Trial Attorney
Anti-Trust Division
U.S. Department of Justice
601 D St., NW
Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

Thank you for your service as U.S. District Court Justice.

The agreed upon remedies in the Microsoft case allow computer operating equipment manufacturers limited access to Microsoft Windows to manipulate it in a way that fits their specific needs and product. Permits some adjustments to the Windows operating system to be made by the average user. It affords other technology providers—including Microsoft's direct competitors—the benefit of access to technical specifications. It sets in motion a machine to enforce these remedies.

It does the equivalent of disclosing the recipe for the McDonald's Big Mac special sauce to all competing fast food restaurants. The fact that this only applies to Microsoft and none of the other software or operating system manufacturers provides all its competitors with an unfair advantage.

Yet, Microsoft agreed to settle with these remedies in an effort to end this relentless infinitely long litigation. Hopefully you will add your consent to this agreement.

Thank You,

Jill Stutts

5520 Antler Drive

Cedar Rapids, Iowa 52411

MTC–00030052

January 28, 2002
Jason Deans
7412 N. Thorncliff Place
Raleigh, NC 27616
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax: 202–616–9937

Dear Ms. Hesse:

As the government accounts representative for Comark, a leading regional tech firm, I am thrilled that the long awaited settlement between Microsoft and thee federal government is finally at hand. All we need now is for the Judge to approve the settlement. The Judge, in my opinion, has more than ample reason to do just that.

First of all, let me say how well I believe that government and business can work together for mutual prosperity. It can and does happen—EVERY DAY! I see it when I call on governmental agencies, officials and departments.

I enjoy using technology to build a bridge between government and business. It makes perfect sense. After all, the emerging technologies of today make every segment of society more productive—it makes no difference if the end user works for the public good or a private interest. Let's forge ahead and revitalize the American economy. Let's renew our commitment to research and development, so that we continue to lend the world in productivity and quality. Let's create a new spirit of cooperation between the government and private enterprise. Let's show the rest of the world that American don't take recessions lying down—that we will act to strengthen our country and assist our countrymen.

Now is the time for bold action. I request that Judge Kollar Kotelly approves the settlement.

Sincerely,

Jason Deans

MTC–00030053

January 28, 2002
Jill Green
4660–302 Tournament Drive
Raleigh, NC 27612
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

During my tenure as Assistant Director of Admissions at North Carolina State University, I have witnessed many technological innovations and trends. Most of these have involved the use of a computer, and many involved Microsoft products.

While I cannot say with exact certainty why the federal government pursued an antitrust lawsuit against Microsoft, I can tell you that it has had a devastating impact on technological innovation while it has transpired. Before the lawsuit, tech companies were lauded for focusing on research and development at the exclusion of politics. In fact, few of the leading tech firms employed anyone to conduct government relations programs.

Microsoft learned quickly that its exclusive focus on making life more efficient for everyone had made its competitors struggle for market share. The competitors retaliated by getting into the political game. The lawsuit followed. Even today, Microsoft's competitors are lobbying to conti9nue the lawsuit endlessly.

We should support the federal government and Microsoft in their decision to settle the case. I urge Judge Kollar-Kotelly to approve the proposed settlement of the lawsuit. Let's allow research and development to march ahead.

Sincerely,

Jill Green

MTC–00030054

January 28, 2002
Tresa Jalot
829 Joyner Court
Wake Forest, NC 27587
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax: 202–616–9937

Dear Ms. Hesse: Given that my husband is a local television news personality, I follow the news even more keenly than I ordinarily would. I began working at a new job just a few short weeks ago, as the membership and marketing director for Heritage Golf Club in Wake Forest, North Carolina. Unfortunately, the news and my common sense tells me that many other folks won't be fortunate enough to find new jobs because of the poor economic conditions our country is in. We've got to change that.

Our government must demonstrate that it is serious about stimulating the economy. A great first step in that process would be to finish the job of settling its antitrust lawsuit against Microsoft. I think I speak for most American when I say, ''Enough already!'' Both sides have agreed to settle—it's time to move on to something else.

I believe that I also speak for executives who work in membership and marketing when I say that I'm much more efficient in my job because of Microsoft's quality products. Database management, communications, and publications are all professionally done with just a click of a mouse.

The American people choose Microsoft products because they make life better. Life will also be better for many Americans once this suit is settled. I request that 3udge Kollar Kotelly approves the settlement.

Sincerely,

Tresa Jalot

MTC–00030055

January 28, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Jennifer Sidbury
1425 Suncourt Villa Drive
Wilmington, NC 28409

Dear Ms. Hesse:

As a past Executive Director of the North Carolina Federation of College Republicans, it has been my pleasure to work with many delightful people in all walks of life. Attorneys, business executives and university faculty were heavily involved in the statewide organization that I ran. Most

were people of common sense, good judgement and fine moral character. Most wanted the common good to prevail in all political proceedings. I have always sought to emulate these people—the ones who act in the best interest of ALL of society.

It is in that spirit that I call on Judge Kollar Kotelly to approve the proposed settlement in the antitrust suit between Microsoft and the federal government. It's the right thing to do. People are hurting. We're in a recession. Let's move the economy... and the country forward by ending this whole affair.

Sincerely,

Jennifer Sidbury

MTC–00030056

January 28, 2002
Dan Mansell
Demco Construction
317 W. Second Street Clayton, NC 27520
Renata Hesse
Trial Attorney
Antitrust Division Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax: 202–616–9937

Dear Ms. Hesse:

I have always believed that a limited government is the best government. Our federal government should give businesses and families a hand up when they need it. Our federal government should never stand in the way of American progress.

I believe that the Microsoft antitrust suit has gone far enough. Microsoft is an industry leader. They deserve to be supported. I use Microsoft's technology to run my construction business. Start to finish, I use the many tools they offer to estimate, bid, and execute a job.

In short, their products help me meet a payroll. I want the feds to support Microsoft the way Microsoft supports me.

I request that Judge Kollar Kotelly approves the proposed settlement.

Sincerely,

Dan Mansell

CEO

MTC–00030057

January 25, 2002
To: Renata B. Hesse
Antiturst Division
U.S Department of Justice
601 D Street NW
Suite 1200
Washington, DO 20530–001
Subject: Microsoft Settlement

The following are my comments regarding the proposed settlement of the United States vs. Microsoft antitrust case.

Personal Background

I am Information Technology specialist who works primarily in Systems architecture, design, and development, Over the past ten years I have specialized in Information Security. I have been a user of Microsoft products (for both consumers and developers) since the early 1980s. United States w Microsoft Background The District Court and the Court of Appeals concluded that Microsoft had ''unlawfully maintained its monopoly power by suppressing emerging technologies that threatened to undermine its monopoly control of the personal computer operating system market.''

The Court of Appeals held ''a remedies decree in an antitrust case must seek to 'unfetter a market from anticompetitive conduct,'' to 'terminate the illegal monopoly, deny to the defendant the fruits of its statutory violation, and ensure that there remain no practices likely to result in monopolization in the future.'''

Comments

Scope of Protection Is Too Limited

Microsoft's competition in the Operating system area varies greatly in type and size. This competion includes:

. direct competitors, organizations creating different Operating systems (e.g. Linux)

. organizations that build applications and middleware that run ''on top'' of an operating system (e.g. Java and Netscape Communicator)

. organizations that customize operating systems for their clients (hardware OEMs)

. organizations that provide software equivalence of the services of one operating system on a different system or environment.

The proposed restrictions on Microsoft business conduct will provide protection to a subset of these Microsoft competitors. The majority of the Proposed Settlement focuses on providing relief for 1) organizations that provide middleware that run exclusively on Microsoft Windows products, and 2) hardware OEM vendors. There are only minimal changes in the Microsoft conduct to protect vendors of competing operating systems.

Only Large Competitors Are Protected

The size of organizations that develop software varies greatly. Even Microsoft started as a small number of people. Unlike many other businesses, there is not a requirement for a large capital investment to start developing software.

The restrictions on Microsoft conduct apply only to large organizations (both OEM and software developers). Not only does this not work to terminate the monopoly it creates new exclusionary and discriminatory practices which did not previously exist,

Scope of Interfaces to be Disclosed Is too Narrow

The Proposed Settlement requires that Microsoft disclose the APIs for its middleware. However, in the Proposed Settlement the definition of Middleware is so limited that it excludes many of the interfaces required by competitors, The Interfaces to be disclosed need to include not just Application Programming Interfaces (APIs) but all other data structures and protocols externalized by Microsoft software components. The Department of Justice chose not to pursue issues related to the comigling of software and yet the Proposed Settlement assumes to have sufficient knowledge of the separate pieces (middleware vs. operating system) to provide a working definition in the Proposed Settlement. As long as the definition of the Windows Operating Systems is outside the scope of the Proposed Settlement Microsoft will maintain the control over which interfaces must be disclosed. It would be more appropriate to require Microsoft to disclose ALL interfaces between all components of their products.

Not All Middleware Components are Identified.

Given that some of the Microsoft Middleware components that are subject to this settlement are mentioned in the Proposed Settlement, the ''.net'' interfaces, as the Microsoft followon to Java should be included, Given the complexity of the definition of Middleware provided in the Proposed Settlement, it would be desireable to include the complete list of all Microsoft Middleware. This list should be publicly available for the time period that the Settlement is enforced.

Not All Current Versions of Windows are Covered In the Settlement

All current versions of Windows that are based on Win-32 should be covered by the Settlement. This should at least include Windows CE and Windows XP Tablet Edition.

Too Many Restrictions on Disclosure of Security Interfaces

The Proposed Settlement places restrictions on the disclosure of Microsoft security interfaces in the name of National Security. I would suggest that the reverse is true. In the current environment it is important to nurture the development of security functionality. All Microsoft security programmable interfaces, protocols, and date structures should be fully disclosed. The only restriction should be that the content of some specific data elements may not be disclosed (private keys, etc.)

Limits on Which Organizations can Seek Disclosure of Interfaces

The proposed Settlement places restrictions on which competitors Microsoft must disclose their APIs. The competitors must be of sufficient size and have a valid business case. This allows Microsoft to chose which organizations they wish to compete. Even Microsoft in its earliest years would have failed these requirements. Given that in the current environment one of Microsoft's strongest competitors is primarily a volunteer organization (Lunix) it seems likely that Microsoft would not disclose any APIs to ''Free'' Software development organizations.

Poor Enforcement Mechanisms

A good settlement should include enforcement that is easily understood, quantifiable, and verifiable. There should be metrics that can be used over a period of time to evaluate the success of the Settlement. A good enforcement needs to provide quick resolution of issues related the Settlement for the business needs of both any plaintiff as well as Microsoft. Finally, them needs to be a sufficient motivation to insure Microsoft will not violate the Settlement.

The Proposed Settlement provides almost none of the above There is technical review by a three person team but all of their work will be confidential and not subject to review. There is no public or judicial review of the progress of the Settlement. The only option for handling misconduct, outside of the technical team, is to go back to court—one of the slowest ways to resolve any violations. Finally, given that them is no financial incentive required in this Settlement and that Microsoft earns billions of dollars using their current business conduct it is hard to see why Microsoft will be motivated to make any changes in their conduct.

Conclusion

The Proposed Settlement does not provide adequate changes in business conduct of Microsoft to provide a remedy that meet the requirements of the Court of Appeals mandate. In some cases the Proposed Settlement adds new herders to the competition to Microsoft Operating Systems and Middleware. Thus, the Proposed Settlement does not serve in the public interest. I recommend that the Proposed Settlement be rejected.

Sincerely,
Jerry L. Hadsell
2800 Woodley Road NW
Washington DC, 20008

MTC–00030058

Fax Cover Sheet
Date: 28 Jan 2002
To: Renate Hesse Antitrust Division
Company: Department of Justice
Fax: (202) 616–9937
From Harold R. ANDRLS Sr
Company:
Tel: (301) 935–0057
Number of pages including this one: 2
kinko's
4417 Hartwick Rd.
College Park, MD 20740
Tel: (301) 277–7543
Fax: (301) 779–6417
Comments:
Renata Hesse, Trial Attorney
28 January 2002
Antitrust Division
Department of Justice
601 D Street NW Suite 1200
Washington, DC 20530
Fax (202) 616–9937
e-mail microsof.atr@usdoj.gov.

On Shabbas, 26 January 2002AD, an unsolicited virtual message was deposited on my telephone requesting my immediate comments concerning the ''Microsoft'' litigation. Please for the sake of immediacy do not make the mistake of recasting the story of Genesis 25:29–34. The action taken must avoid the ??okology of yet another mons?? marching through-out the Lands of this World. The objective of governance should be to protect the rights and freedoms of People (be they individuals or organizations) against predicatory statements by any entity conspiring to sup press and gain absolute control or power.

In presenting and resolving this and similar issues, perhaps rite views of Dr. Herbert I. Schiller should be, considered. I understand that his observations are available in such works as ''Culture, inc.''/ ''Living in the number one country''/''Mass communication ,and American empire''.

In resolving the arguments, Please do NOT make the mistake of ESAU by selling ?? need of the moment to satisfy greed.

''Happy Iris'' & Trails!
Harold R. Andrus,??
3509 DePauw Pla??
College Park, MD 207404009

MTC–00030059

447 Larchwood Avenue
Trevose, PA 19053–4407
January 11, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing to express my opinion about the recent antitrust settlement between Microsoft and the US Department of Justice. In light of the recent terrorist attack and the ongoing war on terrorism, I think it is absurd that nine states continue to bring lawsuits against Microsoft in a case that seemed unjust from the start.

The settlement is too harsh to begin with since entering into third party exclusive distribution agreements have never been a problem in the past. Also, disclosing internal interfaces that Microsoft spent a lot of time and money to develop is a violation of their intellectual property rights.

I urge your office to free up Microsoft to allow them to focus on business. This will serve the public's best interests because only our strong industry leaders can rejuvenate economy.

Sincerely,
John Stern

MTC–00030060

Kory Nanke Letterhead—realtor / business owner
DATE
Judge Kolar Kottely
Renata Hesse, Antitrust Division Public Comment
U.S. Department of Justice
601 D Street, NW, Suite 1200
Washington, DC 20530

Dear Judge Kottely.

After years of litigation, the Department of Justice, nine state attorneys general, and Microsoft Corporation—the majority of the parties involved in the case—have agreed upon a settlement. It is now before you to make your judgment.

As history has revealed, there is often a six-month to one-year delay before the real estate market feels the effects of a significant economic change in either direction. An economic downturn had begun prior to the horrific events of September 11th. However, it was accelerated after that day. Those of us in the real estate industry are just beginning to feet the market soften.

In addition to the much appreciated efforts of President Bush and Congress to put forth an economic stimulus package to help generate a spark in the economy, settling this case is another small, but important step in that direction.

I urge you to accept the settlement that the majority of the parties involved in this case have agreed upon.

Sincerely,
Kory Nanke

MTC–00030061

Jim Grabowski
487 Covewood Boulevard
Webster, NY 14580–1107
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

Now that Microsoft and the Government have reached an agreement, it appears that the states are doing to Microsoft what they did in the tobacco suit. They wish to pursue further litigation in order to fund their state governments, and I think it's ridiculous.

Microsoft did not get off easy. Not only did they agree to disclose various Windows internal interfaces to the competition, they also agreed to not enter into any agreements obligating any third party to distribute or promote any Windows technology exclusively.

Let's move on. Our government should focus on more pressing issues, and leave decisions about software company size and success up to consumers.

Sincerely,
Jim Grabowski

MTC–00030062

Fax
To: Renata Hesse
From: Kenneth Brown
Fax: 202–616–9937
Pages: 7
Phone: 202–307–1454
Date: 1/28/2002
Re: Tunney Act Comments
CO:
Please call 703–608–4222 if you have any problems with this submission. Ken Brown
January 28, 2002
Renata Hesse
Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street, NW Suite 1200
Washington, DC 20530
e-mail: microsoft.atr@usdoj.gov
Re: AdTI Tunney Act Comments

The Alexis de Tocqueville Institution submits these comments under the Tunney Act. The Alexis de Tocqueville Institution is an independent non-profit education and research organization described in detail at www.adti.net. The mission of AdTI is to provide helpful policy analysis to advance the ideas of democracy and freedom around the world.

Sincerely,
Kenneth Brown
President
Telephone Number(s)- office 202–548–0006, cell 703–608–4222

Why the Microsoft Case Should Be Settled
Alexis de Tocqueville Institution
Washington, DC
January 22, 2002

The Hard Truth About Invention in the U.S. Marketplace Two courts have reaffirmed that Netscape nor its browser were shut out of the marketplace. The browser wars produced a winner and a loser; and Netscape was the loser. However, within thousands of briefs and legal arguments criticizing the U.S. vs. Microsoft settlement is the repeated concern about the future of new Netscape's in the technology sector. Almost every other issue is tangential, and we must differentiate the arguments properly.

We see an interchanging of terms being used, specifically, ''....the settlement should make the marketplace safe for firms to compete with Microsoft...'' vs. ''...the settlement should be safe for firms to introduce new products...ie. like Netscape

Navigator...'' The Department of Justice has proposed a settlement that properly speaks to its duty—to introduce a remedy which allows firms to safely introduce new products. Microsoft has agreed to the rules; which include a mandate that Microsoft disclose any information necessary for rival firms to produce fully interoperable products with Windows for competing software and servers.

The reason why critics want a settlement which goes further is because they want Microsoft completely out of the way. The case is merely obfuscation. With billions of dollars in resources, Microsoft's competitors want every advantage because 1) the marketplace for new technology is overwhelming and having a chief competitor eliminated makes things a little easier and 2) the competitors lobbying for a far-reaching settlement are among the most aggressive and fierce technologists in the world.

The reality is that the marketplace, particularly the marketplace for new technology has never been safe from a competitor. What Microsoft's competitors want is an oxymoron because no technology product is ever ''competition-free'' or guaranteed success in the marketplace. This benefits consumers, the country and ironically inventors themselves, which makes it relevant to observe the reality of the marketplace (beyond the courtroom) for a moment. Great Inventors Must Be Fierce Strategists

Every inventor and innovator small and large must face the formidable odds to succeed in the marketplace for new technology. Since the day the first idea was registered in the U.S. patent office, countless inventions and innovations have become cinders in the furnace of competition. Relentless markets in America only sustain the fiercest competitors, without exception. Technologists rewarded with fabulous wealth and fame did so at the expense of employing hard-hitting, merciless strategies. Regardless of ingenuity, technologists without the ability to navigate in the marketplace were failures; and lucky to even receive credit as creators of their own inventions.

The marketplace for food, furniture and other goods each have their challenges. But, the technology marketplace is unique because it demands both inventive genius and keen business savvy. The combination of the two is rare in individuals and corporations, and particularly scarce among pure inventors such as physicists, mathematicians or engineers. From the light bulb to the PC operating system, every innovator that history has been kind to, had the indomitable capability to merge intellectual power with commercial insight. In the end, technologists with these qualities became far more successful than their counterparts with better inventions or greater talent.

Competitive Inventors Preserve U.S. Leadership

However, America's owes its technological leadership in the world to its competitive battleground. Although education, vigorous intellectual property rights and democracy are also credit to American invention, its ability to surface inventors with commercial savvy, make it a source of the most competitive innovations in the world. In the end, the U.S. is a loader in world-changing innovations, at the expense of sustaining a ''bare-knuckled'' marketplace.

After an excruciating and lengthy examination by the court system, the federal government and 9 states (actually 41 when you consider the states that never filed suit) agree on the U.S. vs. Microsoft settlement. Regardless of the differences among the parties, we can't expect any ruling to settle the differences between Microsoft and its competitors. However, this dissatisfaction is in the best interest of our country and will only spawn better ideas and products that will propel the U.S. to new heights. U.S. technological leadership depends on the undying will of its innovators to be no. 1.

The ''Electric'' War Between Edison and Tesla

The debate over Windows is similar to many stories about wars between rival innovators throughout history, particularly aspects of the Thomas Edison story. Although the Edison-Tesla rivalry did not involve anti-trust law, the contest details the reality of the ''invention business'' in the most competitive capitalist society in the world.

Contrary to popular belief, the idea of electric lighting was not Edison's. A number of individuals had developed forms of electric lighting, but none had developed a system that was practical for home use. Using lower current, a small carbonized filament, and an improved vacuum inside the bulb, Edison was able to produce a reliable, long-lasting source of light. Thomas Edison didn't ''invent'' the light bulb, but became a legend for making a 50year-old idea a fantastic commercial success.

Edison's fiercest rival, was an ex-employee named Nikola Tesla from Smijlan, Croatia. Tesla was a genius who invented the fluorescent bulb in his lab forty years before industry ''invented'' them. At World's Fairs and similar exhibitions, he demonstrated the world's first neon signs. Perhaps Tesla's greatest invention was the AC (alternating current) system we use in our homes today. DC (direct current), an inferior system, ironically, was designed by Thomas Edison. After years of fierce wars and debate between the Tesla and Edison teams, AC became the accepted system of transporting electricity. In fact, Edison later admitted that AC was the better system. While both men were geniuses ahead of their time, the biggest difference between Edison and Tesla was their perspective and approach to invention. Edison had a keen understanding of capital markets and the strategies necessary to finance, promote and commercialize his inventions. Tesla was a great theoretician who worked perpetually to finance experiments.

Edison held a world record 1,093 patents and died a wealthy, famous man. Tesla received over 800 patents, died penniless and was literally erased from the history books. In fact, Tesla was poor the last thirty years of his life and arguably would have eclipsed Edison's patent record if he had the capital. Remembered for many things, Edison was known for saying, ''I have more respect for the fellow with a single idea who gets there than for the fellow with a thousand ideas who does nothing.'' Edison's vision reflects the view of anti-trust law, that the greater value is in a stable marketplace, not the resurrection of competing ideas.

The Other Truth about Netscape

The Appeals Court ruling reflects another hard truth—Netscape fell, because it did. The DC Circuit rejected the course-of-conduct theory, under which Microsoft's specific practices could be viewed as part of a ''broad monopolistic scheme.'' This obviously has made anyone that viewed Microsoft as an evil-doer exponentially dissatisfied with DOJ's settlement. But again, is the responsibility of the DOJ to make the world safe from Microsoft? Netscape maintained its Internet dominance until 1997, when Internet Explorer's fourth version was able to lap Netscape. Netscape Navigator never regained its prominence. In addition, by that time, the Netscape product was slow, outdated, and unstable, falling to a swifter surging Internet Explorer.

But perhaps the most unmentioned reality regarding Netscape's fall was their announcement to all (Microsoft included) that their strategy was to be the middleware that would be the ''new'' Windows, removing Microsoft's flagship product from dominance. Hindsight is 20/20 but when you consider how far ahead Netscape was in front of Microsoft, there are infinite what if's'' to consider if it had been mum about its strategy to take on Redmond. Microsoft had all but ignored the Internet and it is very questionable if they would have been able to play catch-up to a well-funded and branded Netscape team. The outcome of this possibility almost completely counters any damage claims in their civil suit recently announced. After all, Netscape's grand plan was never realized, thus the future is incalculable especially when taking into consideration the hubris of Netscape.

Innovators are the Lifeblood of U.S.

Today, new technology firms use every means available to compete including spending billions of dollars on research and development. Sun Microsystems, IBM and AOL and Microsoft combine to spend over $100 billion annually just on research and development. Firms spend exorbitant amounts of money to create and protect to new products. But again, this competition is to the benefit of inventors and the U.S. marketplace.[1] Recently, the United States Patent Office released its annual list of the top ten private sector patent recipients, it reported that for the ninth consecutive year, IBM received more patents than any other organization in the world. ''I am proud that American corporations are leaders among U.S. patent holders,'' said James E. Rogan, Undersecretary of Commerce for Intellectual Property. ''Patents promote technological progress and are a potent source for competitive free enterprise.''

USPTO's comments echo the importance of preserving the status quo of the U.S. marketplace. In the end, it is in the interest of innovation that we close the chapter on

[1] U.S. Patent and Trademark Offfice. January 10. 2002.

U.S. vs. Microsoft. The judicial process has sorted through the facts and come to judgment. Those dissatisfied with the settlement should be reminded by W. M. Deming's famous quip, ''Learning is not essential, survival is not mandatory.'' Deming's point speaks not only to the Microsoft case; but the hard truth about invention and success in the technology business. The court system has done its job, and enough precious time has been dedicated to legal jurisprudence, It is now the time for Microsoft and its opponents to tuck in their chin, learn from their mistakes and return to the marketplace.

U.S. PATENT AND TRADEMARK OFFICE (USPTO) LIST OF TOP 10 PATENT RECIPIENTS

Preliminary rank in 2001	Preliminary # of Patents in 2001	Organization	Final rank in 2000	Final Number of Patents in 2000
1	3,411	International Business. Machines (IBM)	1	2,886
2	1,953	NEC Corporation	2	2,021
3	1,877	Canon Kabushiki Kaisha	3	1,890
4	1,6543	Micron Technology	7	1,304
5	1,450	Samsung Electronics Co., Ltd.	4	1,441
6	1,440	Matsushita Electrical Industrial Co., Ltd.	11	1,137
7	1,363	Sony Corporation	6	1,385
8	1,271	Hitachi, Ltd	13	1.036
9	1,184	Mitsbushi, Denki Kabushiki Kaisha	14	1,010
10	1,166	Fujitsu Limited	10	1,147

*Source: USPTO, January 10, 2002. The listed patent counts are preliminary counts, which are subject to correction. The final listing of patent counts for the top patent organizations in 2001 should be available by early April 2002. Patent information reflects patent ownership at patent grant and does not include any changes that occur after the

MTC–00030063

E. BLAINE RAWSON
596 East 1050 North
Bountiful, Utah 84010
January 28, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoj.gov
VIA FACSIMILE COPY TO: (202) 307–1454
or (202) 616–9937
1ST CLASS MAIL TO:
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

I write to inform you of my support for the position taken by Utah's Attorney General concerning the proposed Microsoft settlement.

It would have been easy for Utah's Attorney General, as a Republican, to join with certain other states in accepting the proposed Microsoft/Justice Department settlement. He has been criticized by some for being anti-free market. However, this case can not be reduced to such simplistic sound bytes. His support for a free market is not at issue. Microsoft was found in violation of law by a court of law. The real question is what action should be taken to prevent similar violations from occurring in the future and what penalty should be imposed upon Microsoft: for past violations. The proposed settlement does not appear to reflect the extent of the findings of violation made by the trial court and sustained by the appellate court.

I applaud Attorney General Shurtleff for holding fast to the rule of law, notwithstanding the pressure brought to bear through campaign contributions and by certain public officials who would have him take a position that may not be in the best interest of the citizens of the State of Utah.

If the settlement does not properly terminate present antitrust violations, penalize for past violations, and prevent future antitrust violations, then it should not be adopted. I would prefer this court hold evidentiary and legal hearings and impose a remedy warranted by the facts and law. In addition, the government should zealously enforce the remedy to avoid future abuses.

Respectfully,
E. Blaine Rawson
cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030064

77 Blackbird
Drive Bailey, Colorado 80421
January 26, 2002
Attorney General John Ashcroft
950 Pennsylvania Avenue, NW
U.S. Department of Justice
Washington, DC 20530

Dear Mr. Ashcroft:

The Microsoft case was ridiculous. In my view, it showed how the U.S. Government can step in and attack a company because it has a huge market share. The competitors complained and said Microsoft was unethical even though the stone attackers'' business practices are largely the stone. The settlement on Microsoft's behalf shows how cooperative the company can be in a reluctant situation. It includes compromises that far exceed the original scope of the lawsuit, and gives their competitors several unfair advantages.

Please approve the settlement and let Microsoft put the lawsuit behind them once and for all.

Sincerely,
Jerol Love

MTC–00030065

The Web Practice
Internet alchemy
FACSIMILE TRANSMITTAL SHEET
TO: John Ashcroft
FROM: Curt Fluegel
COMPANY
DATE: 1/28/2002
US Department of Justice
FAX NUMBER: 1–202–307–1454
TOTAL NO OF PAGES INCLUDING COVER:
2
PHONE NUMBER: 651.842.0475
SENDER'S REF??RENCE NUMBER
RE: YOUR REFERENCE NUMBER:
Microsoft Settlement
NOTES/COMMENTS:
THE WEB PRACTICE, LLC
175 5TH STREET EAST, STE. 700 . ST
PAUL, MN 55101 .
[650 776–993]
FAX: [651] 726–7326 .
January 9, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing this letter to inform you that I am fully in support of the settlement reached between Microsoft and the Department of Justice. The legal battle that preceded this settlement drained tax funds, and challenged state budgets. This suit was initially brought about to help give the consumer more choices in the IT market; instead, it has succeeded in draining money from our pockets.

This settlement is fair and pragmatic. Microsoft has gone far and above what it should have needed to do to get this issue resolved. The settlement addresses concerns that were not even part of the original suit, and Microsoft even compromised some of its intellectual property to make the settlement adequately thorough.

Please prevent any further abuse of our tax resources. The right thing to do would be to finalize the settlement and resolve this issue promptly. We muse give Microsoft way, so it can return to innovation—

Sincerely,
Curt Fluegel
General Partner

MTC–00030066

43 Beaumont Circle Apt. 1
Yonkers, NY 10710
January 25, 2002

Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

Since the Department of Justice is accepting and publishing public comments for the first time since the antitrust suit was brought against Microsoft over three years ago, here are my comments.

Microsoft agreed to the right of third party's to exercise any of the options provided by the settlement that would infringe on any Microsoft intellectual property right. Microsoft will provide the third party with a license to the necessary intellectual property on reasonable and non-discriminatory terms.

Microsoft also agreed to the establishment of a technical committee that will monitor Microsoft's compliance with the settlement and assist with dispute resolution. The technical committee will consist of three experts in software engineering. Any third party who believes that Microsoft is not complying with any provision of the settlement will be free to lodge a complaint with an internal Compliance Officer at Microsoft, as established by the settlement, the Department of Justice, or any of the State plaintiffs that are party to the settlement. Now that Microsoft has agreed to those terms, shouldn't Government agree to end litigation?

Sincerely,
Syed Kamal

MTC–00030068

SUZANNE F. THORUP
3148 Creek Road
Salt Lake City, UT 84121
January 25, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoj.gov
VIA FACSIMILE COPY TO: (202) 307–1454
or (202) 616–9937
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse
Antitrust Division, U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

This letter will inform you of my opposition to the proposed Microsoft settlement. I understand that Microsoft was found to be in violation of the antitrust laws of the United States by virtue of uncompetitive conduct, particularly in its marketing practices. It is important that the market have viable competitors, including those who would make compatible products. Microsoft's practices have destroyed any semblance of an open market place. The proposed settlement appears to be little more than business as usual. Microsoft has once again won, and the consumer has lost. The proposed settlement does not resolve the problems identified by the trial judge, it has merely postponed their resolution because the agreement fails to prevent future violations and does little to correct past behavior.

I am not advocating that Microsoft should be broken up. I am a shareholder and believe that Microsoft is still a strong company that holds value for investors. However, I believe that Microsoft will succeed in a competitive market place. Breaking up Microsoft would not be in the best interests of investors. By the same token, adoption of the proposed settlement agreement would not be in the best interests of the consumers.

Since the parties have not achieved a reasonable settlement, it is time for the courts to do so. Please reject the proposed settlement and conduct such hearings as may be necessary to determine what appropriate remedies should be employed.

Respectfully,
Suzanne F. Thorup

cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030069

268 Neptune Boulevard
Long Beach, NY 11561–3732
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
January 24, 2002

Dear Mr. Ashcroft:

In a few days, the Justice Department will make its final decision on the Microsoft settlement. It is my fervent hope that the government accept this settlement from Microsoft. I feel that Microsoft is giving away too much to the competition, but I completely support Microsoft's efforts to end this three-year legal war over antitrust behavior.

The federal government's actions toward Microsoft have been abominable. I am completely against government involvement in private business affairs. The freedom to innovate must be preserved if our country is to continue to be a world leader This country's strength has been built from our free enterprise system. Further government involvement will continue to hurt our already weak economy.

As a real estate agent, I have exclusively used Microsoft Windows and Microsoft Office for years and it has indeed contributed to the success of my small business. I also use Internet Explorer, my web browser of choice. Nothing on the market compares to Microsoft's software products. The competition can put their software on Windows and remove Microsoft's, but I will always use Microsoft's products.

I have confidence that Microsoft is doing what is in their best interest, to get out from under the hand of government involvement. I see nothing but positives for the economy and for the computer industry, once Microsoft is allowed to work entirely free from further government entanglements. Please do what I feel is best for the economy and the people of this great nation, confirm the Microsoft settlement.

Sincerely,
Maria Ferrer

MTC–00030070

SIDLEY AUSTIN BROWN & WOOD LLP
CHICAGO DALLAS
LOS ANGELES
NEW YORK
SAN FRANCISCO
SEATTLE
1501 K STREET, NW
WASHINGTON, DC 20005
TELEPHONE 202 736 8000
FACSIMILE 202 736 8711
www.sidley.com
FOUNDED 1866
BEIJING
HONG KONG
LONDON
SHANGHAI
SINGAPORE
TOKYO
WRITER'S DIRECT NUMBER (202) 736–8067
WRITER'S E-MAIL ADDRESS tbartucz@sidley.com
FACSIMILE/TELECOPIER TRANSMISSION
From: Name: Tanya Bartucz
Voice Phone: Joanna Harkin 202/736–8268
To: Name: U.S. Department of Justice
Company:
Facsimile #: 202–307–1454
Voice Phone:
Subject:
Message:
Date: 01/28/02
Time: 05:24 PM
No. Pages (Including Cover): 5

Note: If you do not receive all the pages, please call: Joanna Harkin 202/736–8268

SIDLEY AUSTIN BROWN & WOOD LLP
CHICAGO DALLAS
LOS ANGELES
NEW YORK
SAN FRANCISCO
SEATTLE
1501 K STREET, NW
WASHINGTON, DC 20005
TELEPHONE 202 736 8000
FACSIMILE 202 736 8711
www.sidley.com
FOUNDED 1866
BEIJING
HONG KONG
LONDON
SHANGHAI
SINGAPORE
TOKYO
WRITER'S DIRECT NUMBER (202) 736–8067
WRITER'S E-MAIL ADDRESS tbartucz@sidley.com
FACSIMILE TRANSMISSION FORM
Date: January 28, 2002 No. of pages including cover sheet:
To: Company: U.S. Department of Justice
Telephone #: Fax #: (202) 307–1454
SPECIAL INSTRUCTIONS: IF NOT USA PLEASE INDICATE COUNTRY & CITY CODE NUMBER
From: Tanya Y. Bartucz Ext. 8067 Floor:
COMMENTS: Attached please find the Tunney Act comments on the Microsoft settlement of Griffin B. Bell, Edwin Meese III, and C Boyden Gray. An electronic copy will also be submitted Problems with this transmission should be reported to: (202) 736–8067
January 28, 2002
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Ms. Hesse:

We believe the Revised Proposed Final Judgment (''RPFJ'') that the federal government and some of the plaintiff states have reached with Microsoft should be adopted, and that the proposals of the nine states that continue to pursue this litigation (the ''Litigating States'') should be rejected. That is so, in our view, for four main reasons. First, the RPFJ will serve the central goal of antitrust law—benefiting consumers—far better than any of the states'' proposed remedies. Most importantly, it allows Microsoft to continue selling a single, uniform operating system under the Windows name. This will directly benefit all the consumers who have relied on Windows' continued availability when deciding which computer and software to purchase.

At the same time, the RPFJ will increase the range of choices available to consumers by requiring Microsoft to enable both computer manufacturers and end-users to turn off Microsoft's middleware products such as its Internet browser, instant messaging tools, media player, and email utilities. Consumers will therefore be free to sample and choose among a variety of middleware utilities from various companies. The RPFJ thus strikes a sensible balance between the goal of giving rival middleware producers access to Microsoft's customers, and the equally important goal of avoiding anything that would destabilize the Windows platform on which consumers—and indeed most of the software industry—depend.

The Litigating States' proposals strike no such balance. For example, the Litigating States would require Microsoft to sell stripped-down versions of Windows at court-mandated prices, without regard for the technical advantages of integrating middleware and operating system functions, or for the importance of a stable, uniform operating system. Computer manufacturers would then be able to patch competitors' middleware into the Windows system and sell the hybrid product to consumers without giving them any guidance as to how to restore their computers to the original Windows settings. This would effectively destroy the Windows standard. That will not benefit consumers; it will harm them. And it is anti-competitive, not pro-competitive.

Second, the RPFJ is narrowly tailored to the findings of illegality affirmed by the Court of Appeals. The RPFJ thus enjoins the types of conduct held illegal by that court—primarily certain exclusive dealing arrangements and threats of retaliation—in language broad enough to preclude similar behavior, without losing sight of the limited Court of Appeals holding.

In contrast, many of the Litigating States' proposals have nothing to do with any of the issues in this case, much less the Court of Appeals' decision. For example, the Litigating States would require Microsoft to inform them sixty days in advance of any acquisition of technology or other intellectual property. Yet this ''remedy'' cannot be tied to any element of this case, let alone to any finding of liability that was affirmed on appeal. Other proposals are simply overbroad or unworkable, such as the proposal that Microsoft notify any software developer sixty days in advance of any action it intends to take that might have an impact on the interaction between the developer's middleware and Windows,

Third, the remedy in this case must be one that the federal courts can administer, not one that will turn the District Court into a regulatory agency. Again, the RPFJ strikes the needed balance. The Technical Committee and the Compliance Officer that it would install are unquestionably intrusive, but at least the Committee would properly make its reports to the plaintiffs, who then would decide what course to pursue,

By contrast, installing a Special Master with his own staff and the power both to investigate and to judge, as the Litigating States propose, would drag the federal courts into a prosecutorial and regulatory role that they are ill-suited to perform. The Litigating States' substantive proposals take a similar, regulatory approach. They would mandate product design and pricing, force Microsoft to distribute its competitors'' products, and give Microsoft's rivals a mechanism to try to block any decision by Microsoft that they dislike.

Finally, we believe that entry of the RPFJ will respect and promote the primacy of the U.S. Department of Justice in enforcing federal antitrust law. To be sure, the States may have some role to play in this area. But it would be bad policy to allow a small group of state attorneys general to trump, in effect, the Department's decision to settle on reasonable terms an antitrust case that has such enormous implications for the national economy.

For all these reasons, we urge the District Court to enter the RPFJ as its final judgment in this case. We believe it would benefit consumers, effectively address the Court of Appeals' findings, and provide a workable resolution to this long-running litigation.

Sincerely.
Griffin B. Bill
Edwin Meese III
C. Boyden Gray

MTC–00030071

South Dakota Legislature
State Capitol,
500 East Capitol,
Pierre, South Dakota 57501–5070
House of Representatives
January 28, 2002
Renata Hesse
Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street NW—Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

My pursuit in public service has been to make sure that taxpayers and justice are well served in all matters. In the settlement proposal affecting U.S. v. Microsoft, I am concerned that enough resources in time, money, attention and personnel have been used to pursue the issues raised in this anti-trust case.

At no time in the proceedings has it been established that consumers have been wronged by Microsoft's actions. In fact, I think consumers who've used Microsoft have been well pleased with the quality and cost of the company's products and services. The issue seems to focus on Microsoft and its ambitious competitors, and I think this case has expended enough resources to determine what is fair. I strongly support putting the settlement into effect.

I appreciate your attention to my statements.

Sincerely
Representative Bill Napoli
Legislative District 35
Assistant Majority Leader

MTC–00030072

South Dakota Legislature
State Capitol,
500 East Capitol,
Pierre, South Dakota 57501–5070
Senate Chamber
January 28, 2002
Renata Hesse, Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

This letter is to be entered in the public input phase of the settlement in U.S. v. Microsoft. I support the settlement for the following reasons:

. The settlement answers the issues which were found to be valid at the end of this 4-year-old case.

. The settlement will conclude a case which has used sufficient time, personnel and money to seek out every possible issue and fully explore each one.

. At no time during the past four years has it been established that consumers have been wronged by Microsoft's actions.

. A significant benefit from this case to school districts which hold a disproportionate share of economically stressed children is the dedication of hardware, software and tech support to bridge the IT gap for these children.

Frankly, the continuation of this case will not benefit justice or the information technologies industry. After more than four years, an antitrust case of this magnitude should have yielded all of the benefits that are reasonable.

I appreciate the opportunity to submit this letter.

Sincerely,
Brock L. Greenfield
State Senator
Legislative District 6

MTC–00030073

January 28, 2002
Renata Hesse, Trial Attorney
Antitrust Division
United States Department of Justice
601 D Street NW—Suite 1200
Washington, DC 20530

Dear Renata Hesse:

I am a strong supporter of the use of information technologies as a major resource of developing the economy of South Dakota. Efforts achieved in the state's Wiring the Schools Program and long distance learning systems will reap huge dividends as the so-called digital divide is erased between urban America and rural states. The allocation of computers and backup support which is expected from the settlement proposal in the

antitrust case, U.S. v. Microsoft, offers another leap forward because those systems are targeted for use by low income school districts. South Dakota has many of those districts which should qualify for the computer systems. That is one reason I support the settlement.

The other speaks to how the justice system is used to pursue justice. This antitrust case was established to explore Microsoft Corporation's practices as they relate to its competition. It has not established any harm to consumers, which should be a strong consideration in the value of this settlement. From what I have been able to read and understand, the settlement adequately addresses the issues which have remained viable throughout the court process. I think this case has reached the point when it is time to say enough is enough; it's no longer necessary to keep this court action going.

I think justice has been pursued, and the pursuit has not wandered outside the lines of what is a proper action by the courts. My hope is that this process is not allowed to wander outside the lines by rejecting the settlement. Thank you.

With best regards,

Phil Hanson

MTC–00030074

January 28, 2002
Renata Hesse, Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Renata Hesse:

My letter is being sent for the settlement phase in U.S. vs. Microsoft. I have followed the case in the news and I have wondered why so much money and attention has been consumed to pursue Microsoft on issues which could have been decided in much less time. Frankly, the case has the public appearance of Microsoft being punished for leading the competition with software which is more competent and less expensive for average users than Microsoft's competitors.

Skepticism aside, I hope the settlement is enacted because this issue has had its day in court and because the issues which were believed to be important have been answered. I am very pleased that the U.S. Department of Justice reached an accord with Microsoft. The fact that such an accord was reached by the federal government and nine of the states involved in the action should weigh heavily in favor of allowing thin settlement to move toward enactment.

Thank you for your attention to my letter.

Sincerely,

Ron Sauby

MTC–00030075

To: US Department of Justice—Antitrust Division
Title:
Company:
Fax 202–616–9937
Business
From:
Fax number:
Business phone:
Date & Time: 1/28/2002 5:46:28 PM
Pages sent: 12
Re: Microsoft Settlement
Please see attached document
The Center for the Moral Defense of Capitalism
4901 Seminary Rd #1320
Alexandria, VA 22311–1830, USA
(703) 625–3296 (VOX)
(815) 327–8852
(FAX)
Internet: http://www.rnoraldefense.com E-mail: info@moraldefense.com
10708 N Essex Court
Mequon, WI 53092
January 26, 2002
Attorney General John Ashcroft
Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I was relieved last November when a settlement was finally proposed in the Microsoft antitrust case. I do not think Microsoft has done anything worthy of such harsh litigation, and I think that a settlement would, at this point, be the best thing that could happen in the case. To my dismay, however, Microsoft's competitors, who have been relentlessly pursuing the destruction of Microsoft from the beginning, are currently engaged in undermining the settlement and seeking further litigation against Microsoft. Ever since this case was brought to the federal courts, the economy has declined and the technology industry has suffered. The measures Microsoft's opponents want to pursue will ultimately de more harm than good, and I do not believe that the public should have to suffer simply because Microsoft's competitors want to make some money.

Microsoft has been very generous in this suit. I think Bill Gates and his lawyers have shown a great deal of pragmatism in making so many unnecessary concessions. They have gone beyond what was required of them in the lawsuit, and have agreed to terms that restrict parts of their company that have not violated antitrust law,, The settlement appears to be very fair, and I can honestly see no good reason for additional litigation. Microsoft has agreed not to cater into any contract that would require a third party to sell Microsoft software at any fixed percentage. Microsoft has also agreed to change its Windows operating system so that it will support non-Microsoft software, and Microsoft's competitors will be able to introduce their own software directly into Windows.

I believe it is time to let Microsoft gel back to business, and the only way to do that is to settle the case. The proposed settlement is sufficient to prevent future antitrust violations, and there is no need to continue federal action. I urge you to accept the settlement.

Sincerely,

Ronald Chikalla

cc: Representative F. James Sensenbrenner, Jr.

MTC–00030076

WP Investments
January 24, 2002
Renata Heese
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington DC 20530
FAX: 202–616–9937
RE: Settlement of U.S. v. Microsoft

Dear Ms. Heese:

I am writing in support of this proposed settlement. I deeply appreciate the efforts of our government in pursuing antitrust activities and believe that this settlement is a positive development in this pursuit. As the former director of a state agency I know that the government and Microsoft lawyers have fought diligently in this important case. I would like to see the case resolved so that private industry can return to competing in the marketplace. The technology sector of our economy is looking for a signal to get moving again. The settlement of this case can provide the right signal that competition is alive and well through innovation and hard work and not continued litigation.

Please know that t appreciate your consideration of my views on this important matter.

Sincerely,

Chris Pilley
Partner
729 S. Acadian Thruway
Baton Rouge, LA 70806
225–389–9429
225–387–0309 (fax)

MTC–00030077

FAX
Date: Monday, January 28, 2002
Pages including cover sheet: 2
To:
Phone
Fax Phone (202)6169937
From: James J. Ferraro
A&J Marketing Southeast In.
PO Box 150533
Altamonte Springs FL 32715
Phone +1(407)331–4960
Fax Phone +1(407)331–7137
NOTE: Microsoft Settlement.
??
P.O. Box 150533
Altamonte Springs, FL 32715–0533
January 22, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

Microsoft has been dealing with a hostile government for over three years now; it is time to put on end to the lawsuit. I am writing today to encourage the Department of Justice to accept the Microsoft antitrust settlement. The critics are wrong when they claim that Microsoft is getting away with lenient terms. The settlement was arrived at after extensive negotiations under a court-appointed mediator. Microsoft has agreed to terms that extend well beyond the products and procedures that were actually at issue in the suit, simply for the chance to put the issue behind it. Microsoft has given up the right to charge different computer makers different prices, thus losing leverage useful in getting its software promoted. It has also agreed to allow computer makers and users to remove access to Windows technologies,

features, and bundled applications, in favor of competing software. Microsoft has even committed competing software ?? works better with Windows.

It is time that the government stops harassing Microsoft and allows free enterprise to re-emerge. The terms of the settlement are fair and the government needs to accept it. Please exercise your influence and authority to help make that happen.

Sincerely,
James Ferraro

MTC–00030079

HOUSE OF REPRESENTATIVES
STATE OF UTAH
REPRESENTATIVE JUDY ANN BUFFMIRE
35TH DISTRICT
(SALT LAKE COUNTY)
785 EAST 4255 SOUTH
SALT LAKE CITY, UTAH 84107
HOME (801) 268–1862
STANDING COMMITTEES: EDUCATION; REVENUE AND TAXATION; RULES APPROPRIATIONS: PUBLIC EDUCATION
January 25, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoj.gov
VIA FACSIMILE COPY TO: (202) 307–1454 or (202) 616–9937
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse
Antitrust Division, U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

This letter will inform you of my opposition to the proposed settlement of the Microsoft lawsuit. Although we are from different political parties, I agree with the Utah Attorney General's reasons for opposing file proposed settlement—the State of Utah must defend laws that protect our consumers, protect free enterprise, and promote competition. It was determined by the trial court that Microsoft violated the antitrust laws of the United States. That decision has been reviewed and affirmed by the Court of Appeals, and the United States Supreme Court has determined not to hear a further appeal by Microsoft. Microsoft has had ample opportunity to defend itself against charges that its actions thwarted competition in the market. These actions have had an adverse impact on Utah consumers, including some who are my constituents.

Any settlement approved, or any remedy imposed, by the court must assure that Utah's consumers, including its businesses, are protected from Microsoft's anti-competitive behavior. I am informed that the proposed settlement allows Microsoft too much discretion in determining whether or not certain of the settlement provisions apply. Such provisions do not protect free enterprise or promote competition.

Rather than adopting settlement provisions that might lead to future litigation, I recommend that hearings be conducted by the court to determine an appropriate remedy that will ensure fair competition into the future.

Sincerely,
Representative Judy Ann Buffmire
Utah House District 35
cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030080

111 NW First Street
Suite 910
Miami, FL 33128
(305) 375–4507
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

To protect the idea of free enterprise in this country, please make sure to confirm the proposed agreement with Microsoft Corporation. Microsoft has developed a great product, which tile public is satisfied with, so any further attempt to infringe on that could only damage our many years of progress in the PC industry.

Under the review of a committee of software experts, these terms enable computer makers to re-configure Windows with their own preferred software offerings, and the ability to manipulate their supporting features, without reprisal from Microsoft. The top 20 manufacturers will be able to operate without preference on terms and conditions to license the Windows operating system and any requirements to distribute or promote Microsoft technologies. Not only is the offer generous, but also some of the proposed measures even exceed the Justice Department demands in order to encourage swift approval of the deal.

It's time to put the legal activities aside and complete this agreement at the earliest opportunity. There is no reason for further action against Microsoft, as the company should continue freely to develop the high-quality software that consumers want and businesses need. I look forward to your approval.

Sincerely,
Miguel Cordero

MTC–00030081

January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am in favor of the decision to settle the Microsoft antitrust lawsuit. Little will be gained by continued litigation, especially in light of the vast concessions Microsoft has made. Contrary to assertions made by their competitors, Microsoft will not be getting off easy. The settlement agreement will impose numerous restrictions on the way Microsoft conducts its business. For instance, Microsoft will not enter into agreements obligating third parties to exclusively distribute Windows products. They have also agreed not enforce many of their intellectual property rights. Instead of calling for more litigation, Microsoft's competitors should be overjoyed by the changes that will be taking place in Microsoft's business practices. I tort hopeful the court will approve the settlement. The time has come for fine parties to move on, and to focus on other matters.

Sincerely
Michael Baldasare

MTC–00030083

January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Attorney General:

With as many people and small businesses that depend on Microsoft and their products on a daily basis, and considering how large an impact the company has on the U.S. economy and balance of trade, I cannot see how the Justice department thought it a good idea to attack Microsoft. It is like shooting ourselves in the foot to attack one of, if not the, top businesses in the world. That is why I was so pleased to hear that you had reached a settlement, This settlement will mean an end to this issue once and for all. It is harsh enough to satisfy Microsoft's competitors and yet will leave the company in one piece to continue innovating. I only hope that they will respect how much Microsoft is giving up by allowing full access to key components of its software. This will allow anyone to use it to enhance their products to better compete with Microsoft's, without retaliation from Microsoft.

That, without all the other pans of the settlement, should be enough to satisfy Microsoft's critics. Microsoft has simply gone beyond what was expected of them in order to end this case. Let's let them move on and get back to business as usual. In my opinion, this will make a major part of ending our recession.

Sincerely,
Lee & June Johns
645 Village Lane South
Mandeville, LA 70471

MTC–00030084

PAUL C. THORUP
3148 Creek Road
Salt Lake City, Utah 84121
January 28, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoj.gov
IA FACSIMILE COPY TO: (202) 307–1454 or (202) 616–9937
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse Antitrust Division,
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

I write this letter to express my concerns about the proposed Microsoft settlement. I am a 17-year old high school student working on a merit badge for my scouting activities. My parents own some stock in Microsoft, and I have discussed the issue with them to help me better understand the issues before making up my mind concerning what type of letter to mite. I am told that the Microsoft proposal is the result of court action in which Microsoft was found to be in violation of antitrust laws. I commend Microsoft for its ingenuity and creativity in bringing products to market, however, I believe Microsoft may have abused its market power to the

detriment of its market competitors and consumers.

The courts have determined that Microsoft has violated antitrust laws. The only thing to determine is what should be done. My parents suggested to me that breaking-up Microsoft may not be in the best interest of its shareholders, however, from I have learned, the proposed settlement has many problems and may not prevent future violations. This would not be in the best interest of the shareholders either.

Please hold hearings to decide what remedies should be imposed, and do not adopt the proposed settlement agreement.

Thank you for your consideration.

Sincerely,

Paul C. Thorup

cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030086

MICHAEL SONNTAG
P.O. Box 675
Draper, UT 84020
January 25, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoj.gov
VIA FACSIMILE COPY TO: (202) 307–1454
or (202) 616–9937
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse
Antitrust Division,
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

I am a concerned consumer who believes that the federal government is not looking out for my best interests in supporting the proposed settlement of the government commenced lawsuit against Microsoft.

I have been concerned for a long time that Microsoft's actions were not in the best interest of consumers and that its practices were uncompetitive, designed more to monopolize than provide reliable products to the market. My concerns were realized when the Department of Justice was able to prove its antitrust case against Microsoft. Although the Court of Appeals determined that breaking Microsoft up would be too punitive, the Court did uphold the district court's findings that Microsoft violated antitrust laws.

If breaking up Microsoft is too harsh of a remedy, then the proposed settlement is too lenient of a remedy. Some of the proposed settlement provisions do not go far enough and others are either not easily enforceable or are subject to conditions that would allow Microsoft to determine whether and how to comply. For instance, one of the driving issues of the lawsuit dealt with Microsoft's failure to share information with others to allow for the reasonable development of compatible software. The proposed settlement agreement would allow Microsoft to determine whether disclosure should be allowed, based upon Microsoft's determination that disclosure would harm Microsoft's security of software licensing.

Settlement should be allowed only if past violations are cured and future violations are prevented. The current proposal, in my estimation, does neither and should be rejected.

Your truely,

Michael Sonntag

cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030087

MIKE BROWNING
88 East Mutton Hollow Road
Kaysville, UT 84037
January 25, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoj.gov
VIA FACSIMILE COPY TO: (202) 307–1454
or (202) 616–9937
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse
Antitrust Division,
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

I am a supporter of the free enterprise system and believe that government should generally allow businesses to operate and compete without government intervention. Nonetheless, I am informed that a settlement has been proposed in the Microsoft case that may not be in the best interest of average consumers like me.

I understand that the original trial court held that Microsoft violated U.S. antitrust laws and that the Court of Appeals did not overturn that portion of the trial court's decision. If Microsoft has violated antitrust laws, they have hurt rather than promoted competition which is one of the most important aspects of a free enterprise system. This call not be good for the average consumer. If the proposed settlement does not resolve the antitrust violations, then Microsoft's conduct could continue into the future, therefore, I ask that you not accept the proposed settlement and take whatever action may be appropriate to properly protect the interests of consumers.

Sincerely,

Mike Browning

cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030088

POH
42 Quail Run Warren, NJ 07059
Telephone: 732–302–9608
Number of Pages (Including cover) 2
To: Attorney General Mr. John Ashcroft
From: Ann Poh
Company: US Department of Justice
Date: 1/28/02
Fax Number: 1–202–307–1454 Phone
Number:
Reply Requested: Yes [ ] No [ ]
Notes/Comments:
Letter attached. Thank you.
POH 42 Quayle Run
Warren, NJ 07059
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to express my opinion of the recent settlement between Microsoft and the US Department of Justice. The lawsuits have been too long to date and need to be ended. I feel that Microsoft has been a victim of personal vendettas and greed and has gotten a raw deal even in temps of the recent settlement.

The settlement is harsh and requires Microsoft to give up interfaces that are internal to their Windows products and design future Windows version so that computer makers, software developers, and consumers can more easily promote their own products. These concessions should be enough to appease all parties that are part of dispute so it amazes me that 9 states want to continue litigation. Please ignore this opposition for the sake of our IT sector and economy. Our nation needs your office to take a strong stance and uphold principles of free enterprise.

Sincerely,

Ann Poh

MTC–00030090

423 NW 21st Street
Oklahoma City, OK 73103
January 19, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

This is to address the recent settlement between the Department of Justice and Microsoft. I want to give my support to this agreement. It has gone on far too long. I opposed the initial lawsuit. It was not warranted. Microsoft, through Bill Gates, has done nothing but benefit the consumer with his technology. I use Microsoft software programs, operating systems, everything, because they work better than the other programs on the market. If another firm were to put out a better product, I would use that one. The antitrust suit was nothing more than a bunch of crybabies getting together and trying to cripple the one firm they could not compete with, and the Department of Justice fell right into line. I know there is a great desire to break up Microsoft, but I cannot think of any thing worse for the industry or the country. AT&T was broken up; our phone system has gotten worse ever since. I get ten different bills, none of which I understand, and my phone service keeps increasing in price. When you need to call service, you are always switched somewhere else; no one takes responsibility. This is what would happen with Microsoft. Further, those who are rivals of Microsoft, and those who see any big business as evil, would sit gleefully on the side, cheering.

Microsoft has agreed to terms that extend well beyond the products and procedures that were actually at issue in the suit. Microsoft has agreed to allow computer makers to ship non-Microsoft product to a customer; Microsoft has agreed to design future versions of Windows with a mechanism to make it easier to promote non-Microsoft software; Microsoft has agreed to document for use by its competitors various interfaces that are internal to Windows''

operating system products—a first in an antitrust settlement.

Whatever ''sins'' Microsoft has committed, they have more than paid for. Give your support and approval to the agreement. Thank you.

Sincerely,

E. Claudine Long

CC: Senator Don Nickles

MTC–00030091

ERIC MECHAM
3274 East 7800
South Salt Lake City, UT 84121
January 27, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoj.gov
VIA FACSIMILE COPY TO: (202) 307–1454
or (202) 616–9937
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B, Hesse Antitrust Division,
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

I understand you are receiving comments concerning the proposed Microsoft settlement, and I wish to be heard on the subject.

I believe it was appropriate for the Department of Justice to bring the antitrust case against Microsoft concerning its anti-competitive actions. It was long overdue. However, I am concerned that the case is being settled without imposing appropriate remedies against Microsoft. This is not the first case brought against Microsoft. Each time, the parties thought they had resolved their problems only to find that Microsoft had found a way around compliance with the settlement agreement. Therefore, settlement of those prior cases has not well-served the public interest in having Microsoft stop its anti-competitive behavior.

Microsoft has proven that it can not be trusted to self-police, and the language of the proposed settlement agreement is not tight enough to prevent future violations of antitrust laws. Some of the agreement's provisions grant too much discretion to Microsoft to determine if and when they will comply with some of its provisions. If left to enforce the agreement itself, Microsoft find a way to interpret the agreement in its favor. This is only natural, however, it does not solve the problems that concerned the Department of Justice in the beginning.

Microsoft has already been found to have violated federal antitrust laws. Break-up may be the only way to finally rein Microsoft in, however, whatever remedy is finally imposed, it must take into account past and the potential for future violations of the same laws. The proposed settlement does not do this. The proposed agreement does not prevent future anti-competitive actions against vendors, suppliers, retailers and competitors.

I request that any settlement or court order be tightly worded to avoid any question as to Microsoft's obligation to comply.

Sincerely,

Eric Mecham

cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030092

PATRICIA CHRISTELLO
Honorable Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
c/o Renata B Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1.200
Washington, DC 20530–0001
RE: U.S. v Microsoft

Dear Judge Kollar-Kotelly,

I am writing with regard to the settlement between the Department of Justice and Microsoft in U.S. v Microsoft. This proposed settlement allows Microsoft to safeguard and bolster its monopoly, while also allowing Microsoft to use anticompetitive strategies to spread its dominance into other markets.

The deal does not promote innovation in this vital sector of our economy. The enforcement provisions are vague and it seems there are many loopholes loft in the settlement. At a time when security is of vital importance to both our government and corporations it would seem eminently important that we do not curb the production of new products in an attempt to protect an illegal monopoly,

Microsoft has been found liable before the District Court, they subsequently lost an appeal in a 7.0 decision to the U.S. Court of Appeals for the District of Columbia, have had their rehearing in the appellate court denied, and its appeal to the Supreme Court denied. It is time we rectify those inadequacies and promote the true nature of free markets to keep from hindering innovation in the marketplace.

The court must find a solution that meets the appellate court's standards and avoid any future anticompetitive strategies.

I appreciate you taking the time to consider this matter further.

Sincerely,

Patricia Christello

Business Manager

MTC–00030093

GREGORY M. D'AGOSTINO
Honorable Colleen Kollar-Kotelly
US District Court, District of Columbia
C/O Renata Hesse
Antitrust Division
United States Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
RE: US v Microsoft

Dear Judge Kollar-Kotelly,

I am writing with regard to the settlement between the Department of Justice and Microsoft in US v Microsoft. I realize there has been much discussion over many years concerning this matter. In light of that, it seems a more equitable solution could have been reached. The specifics of this settlement appear to violate antitrust laws.

As it stands now, Microsoft has the capacity to bolt financial services, cable or even the Internet to Windows hindering competition. In addition Microsoft makes the decision as to what technologies will be compatible with its Windows. This makes it very difficult for companies to develop software or for that matter find investors to provide venture capital for their companies. It is interesting to note that currently Microsoft Windows and Office Suites enjoy over a 90% user status. Expansion into other markets will expand that usage even more. At a time when computer technology companies should be challenged to address security and privacy issues in government and corporations, the inability to compete is. certainly not making it an environment good for growth. The settlement provides many loopholes, which could well keep the issue in litigation for years.

The computer software market should be buttressing the economy rather than adding to its sluggishness. Without competition, venture capital and an expectation of success it is very likely this industry will continue its downward slope. It is interesting to look at the monopoly of Microsoft and note the growth in the company as compared to other companies who do not have the ability to control most aspects of the market. The affect on consumers will be reflected in the high cost of software.

Given that nothing in the settlement hinders Microsoft, there should be little change in its business operation. It appears Microsoft plans to expand to financial, cable and the Internet, which will only serve to expand its control.

Although Microsoft will be required to share technology if it is reasonably necessary it also will determine which companies' technologies will be compatible with Windows. Microsoft will appoint one member of the three-person technology committee, the Department of Justice appoints another and they must both agree on the third.

It is likely companies will be reluctant to take on a Microsoft with a challenge, as their future business may well depend on their relationship with Microsoft. Given that Microsoft will be able to charge whatever it wants for its products, prices will skyrocket.

It seems a more equitable solution could be determined, If I may be of any assistance, please contact me.

Sincerely,

Gregory M. D'Agostino

Consultant

CC: Attorney General Tom Reilly

MTC–00030094

Holme Roberts & Owen LLP
Dee L. Heugly
heuglyd@hro.com
Attorneys at Law
111 East Broadway
Suite 1100
Salt Lake City, Utah
84111–5233
Tel (801)521 5800
Fax (801) 521–9639
www.hro.com
Salt Lake City
Denver
Boulder
Colorado Springs
London
January 28, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoj.gov
VIA FACSIMILE COPY TO: (202) 307–1454
or (202) 616–9937

1ST CLASS MAIL TO:
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

Please add my name to the list of those who believe that the court should not adopt the proposed settlement in the Microsoft v. DOJ case.

I firmly believe that markets should be open and free to competition. When adequate competition exists, consumers generally benefit. When competition does not exist, consumers are generally harmed to the benefit of one player controlling the market. The federal courts have already determined that Microsoft has so controlled the market that it is in violation of U.S. antitrust laws. Notwithstanding Microsoft's attempt to strike a better deal with the DOJ than it might receive from the court, the proposal falls short of the goal of remedying past conduct and preventing future anti-competitive acts in the future.

Microsoft has proven to be a super-charged competitor in the market place and requires the special attention of the court to deter it from once again becoming too dominant in the market. Please reject the proposed settlement and conduct whatever hearings may be necessary to determine a proper remedy. Respectfully,

Dee L. Heugly

cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030095

Holme Roberts & Owen LLP
Abigail L. Jones
(801)323 3265
slolebr@bro.com
Attorneys at Law
111 East Broadway
Suite 1100
Salt Lake City, Utah
84111–5233
Tel (801) 521–5800
Fax (801) 521–9639
www.hro.com
Salt Lake City
Denver
Boulder
Colorado Springs
London
January 28, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoj.gov
VIA FACSIMILE COPY TO: (202) 307–1454 or (202) 616–9937
1ST CLASS MAIL TO:
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

I write to express some concerns with the proposed settlement in the Microsoft v. DOJ case. I am informed that the Microsoft case will be returning to the federal district court for the purpose of imposing a proper remedy. Appropriate sanctions and penalties in an antitrust suit generally require that the violator discontinue past anti-competitive conduct, provide a component to compensate for the damage caused by the past violations, and include conditions under which the violator can operate to prevent future violations. Although this can occur through settlement, it is appropriate for a court to have sufficient supervision over the settlement and approval of its provisions to ensure that future violations will not likely re-occur.

I am informed that the proposed settlement does not go far enough to ensure that there will be an open and fair market place in the future. Microsoft can not be allowed to have too much discretion concerning release of its access codes, otherwise, competitors will not be able to develop compatible products and vendors will once again be required to market software packages according to Microsoft's direction, without competition.

It is time to bring this litigation to an end and correct improper market conduct. It appears this will only occur if the court takes a strong hand to craft and be willing to enforce sanctions designed prevent past conduct from re-occurring. Please reject the proposed settlement and fashion your own remedy based upon the facts and law applicable to this case.

Respectfully,

Abby L. Jones

cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030096

Holme Roberts & Owen LLP
Jennifer N. Byde bydej@hro.com
Attorneys at Law
111 East Broadway
Suite 1100
Salt Lake City, Utah
84111–5233
Tel (801) 521–58oo
Fax (801) 521–9639
www.hro.com
Salt Lake City
Denver
Boulder
Colorado Springs
London
January 28, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoi.gov
VIA FACSIMILE COPY TO: (202) 30%1454 or (202) 616–9937
VIA FIRST CLASS MAIL TO:
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

I write to object to the proposed settlement in the Microsoft v. DOJ case.

The federal district court determined that Microsoft has violated United States antitrust laws and the Court of Appeals reviewed and sustained that finding. The Court remanded the case to the district court for a determination of the appropriate remedy. At long last, the case can proceed and the Court may impose appropriate remedies for violations U.S. antitrust law. Although I personally find Microsoft's cavalier attitude towards antitrust laws troubling, and feel that the break-up may be appropriate under certain circumstances, I understand that the Court of Appeals has already determined that break-up is not an appropriate remedy. I further understand that the DOJ has agreed to a settlement of the matter on terms that I believe are wholly inadequate and partially unenforceable. Therefore, I ask that you not approve the settlement and hold your own hearings to determine and impose an appropriate remedy.

Respectfully,

Jenniffer Byde

cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030097

DAVID & BRANDY STEWART
44 West Broadway, Suite # 803
Salt Lake City, Utah 84101
January 26, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoj.gov
FACSIMILE COPY TO:'' (202) 307–1454 or (202) 616–9937
1ST CLASS MAIL TO:
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

I have been asked to share some of my feelings relative to the proposed settlement of the Microsoft v. DOJ litigation.

I am a CPA with a large accounting firm and consider myself as pro-business. I generally do not advocate government intrusion into the free market system and would prefer that the competitive market place correct any problems. Unfortunately, when one player is too dominant in the market place and aggressive in using its dominance, the competitive market place can not properly function. This appears to be the case with Microsoft. The federal trial court determined that Microsoft was in violation of U.S. antitrust law by virtue of some of its marketing and other practices. This portion of the court's decision was affirmed by the Court of Appeals and was allowed to stand by the U.S. Supreme Court. Whenever violations of antitrust laws are found to be present, reasonable measures must be taken to deter similar conduct in the future and to deal with the harm caused by past actions. From what I understand about the proposed Microsoft settlement, it does not contain reasonable, enforceable measures to accomplish this result. I am particularly concerned that Microsoft has too much discretion concerning its future compliance with some of the important provisions of the settlement agreement- those that would require sharing of source codes with competitors so that compatible products can

be developed. Without assurances that Microsoft will no longer engage in anti-competitive behavior, nothing will have been gained by the litigation, and the consumers will continue to be harmed thereby.

A proper resolution to the case would entail the imposition of appropriate sanctions and conditions of operation. This can only be done by the court following hearings. Adoption of the proposed settlement will not protect the rights of consumers into the future.

Respectfully,
David Stewart
cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030098

BECKY T. KINZEL
2654 E. Lincoln Lane
Salt Lake City, Utah 84124
January 25, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoj.gov
VIA FACSIMILE COPY TO: (202) 307–1454 or (202) 616–9937
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse
Antitrust Division, U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

My perspective on the proposed Microsoft settlement is somewhat unique. My family owns stock in Microsoft and is a consumer of its products. We purchased Microsoft stock several years ago because of its tremendous growth potential. Unfortunately, because of the Microsoft lawsuit and the national economy, our stock has not performed as well as we would have hoped. We believe that Microsoft will not reclaim its great growth potential until the government lawsuits are concluded and all hints of antitrust violations are silenced. Although we would welcome an end to the lawsuit through settlement, there is enough opposition and legitimate questions raised concerning the proposed settlement that litigation could be unnecessarily extended or result in additional lawsuits in the future as the various parties attempt to enforce or comply with the proposed settlement. A judicial resolution after reasoned argument before the court seems to offer a greater likelihood of economic stability and growth for Microsoft. This would be best for Microsoft shareholders. We are confident that Microsoft will meet any challenge and would continue to succeed in a more competitive marketplace.

Therefore, I recommend that the court not adopt the proposed settlement, but impose reasonable, but not punitive sanctions against Microsoft based upon evidence presented at future hearings.

Sincerely,
Becky T. Kinzel
cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030099

MICHAEL K. EVENS
24 Wanderwood Way
Sandy, UT 84092
January 26, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoj.gov
VIA FACSIMILE COPY TO: (202) 307–1454 or (202) 616–9937
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse
Antitrust Division, U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

I appreciate the opportunity to comment concerning the proposed Microsoft settlement. I generally believe in free market principles and the least amount of government intrusion into business practices and market competition, however, I am concerned that adoption of the proposed Microsoft settlement will not accomplish what is necessary to prevent future antitrust violations by Microsoft.

Although the proposed settlement pays lip service to penitence for past behavior and contains provisions intended by the Justice Department to prevent future violations, the actual language appears to be so broad as to provide loop-holes to future compliance. Rather than engaging in another round of lawsuits five or ten years from now, the better course would be to impose a proper, enforceable remedy now. This will likely require hearings before the court, but further hearings now will benefit consumers in the long run if it prevents violations and further litigation in the future. Please do not adopt the proposed settlement.

Sincerely,
Michael K. Evans
cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030100

01/28/2002 16:05 FAX 8015219639
HOLME ROBERTS & OWEN LLC
??001/002
ART PURCELL
5197 Spring Clover Drive
Murray, UT 84123
January 26, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoj.gov
VIA FACSIMILE COPY TO: (202) 307–1454 or (202) 616–9937
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse Antitrust Division, U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

I understand you are receiving comments concerning the proposed Microsoft settlement, and I have an opinion on the subject. The antitrust case brought by the Department of Justice is not the first case brought against Microsoft concerning its anti-competitive actions. Unfortunately, settlement of those prior cases has not well-served the public interest in having Microsoft stop its anti-competitive behavior. Microsoft has a way of wriggling out of settlement language.

The language of the proposed settlement agreement is not tight enough to prevent future violations of antitrust laws. Some of the agreement's provisions grant too much discretion to Microsoft to determine if and when they will comply with some of its provisions and fail to address the tactics of ''fear, uncertainty and doubt'' that Microsoft has used on competitors'' customers to drive them into Microsoft's camp and to squash competitors.

Microsoft has already been adjudged to have violated federal antitrust laws. Although break-up may be too harsh of a remedy, the remedy finally adopted by the court must consider past, as well the potential, for future violations of the same laws. The proposed settlement does not do this. It does not reduce Microsoft's power to impose anti-competitive conditions upon vendors, suppliers, retailers and competitors. Any settlement or court order must be tightly worded to avoid any question as to Microsoft's compliance obligations.

Sincerely,
Art Purcell
cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030101

LOUISE ANDERSON
11102 9TH AVE CT S
TACOMA, WA 98444
253–474–9421
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Ave. NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am in favor of the Microsoft antitrust case settling. Three years of litigation is enough. In my opinion, this lawsuit should never have been filed against Microsoft. Despite this belief, I would like to see the Court approve the settlement agreement that the parties worked hard to negotiate. Any threat of future anti-competitive behavior should be dispelled by the terms of the settlement agreement. Microsoft has agreed not to retaliate against those who promote or distribute programs that compete with Windows. They also agreed to a uniform price list for the largest computer manufacturers. Beyond the terms of the settlement agreement, nothing further should be required of Microsoft. Little will be gained by continuing to litigate this case. i applaud your efforts to resolve the lawsuit.

I've enclosed my address and phone number, in the event that you would like to contact me.

Respectfully.
Louise Anderson
INC. RV MTRS. SIDE SOUTH : FROM

MTC–00030103

406 Gerald Street
State College, PA 16801
January 11, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to express my disagreement with the lawsuit that was brought against

Microsoft by the federal government. While the antitrust case has been dragged out way too long, I am glad to see that a settlement has finally occurred.

The concessions seem fair and reasonable and I am confident that they would probably have occurred anyway without the government's interaction, because I believe the government should stay out of free enterprise's business and let them weed out their own problems. Under the terms of the settlement there will be increased relations with computer makers and software developers which is a good thing for the IT industry. There will also be a three-person committee to monitor Microsoft's compliance with the settlement. These represent to concessions that show Microsoft is looking out for the best interests of the public and themselves.

The question is whether or not the government is looking out for our best interests. The nine states holding out seem to be grandstanding their own political agendas instead of trying to help our ailing IT sector. I urge your office to help quell the opposition. IT is time for this matter to end.

Sincerely,
John Davis
cc: Senator Rick Santorum

MTC–00030104

FROM:
FAX NO. :
Sep. 10 2001 06:33AM P1
Richard Gardner
11 Carpenter Lane
Newburg, PA 17240–9219
January 17, 2002
Attorney General John Ashcroft
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am very happy to hear the Department of Justice has reached a settlement. I firmly believe that this settlement is in the best interests of the state, the IT industry, and the economy. Microsoft opponents would like us to believe that Microsoft has gotten off easy in this settlement, but this is not the case. Microsoft has been made to endure three long years of litigation in order to arrive at the terms of this settlement. The terms of the settlement, in my opinion, are fair and reasonable, and, if adhered to, will do much benefit consumers and avoid future anti-competive behavior.

Microsoft has already proven its willingness to comply with the terms of the settlement. They have agreed to establish a uniform pricelist, grant intellectual property licensure to third parties, the establishment of a three person Technical Committee consisting of software engineering experts to help with dispute resolution.

With the current recession and its devastating effects on the state and federal budget, is very important that the technology industry be allowed to concentrate on business now rather than being distracted by a suit of this magnitude. The public appreciates your efforts to resolve this as soon as possible.

Sincerely,

MTC–00030105

January 28 20 02:57p
[206] 722–5078
202.307.1455
3450 Cascadia Ave. S.
Seattle, WA 98144
206.722.5078
dwburroughs@attbi.com
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing in support of the Microsoft antitrust settlement agreement. As someone who works in the technology industry, I see the benefits of the parties settling this case. Protracted litigation is not in anyone's best interest.

The settlement agreement will mean many changes will be made to the way Microsoft conducts its business. These changes appropriately deal with the concerns raised about anticompetitive behavior on Microsoft's part. By way of example, the settlement agreement will require Microsoft to establish a uniform price list. Microsoft will license Windows to the 20 largest computer makers at the same price. Additionally, Microsoft has agreed not to enter into contracts with third parties that would require that party to exclusively distribute Windows. These types of changes in Microsoft's business practices will help restore fair competition. I urge the Department of Justice to continue working toward a prompt resolution of this case.

Thank you for your time and attention.

Sincerely,
David Burroughs

MTC–00030106

Karl Spielman
2609 N. W. Marker St
Seattle, WA 98107
(206) 365–2564 home
(206) 365–5049 fax
(435) 260–1383 cell
email: 2kadspieiman@hcme.com
Utah Back County Pilots
Resource Access
Skypark Airport
Officer
1887 S. Redwood. Box 16
Woods Cross, Utan 8408/
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington DC 20530

Dear Mr. Ashcroft.

For the past three years, the Microsoft antitrust suit has lingered in the federal courts. Six months ago, round-the-clock, mediated negotiations began, and last November, a settlement was proposed. That settlement is pending approval, and next week, it will be determined whether or not the terms are satisfactory. I believe they are, Fully half of the plaintiff states in the case do not agree and are actively seeking to undermine the settlement on, the federal level and extend litigation against Microsoft.

The settlement is not only just it is fair. There is no reason to continue litigation. .Microsoft has even agreed to terms that extend to policies and technology that were not declared unlawful by the federal court of appeals. All of the conditions in the settlement are aimed at restoring a fair competitive atmosphere within the technology market and preventing further antitrust violations on Microsoft's part. For example, Microsoft will refrain in future from taking retaliatory action when software developers or computer makers introduce a product into the market that directly competes with Microsoft technology Microsoft has also agreed to reformat future versions of Windows to support non-Microsoft software, and furnish third parties acting under the terms of thc agreement with a license to pertinent intellectual property rights to prevent infringement. I do not believe that additional action is necessary on the federal level. The settlement addresses the concerns both of the defendant and the plaintiffs, and further li??gation will not only be red??, it will also ?? ??tting and costly. It is time to move on. I urge you to support the finalization of the settlen??

Sincerely,
Karl Spielman

MTC–00030108

Facsimile Transmittal Sheet
Fax Date 1/28/02
To: ??orney General John Ash??
Fax #: 1 202 307 1 454
From: Jerri P??wson
Subject: microsoft antitrust CAST
Total Pages: 2
2045 SW Leewood Drive
Beaverton, Oregon 97006
January 27, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I fully support the settlement of the Microsoft antitrust case. The litigation has dragged on for long enough. The resources of both the government and Microsoft alike would be better spent pursuing other matters.

The settlement agreement's terms are reasonable. Once the settlement is finalized, there will be no grounds for any further complaints on the part of Microsoft's competitors. They will be getting Microsoft's internal operating system information, and will basically be free to infringe upon Microsoft's intellectual property rights. Microsoft is essentially giving up many of its rights in the interest of settling this case.

With these types of concessions, I see no reason for any further action at the federal level against Microsoft. Your efforts toward putting this case to rest are greatly appreciated.

Sincerely,
Jerri Pawson

MTC–00030109

FAX
STONER CHIROPRACTIC OFFICE
515 South Broad Street
Lititz, PA 17543
Phone (717)626–2051 Fax (717)626–7398
E-mail ipaulstoer@dejazzed.com
To: Attorney ?? ?? ??
From: I Paul Stoner, DC
Dale: 1–27–02
#Pages: 1

(excluding ??)
I Paul Stoner
515 South Broad Street
Lititz, PA 17543
January 12, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The federal government's actions in its case against Microsoft have been truly disappointing and inappropriate. The fact that many states have yet to settle simply illustrates the point that their interests do not lie seeking justice but rather seeking their piece of the pie. We have seen other examples of this miscarriage of justice in our government before, never one so blatantly frivolous and inappropriate.

For that reason, the settlement that was reached in this case last November should be implemented immediately and the issue should immediately cease to exist. Settlement is more than adequate to accomplish the stated goals of the government's suit. In fact Microsoft has accepted restrictions and obligations pertaining to products and practices that were not even issue at the lawsuit. Therefore no further actions need to be implemented against Microsoft. For the benefit of all involved in this case, and indeed the entire country, it is my firm belief that this issue be resolved immediately. This can only be accomplished if the current settlement is implemented without further delay.

Cc: Senator Rick Santorum

MTC–00030110

STEVE HALLMARK
7929 South DaVinci Dr.
Salt Lake City, Utah 84121
January 27, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoj.gov
VIA FACSIMILE COPY TO: (202) 30%I454 or (202) 616–9937
1ST CLASS MAIL TO:
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

I write because of some concerns I have about the proposed Microsoft settlement. While I am not advocating that Microsoft be broken-up into parts as an appropriate remedy for its antitrust violations, I am concerned that the proposed settlement will not accomplish what it is intended to do, e.g. create a competitive market place, benefit consumers, and rectify past conduct.

I am informed that the proposed settlement is too lenient on Microsoft and may place to much discretion in Microsoft's hands in whether and how to comply with the agreement. Such an agreement will not create of competitive market place or be of long-term benefit to consumers. I would be more comfortable if the court were to conduct hearings during which the parties in interest can voice their concerns and offer evidence and legal precedence. The court can then impose an appropriate remedy that will ensure compliance into the future.

Thank you for your consideration.

Respectfully,
Steve Hallmark

cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030111

FAX COVER SHEET
DATE: January 28, 2002
TO: JOHN ASHCR?? (202)—307—1454 US ATTORNEY GENERAL
FROM: T. Clifford Smith
PHONE: 513–385–8577
FAX: 513–385–4491
Number of pages including cover sheet: 2
Comments: ??
T. Clifford Smith
6480 Dry Ridge Road
Cincinnati, Ohio 45252–1748
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue
Washington, DC 20530–001

Dear Mr. Ashcroft:

It is my opinion that the antitrust suit against Microsoft should never have existed in the first place. However, since it did, I am glad to see that there has been a settlement to the case. It took over three years for the Justice Department to finally settle the case with Microsoft, and I fully support that settlement.

As I'm sure you're aware Microsoft has never harmed anyone; instead it was a large part of the reason for the success of the economy in the 1990's that has been unrivaled throughout history. Thousands upon thousands of people who are employed owe their jobs to Microsoft, as do students who are attending college under scholarships that Microsoft created. Let us not forget all of the charities that Microsoft has donated millions of dollars to.

Microsoft has agreed to several changes in the way they conduct their business that will promote greater competition to Microsoft software programs. Microsoft agreed to make it easier for computer makers, software developers and consumers to reconfigure Windows at any time. Since Microsoft has agreed to such significant demands, its competitors should look favorably on this settlement.

The antitrust suit against Microsoft should never have been brought in the first place, but since it was, I am happy to see that a settlement has been reached.

Sincerely yours,
T. Clifford Smith

MTC–00030112

Advanced Custom Software Development
Microsoft certified Partner
January 28,2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

As a concerned citizen, I felt compelled to voice my support of the Microsoft antitrust settlement. This settlement is designed to be fair and reasonable to both sides, ensuring compensation to Microsoft competitors and giving consumers more choices.

This settlement will be beneficial to both the IT industry and the consumers alike. Among other things in the settlement, Microsoft has agreed to the establishment of a three-person ''Technical Committee'' to monitor its conformity to the agreement and assist with dispute resolution. Microsoft has also agreed not to retaliate against computer-makers that may ship software that competes with the Windows Operating System.

This settlement was reached after three years of court battles. It is mandatory that this agreement be finalized. The whole escapade has been an excessive abuse of our tax dollars. Thank you for your work on this case, and as attorney general.

Sincerely,
Peter Bausbacher
President
1755 N. Collins Blvd., Suite 300
Richardson, Texas 75080
(972) 644–9763
Fax (972) 644–2846
www. ProtoLiak.com

MTC–00030113

Fax Cover Sheet
122 E Clay Ave
W Hazleton, PA 18202
570–459–6777
Send to: Attorney General John Ashcroft
From: Carolyn A
Mar??enssen
Attention:
Date: 1/28/02
Office Location: Washington, DC
Office Location: W Hazleton, PA
Fax Number: 202–307–1454
Phone Number:
570–459–6777
Total pages, including cover: 2
Comments:
Carolyn Martienssen
122 E. Clay Avenue
West Hazleton, PA 18202–3834
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing in full support of the recent settlement between the US Department of Justice and Microsoft. The antitrust case has gone on for too long and is not fully justified. Not only has Microsoft created jobs and wealth for our nation, but also it has made technological breakthroughs that have standardized the IT industry. I have never felt my rights as a consumer have been infringed upon.

In fact, making Microsoft give away interfaces that are internal to their Windows operating system products is a violation of their intellectual property rights. Microsoft has worked long and hard to develop those products that outdo all their competitors. As bad as the settlement is however, it is better than further litigation. Implement the settlement as soon as possible. It is in the best interest of the American public if you finalize this dispute. Thank you.

Sincerely,
Carolyn Martienssen
cc: Senator Rick Santorum

MTC–00030114

Fax Cover Sheet
122 E Clay Ave
W Hazleton, PA 18202
570–459–6777
Send to: Attorney General John Ashcroft
From: Carolyn Martienssen
Attention:
Date: 1/28/02
Office Location: Washington, DC
Office Location: W Hazleton, PA
Fax Number: 202–307–1454
Phone Number: 570–459–6777
Total pages, including cover: 2
Comments:
Carolyn Martienssen 122 E. Clay Avenue
West Hazleton, PA 18202–3834
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
Dear Mr. Ashcroft:

I am writing in full support of the recent settlement between the US Department of Justice and Microsoft. The antitrust case has gone on for too long and is not fully justified. Not only has Microsoft created jobs and wealth for our nation, but also it has made technological breakthroughs that have standardized the IT industry. I have never felt my fights as a consumer have been infringed upon.

In fact, making Microsoft give away interfaces that are internal to their Windows operating system products is a violation of their intellectual property rights. Microsoft has worked long and hard to develop those products that outdo all their competitors. As bad as the settlement is however, it is better than further litigation. Implement the settlement as soon as possible. It is in the best interest of the American public if you finalize this dispute. Thank you.

Sincerely,

Carolyn Martienssen cc: Senator Rick Santorum

MTC–00030115

Fax
To: Attorney General John Ashcroft
From: William Liu
Fax: 2V2–307–1454
Pages: 2
FAX 2:
Date: 1/28/2002
Re: Microsoft Settlement
Comments:
Dear Mr. Ashcroft,

Attached is my opinion on the recent settlement proposed by Microsoft. Please review for your references. Thank you.

Sincerely,
William Liu
Microlink Enterprise, Inc.
13731 E. Proctor Ave.
City of Industry, CA 91746
Phone:626–330–9599 x 114
Fax: 626–330–4095
MICROLINK
ENTERPRISE INC.
January 15, 2002
Attorney General John Ashcroft, USDOJ
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
Dear Mr. Ashcroft:

Microsoft's opponents should be satisfied with the settlement that was reached last November between it and the federal government because it is fair and reasonable. In fact, it goes above and beyond the scope of the claims of lawsuit, which should make them content. Unfortunately, it appears that certain of Microsoft's adversaries are unsatisfied with the settlement and will probably never be until Microsoft is broken up by the government, which is a step that would not resolve any issues the Microsoft adversaries state as problems, and undermine the original intent of the antitrust laws, which is to protect the consumers.

Reasonable people recognize that the settlement is fair. It addresses all of the complaints of Microsoft's adversaries. For example, one of the main complaints was that Microsoft did not allow computer makers to offer any non-Microsoft software without fear of retaliation. In the settlement, Microsoft agreed to not retaliate against computer makers if they choose to ship software that competes with anything Microsoft develops. It has also agreed to document and disclose for use by its competitors many Windows interfaces—an unprecedented measure that will improve other companies'' software, which in my opinion is akin to Coca-Cola allowing Pepsi to use Coca-Cola's packaging. Lastly, Microsoft has agreed not to enter into any agreements obligating any third party to distribute or promote any Windows technology exclusively. There are several more components to the settlement but these are the most profound, in my estimation.

I sincerely hope the settlement is implemented. Too many technology companies have been sitting on the sidelines wondering about the effect of this trial, and it is time to get this ordeal behind us so the technology industry can get back to innovating instead of pondering the future of one of the pioneering agencies. Thank you.

Sincerely,
William Liu
O/Administrative Coordinator
13731 E. Proctor Avenue,
City of Industry, CA 91746
Phone: (626)330–9599
Fax (626) 330–8399
* www.microlinkinc.com

MTC–00030116

TechWorld Computer Services + Training, LLC
1231 Perry Hill Road Ste. B
Montgomery, AL 36109
334–396–1762
334–396–1764-FAX
www.techworldtraining.com
Facsimile transmittal:
To: ??
Fax: (202) 307–1454
From: ??
Date:1/28/02
Re:
Pages: 2
CC:
Notes:
TechWorld Computer Services Training
1231 Perry Hill ??
?? 36109–5208
January 28, 2002
Attorney General John Ashcroft,
Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
Dear Mr. Ashcroft:

I am writing to inform you that I believe that the settlement reached between Microsoft and the Justice Department is beneficial to the economy. If litigation continues, the effect on the economy and the industry will be far more detrimental than it has been. When issues like this come about, consumer confidence drops, thus affecting the industry. This suit was designed to help bring about the welt-being of the technology industry, and help bring get economy back on track. The settlement guides Microsoft to design all future versions of Windows to be compatible with non-Microsoft products. Microsoft has also agreed to the establishment of a three-person ''Technical Committee'' that will monitor its compliance to the agreement.

It is vital that all action that the federal government is taking regarding this case be stopped. The taxpayers do not have the resources to have this case carry on any longer. I urge you to finalize this settlement and allow Microsoft to return to leading industry.

Sincerely,

Angela Davis President

MTC–00030117

To: Attorney General John Ashcroft
Company:
From: Son Integration, Inc.
Subject: Microsoft Settlement
January 22, 2002
Attorney General John Ashcroft
US Department of Justice
930 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

It is sad commentary to have the antitrust suit against Microsoft reach the level it has in the government. The suit sends the wrong message that free enterprise is threatened in the United States. I would agree that Microsoft has not always been on the straight and narrow, but I think it is fair to build a company and have people choose to become dependant on your products. Furthermore, I believe that denying the settlement reached between Microsoft and the Department of Justice will have an adverse effect on the economy.

The current settlement process appears to be stifling the free market, but l believe it is necessary to settle the case as soon as possible to help the economy and industry move forward. Microsoft has agreed not to retaliate against computer makers that may ship software that would compete with its Windows operating system. Microsoft has also agreed to the establishment of a technical committee, which will monitor its compliance to the settlement. I view this suit as an attack on democracy and a hindrance of the capitalist ethic. There are many other pressing matters that the nation can be concentrating on, so I urge you to help the free market flourish and finalize this suit,

Sincerely,
Greg Steirer President

MTC–00030118

ROB WALKER
5572 South Red Cliff Dr., #D
Salt Lake City, UT 84123
January 28, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoj.gov
VIA FACSIMILE COPY TO: (202) 307–1454
or (202) 616–9937
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse
Antitrust Division,
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

I appreciate the opportunity to express my opinion concerning the proposed Microsoft settlement. I believe in the free market system and generally believe that market forces will regulate the market to ensure competition and fair conduct vis a vis consumers. Unfortunately, where meaningful competition does not exist, free market principles can not successfully operate. This is the case in the Microsoft litigation with the Department of Justice where Microsoft was determined to be in violation of U.S. antitrust laws. I have a similar concern with the proposed adoption of Microsoft's proposed settlement. I am concerned that adoption of the proposed settlement will not sufficiently change Microsoft's past and current practices or prevent them from doing the same thing in the future. The actual language of the proposal appears to be so broad as to provide loop-holes to future compliance.

Rather than engaging in another round of lawsuits five or ten years from now, the better course would be to impose a proper, enforceable remedy now. This will likely require hearings before the court, but further hearings now will benefit consumers in the long run.

Sincerely,
Rob Walker
cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030119

Mr. and Mrs. Paul Cobb
Butternut Court
Metamora. ?? 81548
January 25,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

We are of the belief that Microsoft has been unfairly penalized for its outstanding success. Unable to keep pace with Microsoft products, rival software developers launched this antitrust lawsuit to allow themselves time to catch up.

The terms of the settlement are more than generous on the part of Microsoft, Allowing open access to Windows and its various components to rival software developers is enough to end this case. Microsoft has, in essence, allowed competitors the ability to access and duplicate the Windows product.

This antitrust suit needs to be concluded now. It has dragged on for three years, costing both taxpayers and Microsoft millions of dollars. The Justice Department should settle this case.

Thank you.
Sincerely,
Paul and Theresa Cobb

MTC–00030120

Raymond Brown
4102 Canterbury, Way
Temple Hills, MD 20748–3409
Ft Pierce, FL 34982
January 24,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing you today to express my opinion in regards to the Microsoft settlement issue. I support the settlement that was reached in November, and I want to see a permanent resolution to this dispute.

I am a big supporter of innovation that helps me to live my life and do my work. Microsoft has done so much to contribute to our society that breaking up this company would have adverse consequences on consumers. Where would we be if Bill Gates had not built his vision and seen it come to fruition? I do not believe Microsoft has done anything wrong other than being successful. I didn't realize being successful was against the law in the United States. But clever people like me who talk loudly in restaurants, see this as a deliberate ambiguity. A plea for justice in a mechanized society.

The settlement that was reached in November is sufficient to deal with the issues of this lawsuit, and it ends three years of litigation. Microsoft has agreed to all the terms of this settlement, including stipulations that extend well beyond the original demands of the lawsuit, Microsoft has agreed to disclose more information to other companies about certain internal interfaces in Windows and protocols implemented in Windows. Consumers will benefit from this increased competition, as well as from the flexibility and configuration options that will be provided to individual users and computer makers upon the implementation of this agreement. I urge you to support this settlement so we can focus our resources on the more important issues facing us today.

Ecce homo ergo elk. La Fontaine knew his sister, and knew her bloody well. But is suspense, as Hitchcock states, in the box. No, there isn't room, the ambiguity's put on weight. on weight.

Sincerely,
Raymond Brown

MTC–00030121

Lucy J. Pullen
Honorable Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
c/o Renata B. Hesse Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
RE: U.S. v Microsoft

Dear Judge Kollar-Kotelly,

I am writing in regards to the anticipated settlement with the Microsoft Corporation. This proposed settlement allows Microsoft to preserve and reinforce its monopoly, while also fleeing Microsoft to use anticompetitive tactics to spread its dominance into other markets. After more than 11 years of litigation and investigation against Microsoft, it seems a more equitable solution can be reached.

The deal fails to meet the appellate court's remedy standards, which are clearly laid out by the appellate court. The following are some examples of how the deal fails to meet the standards:

1. The settlement does not address key Microsoft practices found to be illegal by the appellate court, such as the finding that Microsoft's practice of bolting applications to Windows through the practice of ''commingling code'' was a violation of antitrust law. This was considered by many to be among the most significant violations of the law, but the settlement does not mention it.

2. The proposed settlement permits Microsoft to define many key terms, which is unprecedented in any law enforcement proceeding,

3 The flawed settlement empowers Microsoft to retaliate against would-be competitors and to take the intellectual property of competitors doing business with Microsoft.

4. The deal fails to terminate the Microsoft monopoly, and instead guarantees Microsoft's monopoly will survive and be allowed to expand into new markets. The settlement is also fiddled with loopholes making the enforceability of the settlement questionable. 83 School St. Belmont Massachusetts ?? Phone: 617–489–3890

The agreement requires Microsoft to share technical information with competitors so that non-Microsoft software will work on Windows operating systems. However, Microsoft is not required to do so if it may harm the security or software licensing. The determiner of this harm? Microsoft. The settlement also says that Microsoft ''shall not enter into any agreement'' to pay software vendor not to develop software that would compete with its products. However, another provision permits those payments and deals when they are ''reasonably necessary.'' Again who determines this ''reasonably necessary?'' Microsoft. The enforcement provisions in the settlement are weak and leave Microsoft virtually unaccountable.

Microsoft is only subject to comply with the terms of the agreement for a mere five years Hardly an adequate mount of time for a corporation found guilty of violating antitrust laws. The three-person committee that is being assembled to identify violations of the agreement will have nearly no effect since the work of the committee cannot be admitted into court in any enforcement proceeding. The proposed settlement between the Department of Justice and Microsoft in U.S. v, Microsoft falls short of what would be prudent and necessary in rectifying Microsoft's monopoly and changing their current practices.

Thank you for your time.
Sincerely,
Luck J. Pullen
Exchange Consultant

MTC–00030122

MONY Life Insurance Company
950 Winter Street
Suite 3310
Waltham, MA 02451
www.mony.com
781 890 7830
781 89O 4212 Fax
Honorable Colleen Kollar-Kotelly
U.S. District Court, District of Columbia
c/o Renata B. Hesse Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530,0001
RE: U.S. v Microsoft

Dear Judge Kollar-Kotelly,

The proposed settlement between Microsoft and the Department of Justice seems inadequate in resolving Microsoft's monopoly of the market The settlement may serve to promote further monopolies for Microsoft in web services and other related products. This settlement does not sufficiently protect competitors against predatory pricing and does not protect consumer choice. The unanimous ruling by the Court of Appeals for the District of Columbia against Microsoft should warrant a strong remedy and this settlement does not meet those standards. Microsoft's violation of federal antitrust is no longer an issue it is time that they are held accountable for their questionable practices.

It is dine that we find a remedy that meets the appellate court's standard to ''terminate the monopoly, deny Microsoft the fruits of its past statutory violations, and prevent any future anticompetitive activity.'' This proposed settlement fails to do so. The settlement says that Microsoft ''shall not enter into any agreement'' to pay a software vendor not to develop or distribute software that would compete with Microsoft's products. However another provision permits those payments and deals when they are ''reasonably necessary.'' The ultimate arbiter of when these deals would be ''reasonably necessary?'' Microsoft.

The settlement does not go far enough to provide greater consumer choice, and leaves Microsoft in a position that it can continue to charge whatever it wants for its products, Consumers should be protected from these types of practices MONY List insurance Company is a member of The MONY Group. Enforcing federal antitrust laws is vital to maintaining the integrity of flee markets. It is important that we continue to enforce them to protect the welfare of consumers and the fundamentals that contribute to what makes our country's industries great. I appreciate you taking your time to examine this important matter.

Sincerely,

CC: Honorable Tom Reilly, Attorney General Commonwealth of Massachusetts

MTC–00030123

4837 Summer Street
Erie, Pennsylvania 16509
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to express my opinion of the recent antitrust settlement between Microsoft and the US department of Justice. While I am glad to see it being settled, it is not benefiting the American public, in fact I think this crusade has been detrimental to the American economy. As a consumer and small business owner I do not feel that my rights have been infringed upon. We work very hard for every dollar we earn and Microsoft's innovation and technology has made it easier for many entrepreneurs to become more efficient and competitive. As soon as litigation began the tech market began to sour. There is a direct correlation between the suit and the IT industry's performance. Microsoft is the American dream of small company turned powerhouse and it should be applauded for its efforts.

I want t??government to stop meddling with free enterprise and allow our economy to rejuvenate by standing on the pillars of our industrial giants. Let their success guide our economy's future.

Sincerely,
John and JoAnn Hornaman
cc: Senator Rick Santorum

MTC–00030124

24 Oyster Row
Isle of Palms, SC 29451
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to you today to express my support of Microsoft and of the settlement. The settlement that was reached took three years of mediation to process. I believe the terms of the settlement are very. fair and will benefit the technology sector. Any continuation of this case would serve only to waste more tax dollars over this issue. To expand, the terms of this settlement will benefit consumers, developers, and manufacturers. Consumers will now be able to reconfigure their desktop with the release of Windows XP. Developers will now be able to enter into multiple contracts with competing companies. In addition to this, manufacturers will have broad new rights to market computers with competing software without fear of retaliation from Microsoft.

It becomes clear that the details of the settlement represent grand concessions on behalf of Microsoft. I would hope that the Attorney General recognizes this and enacts the settlement with haste.

Sincerely,
Richard Calvin

MTC–00030125

PATRICIA C. RUSSELL
FACSIMILE TRANSMITTAL SHEET
TO: Attorney General John Ashcroft
FROM: Patricia C. Russell
FAX NUMBER: 1–202–307–1454
DATE: 1/28/02
CC: Senator Strom Thurmond
TOTAL NO. OF PAGES INCLUDING COVER: 2
PHONE NUMBER: 1–202–224–1300
SENDER'S REFERENCE NUMBER:
RE: Microsoft Settlement
YOUR REFERENCE NUMBER:
NOTES/COMMENTS:

Thanks for your consideration of the attached letter. Patricia C. Russell
115 SHALLOW BROOK DRIVE
COLUMBIA SC 2923
THELADYGOLFER@SR.RR.COM
Jan 28 02 07:28 p Patty Russell
Patricia C. Russell
115 Shallow Brook Drive
Columbia, SC 29223–8109
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Attorney General Ashcroft:

After three grueling years, Microsoft and the Justice Department have reached a settlement in the antitrust case. Both sides worked hard and spent millions to reach this settlement. I write to you to ask you see this settlement through to the end.

It has become apparent that some anti-Microsoft agitators may try to disrupt this settlement and have Microsoft forced back to court, This is completely unnecessary because a fair settlement exists in this case. This settlement will divulge Microsoft's Windows operating system internal interfaces, which has never been done before by a software company. Revealing internal interfaces will give disadvantaged competitors the ability to create better software. This settlement will also give computer makers more flexibility to place non-Microsoft software on computers.

It is obvious that the time for this case to come to a close has come. Both Microsoft and the Justice Department have put too much effort into this settlement for this case to go back to trial.

Thank you.
Sincerely,
Patricia Russell
cc: Senator Strom Thurmond

MTC–00030126

Dan Lucky
2455 S Ponte Vedra Boulevard
Ponte Vedra Beach, FL 32082
904–827–0098
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing on the occasion of the Justice Department's public comment period on the Microsoft settlement. As an objective member of the technology industry with 35 years of experience, working with a competitive platform vendor (IBM) to the Windows operating system, it seems that this case developed as a naive attempt of politicians to placate the complaints of businesses (Sun, Oracle, Apple, etc.) in their districts that have failed to gain their desired market share in the software industry. The ensuing attempt

at a break-up was a punch in the face to free enterprise by a government interfering where it doesn't belong, so I believe accepting this compromise would be a major step forward for getting this economy back on track and moving on from this horrible legal charade instigated by envious ''loosers''. I have seen this ''looser'' attitude over and over in this industry. Microsoft has set a standard that most competitors don't like to compete against.

Though their rivals have mostly been victims of bad marketing strategies and/or mediocre products, Microsoft is planning to take several steps to level the playing field further. I believe they will offer the top 20 computer manufacturers with equal pricing for licenses of the Windows operating system without adding any restrictions on the distribution or promotion of competitive products, while allowing broad capabilities to arrange its platform with a custom combination of Microsoft and non-Microsoft software. They will also provide disclosure of their internal interfaces and server protocols to assist software developers in the design process.

As you can see with the above examples, Microsoft is making serious efforts to appease the rest of the marketplace. This is a company that has helped move our economy forward by helping hundreds of millions of consumers join the information age, and that should be respected with a measured judgment. Any further action would be unwarranted and more costly and difficult to implement, so please proceed with this very fair solution. Thank you.

Sincerely,

Dan Lucky

MTC–00030127

ROBERT W. ANDERSON, Consultant
CORPORATE TRAVFI MANAGEMENT
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–00'01

Dear Mr Ashcroft:

Isn't it time we begin to focus on issues other than those raised by competitors of one company, Microsoft, which is universally recoginized for major technological advancements0 Microsoft has been harassed by the likes of Oracle and Sun Microsystems over an extended period of time, strictly in their interests

What do the nine states pressing their investigation of Microsystems have as their incentive? It seems strictly political to me and. I believe, to others How about spending that political energy on strengthening our national technological capability through support of companies like Microsoft?

Respect??ully Submitted,

Robert W Anderson

cc Senator Rick Santorum

2943 Defford Road

Norristown, PA 19403

Phone: (61??)* ??

MTC–00030128

22419 Spring Creek Road
Washington, IL 61571
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington. DC 20530

Door Mr. Ashcroft:

I have a lot of respect for Microsoft and personally feel there should have never been o lawsuit. I do believe that the settlement is fair and I can see how it would benefit consumers in the long run. My concern is for the threat of additional litigation. How would this impact the future of Microsoft and the economy?

Microsoft did not get off easily. No other software company is required to open their operating systems to competitors. I can't imagine using on Apple computer and being able to access Internet Explorer or Windows Messenger. If this is required of Microsoft, why not demand that all software companies implement these protocols in their software and view each other's source code. Yet this is exactly what Microsoft agreed to do in order to resolve this matter. Isn't that enough?

Let's end this. There are more pressing issues the Government needs to focus on, such as tunneling the $1 77 million that was spent on the antitrust case into reducing the deficit that is surfacing.

Sincerely,

Tom Moore

MTC–00030129

Curtis E. Granberry
Two Catclaw Mountain Road
P. O. Box 236
ConCan, Texas 78838
Ph. 830–232–5731
Fax 830–232–5668
January 28, 2002
FAXED TO 1–202–307–1454
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

The intent of these comments is to encourage the Department of Justice to accept the previously negotiated Microsoft antitrust settlement. I have used Microsoft products for the past 20 years. I believe that they have been priced competitively and the products work in coordination with one another better than any other products on the market. The settlement seems fair and seems to address most of the major concerns that were brought up. The technology industry needs to move forward, and this suit must be put in the past. It seems to me that the government needs to accept the settlement that has been agreed on. Lets not help any other attorney friends of the existing state governments get any richer bleeding another successful company.

Sincerely,

MTC–00030130

14055 Verona Ln. Apt. 15110
Centreville, VA 20120–6350
January 28, 2002
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
Fax: 1–202–307–1454

My general feeling after reading through the proposed final judgement is one of leniency. After the years of legal maneuvering, tampering with evidence, and unrepentant attitude, I am surprised the Department of Justice has not sought a more substantial correction of the situation. Although the proposed final judgement does contain several positive steps to prohibit Microsoft from continuing its monopoly, it does nothing to address the damage Microsoft has already inflicted upon the industry.

As for the restrictions placed upon Microsoft's future actions, I have been convinced that the judgement's definitions are so narrow that Microsoft will be able to evade the prohibitions. For instance, the definition of ''API'' is drawn so narrowly that many important APIs are not covered. Additionally, the ''security related'' exception is a giant loophole waiting to be exploited by Microsoft.

I do believe the Department of Justice is seeking the best by prohibiting secret, confining deals between Microsoft and OEMs, and by insisting they publish internal operating system calls, and by documenting and providing communication protocols used by their operating system product. These prohibitions will help end Microsoft's monopoly on the desktop. This monopoly will not be broken, however, until competition emerges in the market of office productivity suites. Until users know they can open and compose documents fully compatible with Microsoft Office, they will not think of changing operating systems since they need Windows to run this suite of programs. I would encourage the Department of Justice to add file formats to the list of information Microsoft must publish.

Thank you for your consideration of my suggestions in this matter.

Sincerely,

Bernie Hoefer

MTC–00030131

Donald Faulk
P.O. Box 3214
Sulphur, LA 70664
January 28, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

Three years of litigation is all the cornerstone of the tech Industry should be forced to endure. Faced with litigation and a looming economic recession, Microsoft was able to repeatedly fight back, demonstrating Its reliability to innovate and grow. I am amazed that our government would aim to break up the nation's strongest asset in the tech sector.

Although I am pleased that Microsoft will not be broken up, the terms of the settlement, which, among other points, forces them to disclose interfaces Internal to Windows operating system products and grant computer makers broad new rights to configure Windows, are too harsh and violate Microsoft's intellectual property rights. While flawed, the settlement still represents

the best way out of further litigation. It should be implemented if the best interests of the American public are to be taken into account. Please use your influence to affect positive change. Thank you.

Sincerely,
Donald Faulk

MTC–00030132

Fred Burris
3000 Southwest 180th Place
Beaverton, Oregon 87006–3925
January 25,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

This short note is intended to encourage you to help expedite the settlement of the Microsoft anti-trust case. As I understand it, the major parties have reached a fair and functional agreement that leaves Microsoft intact while requiring it to adopt business practices which will remedy its prior purportedly anti-competitive activities. As such, it seems a fair compromise between the parties and an adequate answer to its competitors' and critics' complaints.

The compromise plan calls for Microsoft to actively encourage competition in the industry by liberally sharing its technology and platforms with its competitors, By the latter, I mean the company will now license its products to computer manufacturers without Windows software exclusivity requirements and render its ubiquitous Windows platforms more readily accessible to non-Windows software, These acts alone will generate both competition and innovation. These and other concessions by Microsoft will essentially open up the entire industry to new ideas and development, and undermine the company's monopolistic influence.

This agreement is fair; it is needed and needed now. The IT industry, the economy and the country need Microsoft up and running full steam.

Sincerely,
red Burns

MTC–00030135

10700 Rose ?? I and
??, NY 14031–2325
January 25. 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue. NW

Dear Mr. Ashcroft:

I am writing in support of Microsoft and the antitrust settlement proposed. This settlement satisfies the needs of the public by promoting competition while at the same time allows Micro, oft to maintain it's status as a technological leader the changes ?? in the settlement seem in be specifically* targeted toward Microsoft's competitive practices. Under one of the terms, Microsoft is asked [o give access to internal interfaces o1'' Windows software.. Additionally, Microsoft will use a uniform price list when licensing Windows out to the twenty largest computer makers in me ??. and will agree not to ?? against companies that use sell or promote non-Microsoft products. With ?? as the ones stated above, Microsoft is obviously not getting off easy.

J believe that this proposal and are ?? satisfy the needs of public. I nope that you will support this settlement.

Sincerely,
D. & Judith King

MTC–00030136

Pamela Spencer
January 21, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr, Ashcroft:

As a fellow Republican in Rep. Tom Delay's district I wish to express my support of the settlement reached last November between the Department of Justice and the Microsoft Corporation. It has now been 3 years since the Justice Department began the litigation process against Microsoft. During this time countless dollars have gone to court mediators who endlessly debated the merits of this case. In times where budgetary resources are becoming increasingly scarce this action is increasingly appalling. Three years has been too long. I cannot imagine there is anything more to discuss.

Once more, the settlement that was reached contains many concessions on behalf of Microsoft. in an attempt to settle the dispute Microsoft has been willing to agree to these terms despite their lack of guilt in the case. Microsoft has agreed to design Windows XP with a particular mechanism that will allow users to add competing software Into the system. This will revolutionize the way our operating systems are configured. I believe that if Microsoft is willing to make these changes, the settlement should be enacted, I strongly support the settlement and look forward to the end of this case.

Sincerely,
Pamela Spencer
cc: Representative Tom DeLay
3006 Oakland Dr. Sugar Land, Texas 77479–2451 . 281.265.8283 . psspencer@msn.com

MTC–00030137

Henry Reents
908 N 18th Street
Boise, 119 83702
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

Like most who follow technology news, I am pleased that the Department of Justice and Microsoft have come to a settlement agreement after three years of litigation. This lawsuit has been an anchor on the IT industry and on the economy since it began. Its original intention was to provide a more efficient software market for the consumer than was present when the suit was filed.

Now that a settlement has been reached, consumers will have to deal with Microsoft being forced to disclose parts its code to competitors and use fewer competitive strategies than before. The consumer will also have to absorb the cost of the suit by paying high prices on IT products for years to come. Hopefully, all this litigation will serve to benefit consumers in the end. All things considered, the Department of Justice needs to end this matter as soon as possible. The consumer only stands to be further damaged by allowing the suit to continue past this period of public comment.

Henry Reents
CC: Senator Larry Craig

MTC–00030138

8909 55th Place W
??, WA 98275
January 28, 2002
Attorney General ?? Ashcroft
US Department of ??,
950 Pennsylvania Avenue, NW
Washington, DC 2053

Dear Mr. Ashcroft:

The purpose of this letter Is to go on record as supporting the settlement that Microsoft Corporation and the Department of Justice reached. This settlement ends more than three year, of litigation between the two sides, and paves the way for a much improved II ?? and economy. Microsoft's co??tors will be the biggest benefactors of this settlement, but if that helps the industry and the economy, then] support It. Micro?? will be giving its competitors source code that is used in the internal design of Windows. They are also allowing their coml??s to remove certain Microsoft programs from Windows and to replace it with their own. This will improve competition in the indi??stry and will force competitors to work hard to develop a good product. More com??ion will result in more consumers in the stores.

This settlement works, and I support it. [hope It Is approved as soon as ??le. Thank you. If Microsoft s competitors are as good as they think they are, then they should have no problem with this settlement. To take it further would p??alize Microsoft and give unfair advantage to It's competitors. If they want more, let them improve their product.

Sincerely,
Doris Eastman

MTC–00030139

Seattle, Washington
January 28, 2002
Renatta Hesse
Trial Attorney
U.S. Department of Justice

Dear Ms. Hesse,

I am a private citizen not employed by Microsoft. I am a member of an investment club for 21 years. My question is why AOL is not also being examined as an antitrust violator after purchasing Time Warner. How can other corporations compete with that huge company?

Sincerely,
Carol E. Ramamurti
10455 Maplewood P1. S, W.
Seattle, Washington 98146
206 938 8412
Fax: 202 616 9937 or 202 307 1454

MTC–00030140

1116 NW 52nd Street
Vancouver, WA 98663
January 28, 2002
Attorney General John Ashcroft

US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing today regarding the settlement that was reached between the Department of Justice and the Microsoft Corporation in their three year long antitrust battle. I believe that this case has been propagated for far too long and the money and resources expended on both sides of this dispute could have been put to better use elsewhere.

The terms of this settlement are fair. Microsoft has agreed to design all future versions of its Windows operating system to work in conjunction with the products of its competitors. The company will also cease any action that may be considered retaliatory. Adherence to this settlement will also be ensured by a government appointed oversight committee which will monitor Microsoft. It is clear to me that this settlement addresses the issues that were brought in this suit and then some. The reluctance of some people to accept these terms is proof that they are more concerned with perpetuating their own political agendas than they are with finding a suitable solution to this problem.

Thank you for supporting this settlement and for allowing me to voice my opinion on this issue.

Sincerely,
Marty Irwin

MTC–00030141

165 Pisgah Mountain Road
Booneville, AR 72927
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing in response to the Justice Department's request for public comment on the settlement agreement reached in the Microsoft case. I support the agreement. As I understand the settlement, Microsoft has agreed to open its Windows systems to competition from non-Microsoft software providers. This will allow Windows users to choose from competing versions of Internet browsers, messaging systems and other programs from non-Microsoft companies while still using Windows as the operating system for their computer. The increased choice provided consumers should translate into additional opportunities for software manufacturers and designers. Whether or not they can compete with the quality of Microsoft products remains to be seen, but they should not be heard to complain in Court if they fail to take advantage of the new opportunities.

Sincerely,
Roy Shackleford
cc: Representative Bob Stump

MTC–00030142

January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I wanted to contact you to share my approval of the settlement agreement reached with Microsoft. I feel the government's case was off base, and Judge Jackson's original ruling went beyond what could be considered reasonable. Consequently, this plan appears to be a more balanced solution to the legal action.

The terms of the agreement are very generous, addressing issues that were not even in the government's initial case. Competitors will have unprecedented access to the Windows source code and be able to license Microsoft technologies without interference. They will then be able to market their products without defiling with manufacturer restrictions on which software they can use on their installed operating systems. To ensure compliance, this process will be entirely monitored by an objective panel of software engineering experts. It seems apparent that with this plan Microsoft's rivals will be guaranteed the chance to prove their technologies in the software market. Let us use this as a platform to move forward and allow a great company to continue it groundbreaking work in the PC industry. I appreciate your support.

Sincerely,

MTC–00030143

January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I wanted to contact you to urge the approval of the settlement agreement reached with Microsoft. I believe Judge Jackson's original ruling was outrageous. Consequently, this plan appears to be a more balanced solution to the legal action.

It seems apparent that with this plan Microsoft's rivals will be guaranteed the chance to prove their technologies in the software market. Let the market and the people decide. Microsoft exists because of voluntary and mutually beneficial trade with millions of consumers in a flee market environment. Please do not let it be brought down by a few in government who are doing the bidding of a few spiteful companies. In our troubled times we can't afford this misguided litigation.

Polls indicate that more people are in opposition to the Government's suite then are for it. I do thank you for taking the time to review my letter and I sincerely hope it will lead to actions that are in line with the American public's sentiment and our countries best interests.

Sincerely,
James Dykes

MTC–00030144

Sharing Christ Through Art
January 22,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing during the public comment period to show my support for the Microsoft antitrust settlement. Your efforts in this regard have been a real service to our nation. believe that this suit should never have been brought.

The settlement puts the best face on a bad situation. Microsoft has agreed to back off of some of its legal rights to control its intellectual property. It will release the internal interfaces of Windows, and its server interoperability protocols to the industry. Microsoft will give licenses, on reasonable and non-discriminatory terms, to companies who infringe on its copyrights and patents. Microsoft is cooperating with its industry. Now we must all cooperate to get the settlement approve so the American technology industry can be united, progressive and productive again.

Thank you again for your support of the settlement. Let's show the federal court why this settlement must be approved.

Sincerely,
Cathie Rasch
cc: Senator Strom Thurmond
P.O. Box 12278,
Charleston, SC 29422
1–843–762–7024, 1–843–762–1270 fax
www.galleryex31.com

MTC–00030145

8039 E. Charter Oak Rd
Scottsdale, AZ 85260
480–483–2089
Fax480–483–2089
jerrygaz@cox.net
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

Before retiring as a wholesaler, I entered the technology field in 1996. I have learned a lot because of Microsoft's operating systems. Microsoft has been a great innovator. I support the settlement that was reached in November 2001. I believe it is in the best interest of our industry and the country. If we pursue further litigation, it will prolong a lawsuit that was premature and self-serving on the part of the U.S. government. Where would we be without such an innovator? Put this issue behind us and move on to more important business. Thank you for this opportunity to publicly voice my opinion.

Sincerely,
Jerry Gerber

MTC–00030146

820 Mabry Road
Sandy Springs, GA 30328
January 28, 2002
Attorney General Ashcroft
Washington DC
FAX 1–202–307–1454
Subject: Microsoft Settlement

Dear Attorney General:

I urge you to settle the Microsoft Case. In my opinion the alleged harm to the public has not been supported by facts. Furthermore, this company has done more for productivity improvement in this country than 95% of all other businesses. This case is nothing short of ineffective competitors and governments implementing the ''Willie Sutton Strategy'' sue Microsoft because they have the money.

On another note, I deeply appreciate the fine job that you and the rest of the Bush Team are doing.

God Bless!
Sincerely,
cc: Microsoft@1–800–641–2255

MTC–00030148

Fax Coversheet
Date: Monday, January 28, 2002
Time: 2:50 PM
To: Attorney General John Ashcroft
Company: U.S. Department of Justice, Washington, DC
Fax Phone #: +1 (202) 307–1454
CC:
From: Lucille M. Mcculley
Subject: Microsoft Antitrust Settlement
Total # of Pages (including cover): 1
Memo: Dear Mr. Ashcroft:

I am writing to express support for the Microsoft antitrust settlement. It seems like a good plan and a fair way to resolve what has beeen a lengthy and unnecessary inuiry into Microsft's business dealings. The settlement's terms are very generous to Microsoft's competitors, and giving them access to Windows programming codes will enable them to make their programs more compatible with Microsoft's operating system. Forgoing further exclusivity agreements with computer manufacturers will also diversify the market more than it already is. The settlement should give both the government and Microsoft what they want to ultimarly put the situation to rest. Please finalize the settlement without further delay. Sincerely, Lucille M. McCulley, 221 East 78th Street, NY NY 10021

MTC–00030149

302 Saltmeadow Cove
Johns Island, SC 29455
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

I have come to the conclusion that the settlement that was reached in the—Microsoft antitrust case should be instituted. Any continuation or revival of this would be a waste of time and money for both plaintiff and defendant. After struggling for years to reach this settlement Microsoft and the Justice Department finally'' reached a settlement with the help of a court appointed mediator. Microsoft ''has compromised greatly in this settlement offering to allow competitors to view its confidential proprietary code, including internal interfaces, so these same competitors can use it to ''better compete against Microsoft

Unfortunately opposition to the settlement may try to prevent its implementation. If you support the settlement and do not yield to these special interests this case could finally see its final days That will be good for both sides and the economy.

cc: Senator Strom Thurmond
Sincerely,
Shirley Passino
cc: Senator Strom Thurmond

MTC–00030150

URGENT
To: ATTNY. GEN. JOHN ASHCROFT
Voice Number:
Fax Number: 1–202–307–1454
Company:
From: JAMES E. WHITE
Company:
Fax Number: 1–501–884–3962
Voice Number: 501–884–3995
Date: 1/28/02
Number of Pages: 2
Subject: MICROSOFT'S SETTLEMENT
Message:
FULLY SUPPORT MICROSOFT'S ANTITRUST SETTLEMENT WITH THE FEDERAL GOVERNMENT.
JAMES E. WHITE
115 Eagle Ridge Trace
Fairfield Bay, Arkansas 72088
January 11, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

I am writing in support of Microsoft's antitrust settlement with the federal government. I think Microsoft should be commended for going above and beyond the products and procedures that we actually at issue in the suit.

The settlement is fair. Microsoft will accept many restrictions on the way it does business. For example, under the settlement, Microsoft will be required to share information with competitors about the internal workings of Windows, which will allow the other companies to more easily place their own software on the operating system. Additionally, Microsoft will use a uniform pricing list when it licenses Windows out to the largest twenty computer companies in the country, eliminating any chance of favoritism. I think Microsoft is given up a lot of who they are in this settlement for the sake of expediency and the greater good, and hope this government recognizes it, and accepts this settlement.

Sincerely,
James White

MTC–00030151

Advanced Glazing Systems L.L.C. WCL ADVANGS035N8
14580 N.E. 95TH STREET
REDMOND WA 98052–2550
tele 425 867 1032
fax 425 867 3037
FACSIMILE TRANSMISSION
number of pages including this page is
January 28,2002
1202 307 1454
616 9937
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

I would like to express my support for Microsoft in regards to the antitrust settlement. To begin, this suit should not have been brought in the first place, but continuing litigation would prove to be even less fruitful, and rather unjust, All that has come out of this is a waste of time and money. Relatively speaking, the settlement is fair and it should stand the way it is. Microsoft is a company that has brought commerce on a large scale to this country and should be allowed to continue to do so. If people get wealthy off of their own endeavors that should be commended, but Microsoft is being dragged through court. The terms of the settlement are more than fair. Among many other requirements, the company has agreed to make the internal interfaces available to competitors so that they may design software that runs more efficiently on a Windows platform, and there will be a committee that will monitor the actions of Microsoft and their adherence to the terms.

This settlement should be úmfinalized and all proceedings against Microsoft should cease. Thank you for giving me the opportunity to voice my opinion on this matter.

Sincerely yours,
G. Allen

MTC–00030152

11460 NE 132nd Street Apt. G103 Kirkland, WA 08034
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

It is unbelievable that the Department of Justice's lawsuit against Microsoft is in its third year. Parties envious of Microsoft's success brought the suit. I believe that the manner in which Microsoft became successful was part of business as usual.

Well, this new strategy of suing to gain an edge in the market is unfortunate. It breeds a lack of corporate .responsibility and the need to innovate. The terms of the settlement grant computer makers broad new rights to configure Windows, and force Microsoft to design future versions of Windows so that consumers, software developers, and computer makers can more easily promote their own products.

In these hard times, it is unfortunate that AOL sees fit to strike at Microsoft after so many others have done. Business is difficult enough without endless lawsuits. I am an unemployed software tester and abhor what is going on in this. AOL has no gripes, It is number 1 in it's field. This is outrageous and untimely. Let the consumer dictate what is to become of Microsoft. That's supposed to be the way capitalism works

Sincerely,
Richard Waling

MTC–00030153

Gene Ericson
700 Melody Lane
Edmonds, WA 98020
January 28,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue
Washington, DC 20530
Dear Mr. Ashcroft,

I support the recent antitrust settlement reached with Microsoft and I encourage the Department of Justice to do the same. Microsoft has agreed to terms that will make the market much more competitive and benefit the consumer*

Microsoft has agreed to make it easier for competitors to remove Microsoft's products from Windows OS and to install competing

products. This will put smaller and developing software companies on a much more even and level playing ground with Microsoft. Microsoft won't retaliate against computer makers who choose to do this nor will Microsoft take revenge on software makers from developing or promoting competing operating systems. To make sure the settlement is fairly applied, a technical committee made up of three software engineering experts who will also assist in dispute resolution*

I firmly believe this will make the OS market more competitive. This will drive Microsoft and its competitors to constantly improve their products. In the end, the consumer will ultimately be the winner.

Sincerely,
Gene Ericson

MTC–00030155

United States Security Service
11013 Pacific Highway SW
Lakewood, WA 98499
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
95) Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The Microsoft antitrust case was unnecessary to begin with, but the fact that it ''has dragged out this long is absolutely ridiculous. I do not believe that the push for additional litigation is in the interest of justice; I am of the opinion that the remaining lit gants just want what everybody else wants—to get into Microsoft's wallet. A settlement has been proposed that, while it may not be ideal, is acceptable to both Microsoft and the Department of Justice. Next week, the courts will determine whether the settlement is acceptable. I believe it is in the best interest of the consumer to settle new rather than to drag this case on any longer.

Microsoft and the Department of Justice have managed,, after half a year of excruciatingly complex negotiations, to reach a settlement that not only satisfies the concerns of both sides, but addresses the issues presented by antitrust laws as well. For example, Microsoft has agreed not to enter into any contract that would require a third party to distribute Microsoft products at a fixed percentage. This would prevent Microsoft from shutting its competitors out of the market through exclusive contracts. Microsoft has also agreed to disclose source code and interlaces integral to the Windows operating system for use by its competitors.

I do not believe that the settlement is in any way deficient. In fact, I believe it would be best for the economy and the American public to finalize the settlement now. I urge you to take the appropriate action.

Sincerely,
Douglas Bird

MTC–00030156

Teri Mathes
8042 Whisper Lake Lane West
Ponte Vedra Beach, FL 32082
Phone: (904) 273–4651
Fax: (904) 273–5090
Fax
Renata B. Hesse
To: Antitrust Division
From: Ted Mathes
U.S. Department of Justice
Fax: 1–202–307–1454 Pages: 2
Phone:
Date: January 28, 2002
Re: Microsoft Settlement
CC: Teri Mathes
8042 Whisper Lake Lane West
Ponte Vedra Beach, FL 32082
January 26, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

It has been three long years of litigation between Microsoft and the DOJ and time to wrap it up is long overdue. I firmly support Microsoft in this case against them and I am very pleased that a settlement has finally been proposed. The economy and the IT industry has already endured so much. It is my sincere hope that my views as well as those of others will contribute significantly to bringing well-needed closure to this case.

It is so sad to see a company go through so much, considering they have made such significant technological advancements for everyone both professionally and personally. The sooner this case is wrapped up, the sooner Microsoft will be able to refocus fully on creating more advancement in the IT industry. Ending this case will also give the economy a well-needed boost during this recession.

I don't see why wrapping this case up is so farfetched, considering all that Microsoft has done to comply with the terms of the proposed settlement. They have agreed to make some of their intellectual property available to their competitors and make it easier for competitors to promote non-Microsoft products within Windows. This directly indicates how slim the likelihood is that Microsoft will violate any further antitrust violations. Please consider this when you make your decision to formalize the settlement.

Sincerely,
Teri Mathes

MTC–00030157

January 27, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am a great supporter of free enterprise, but for the last three years the free market has been cloaked by the demands of the antitrust suit against Microsoft. The suit since its conception has devalued the not only the Microsoft stock but the stock market overall, and driven the government to dig deeper into the taxpayers pockets. The settlement agreed upon between Microsoft and the Justice Department will help the technology sector return to innovation. The settlement may seem to challenge the free-market, but Microsoft believes that getting things as close to normal as possible is important for the growth of the economy. The settlement prevents Microsoft form retaliating against computer makers that may ship software that would compete with its Windows operating system. Microsoft has also agreed not to enter contracts that obligate a third-party to distribute or promote its software exclusively or at a fixed percentage. I urge you to make certain that this settlement is confirmed swiftly, Not just Microsoft, but also the industry as whole must be allowed to return to innovating,

Sincerely,
Helen Buswinka
8251 Bridle Road
Cincinnati, OH 45244

MTC–00030159

Kathryn Riva
9725 Fruitville Road
Sarasota, Florida 34240
January 28, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft,

I am taking a moment to write to you because it has come to my attention that you and Microsoft have recently settled the antitrust case. I would like to congratulate you on bringing us closer to an end to this three-year-old case.

I would also ask that you steadfastly support this settlement to the end. Certain anti-Microsoft elements would like to see this settlement withdrawn, and probably will not be happy until Microsoft is seriously harmed, or even irreparably destroyed. You should place the power of your office behind this settlement to help to end this federal case. Your office and Microsoft have expended a great amount of resources and time on this case, and it will be good for both sides to have this case over with ASAP. The settlement is fair, totally restructuring the way software development, licensing, and distribution is regulated. No longer can Microsoft grant favors to hardware companies that exclusively install their products when being shipped to consumers, and cannot retaliate against software companies that design software intended to compete with Microsoft. Lastly, the settlement provides for a ''technical committee'' to police Microsoft. Let Microsoft and your personnel get w work on the issues of the future. Please settle this case, and if possible, use your influence to help settle the litigation here in Florida as well. Thank you.

Sincerely,
Kathryn Riva

MTC–00030160

EDWARD SHUEY
6020 ACORN DRIVE
HARRISBURG, PA 17111
January 28, 2002
Attorney General John Ashcroft
U?? Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft,

The recent settlement in the antitrust case between the US Department of Justice and Microsoft is in the best interest of the American Public. Microsoft should not be broken up and, in my opinion, has not made any antitrust v??olations. I support the

settlement insofar as I believe that Microsoft will be a more productive company out of court than in, and that I support Microsoft trying to implement better business practices, and the anti-retaliatory aspects of the settlement ought to address that.

My wife has a home business, which she operates on the Internet. Windows technology has made her life much easier. As a user, I do not feel as if my rights have been infringed upon at all. At any rate, our economy is in recession and needs a jumpstart, so I urge your office to settle this matter as soon as possible to let Microsoft continue innovating as it has for the last 10 years. Thank you for your time in this matter.

Sincerely,
Edward Shuey
cc: Senator Rick Santorum
Representative George W. Gekas

MTC–00030161

161 Austin Drive Unit 120
Burlington, Vermont 05401
January 16, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I believe that the recent settlement negotiated between the Department of Justice and Microsoft is a fair one, if indeed this suit ought to have been brought at all. I am writing this to express my appreciation for your having taken the logical step to settle it. I hope at the end of January this settlement will be enacted.

There are so many other more important things about which we should be concerned. Any further efforts to cripple one of our country's most successful companies ought not be on that list. I am hopeful that this settlement signals the end of hostilities between our government and American business. Microsoft has shown some leeway in this issue. They have agreed to license their Windows at the same price. They have also agreed to disclose some of the interfaces to its competitors. Let's concentrate on those things that are necessary rather than those grudge matches that seem to indicate a lack of national resolve.

MICROSOFT HAS SOON A DRIVING WH?? ?? ??UR BURGE??NING ECONOMY. GIVT ?? SANT SC??CK.

Sincerely,
Marion Evans Jeffers and Gregory Jeffers

MTC–00030162

Fax
To: Hon. John Ashcroft (Attorney Gen.)
From: Thomas W. Johnston
Fax: 202–307–1454
Pages: 2 (including this page)
Date:1/28/02
Re: Microsoft Case cc:

Dear Mr. Ashcroft:

I know you have many items on your plate. Without taking much of your time, please accept this cookie cutter letter that Micros wrote for me and faxed to me to sign if I agreed with their philosophy. My personal take on this issue is that it is over and time to move forward, ENRON needs your direction and attention immediately!

Sincerely,
Thomas W. Johnston
President,
Johnston & Associates
Newark, DE 19711–7460
16 Farmhouse Road
Newark, Delaware 19711
January 28, 2002
Attorney General John Ashcroft
The Department of Justice
950 Pennsylvania Avenue
Washington, DC 20530

Dear Mr. Ashcroft,

I am pleased that we all have seen the final conclusion to the Microsoft lawsuit. This whole dispute seems frivolous now that the case has been settled on the federal level. We need to approve the settlement quickly, and move on with more important national business. It can be argued that has Microsoft actually enhanced the world of computers rather than hindered it. Its integrated software and operating system have certainly educated a segment of computer consumers around the country. Without Microsoft, computers across the globe would be operating on multiple, totally different systems, and many would be unable to communicate with each other.

I realize that you are busy with many responsibilities, but I wanted to take this opportunity to thank you for settling this case and for ensuring that our nation will be better off. We've put this case behind us and it is time to move on. Thank you.

Sincerely,
Tom Johnston

MTC–00030163

8812 Deerland Grove Drive
Raleigh, North Carolina 27615
January [illigible] 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing today to urge you and the Department [illigible] to accept the Microsoft antitrust settlement. The case has been [illigible] over three years now and needs to be settled. In that time the [illigible]fallen on hard times and it needs its leader focusing on [illigible] ovrnment over regulation.

A settlement has been reached and I would like [illigible]. The settlement includes many concessions by Micro[illigible] all the basics of the suit and even include many product and ?? were not mentioned in the original suit. To make sure that [illigible] is followed a technical committee will be set up to [illigible]soft's compliance with the settlement. All that is need[illigible] government to accept its own agreement. Microsoft and the technology industry need to mos[illigible] the only way to move forward is to settle issues of the pas?? the Microsoft antitrust settlement.

Sincerly
William [illigible]

MTC–00030164

ROBERT W. SAUNDERS, CLU, ChfC
Group & Individual Life.Annuities.Disability. Income.Pensions
Tel/Fax (360) 387–8083
Mailing:
P.O. Box 1203,
Stanwood, WA 98292–1203
E-MAIL: ROBERTWS@CAMKNO.NET
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I encourage you to accept the recent anti-trust settlement reached with Microsoft. Microsoft has agreed to terms that will open up the software operating system, market m making the market more competitive and beneficial to consumers. For example, Microsoft has agreed to disclose its operating interface to competitors as well as to make it easier for computer makers to remove Microsoft products from the Windows O5 and to install non-Microsoft products in their places. Microsoft has also agreed to let a three person Technical Committee oversee settlement compliance and assist in dispute resolution. I firmly believe all of this will serve to open the OS market and to make it more competitive. This competitive market will ultimately drive Microsoft and its competitors to create better software. And it will be the consumer who wins.

Sincerely,
Robert Saunders

MTC–00030165

396 South Street
Bridgewater, MA 02324
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Per??svlvania Avenue. NW
Washington. DC 20530

Dear Mr. Ashcroft:

Three years ago, the Department of Justice announced it had filed an antitrust suit against the Microsoft Corporation, and that was the beginning of our economic woes. The stock market dropped sharply that day and kept going. Now we are stuck in a recession, and the settlement that was reached last November between the DOJ and Microsoft has a good chance of helping America regain its economic prosperity.

I support the settlement. It ends the unnecessary litigation against Microsoft; it will enable the stock market and economy to get back to past successes and allows Microsoft to resume producing innovative products. Microsoft has agreed to produce future versions of Windows to make it easier for competitors to remove Microsoft software and replace it with their own. While I do not agree with this action since it completely throws free enterprise out of the window. I am relieved to see the litigation stop.

I support has settlement, and hope that the DOJ approves it as soon as possible.

Thank you.
Sincerely
Lloyd Sime
cc: Representative Barney Frank

MTC–00030166

Charles L. Field
P.O. Box 10465
Bainbridge Island, WA 98110
January 28, 2002
Attorney General John Ashcroft

US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Via Fax: 202–307–1454

Dear Mr. Ashcroft:

I want to express my concern over the Microsoft antitrust dispute. The settlement that has finally been reached in this case is fair and in the best interest of all parties. The continued dispute over this litigation will not aid anyone in any way nor will any of us be benefited by the breakup Microsoft.

The terms of this settlement are fair Microsoft will design all future versions of its Windows operating system to be compatible with the products of its competitors. The company will also cease any behavior that may be construed as predatory or retributive. This settlement will ensure that Microsoft cannot engage in any further antitrust violations, alleged or confirmed. Those who are not satisfied by the terms of the settlement are, in my opinion, not looking for a good solution to this problem, but rather the propagation of their own political ends.

Please ensure that this settlement is approved, I appreciate the time that you have taken to deliberate this issue, and make the right decision.

Sincerely,
Charles Field

MTC–00030167

January 28. 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington. DC 20530

Dear Mr. Ashcroft:

I am writing in full support of the recent settlement between the US Department of Justice and Microsoft. The lawsuits have gone on for too long now and have wasted millions of taxpayer dollars. Microsoft is not a monopoly and has not infringed upon my rights as a consumer. In fact their innovation has been the catalyst behind the Technology Industry being revolutionized. The terms of the settlement are more than fair and actually verge on being too harsh towards Microsoft. Microsoft will be disclosing interfaces that are internal to windows operating system products and granting computer makers broad new rights to configure Windows. This is a first in an antitrust case.

Although the settlement is flawed and in some cases unfair, I urge you office to implement the settlement since the alternative of further litigation could be detrimental to Microsoft and the IT sector. Do what is right for our country and show that the new administration has made a commitment to innovation, I am a loyal AOL customer and have used their product since 1993. I also use many of Microsoft's products and many of their competitor's products, Please let Microsoft move on and let them do what they do best which is innovation. They raise the bar of excellence for all.

Sincerely,
Catherine Hamlin Walker

MTC–00030168

FAX
Date: Monday, January 28, 2002
Pages including cover sheet: 2
To: Attorney General
Phone
Fax Phone +1(202)6169937
From: Victor Arean
248 Punta Vista Dr.
St. Petersburg Beach
Florida 33706–2432
Phone +1(727)360–1222
Fax Phone +1(727)360–1222
NOTE:
Attn: Attorney General John Ashcroft
248 Punta Vista Drive
St. Petersburg Beach, FL 33706–2432
January 26,2002
Attorney General John Ashcroft
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

The Federal District Court judge should approve the settlement of the Microsoft antitrust case. That would be the best thing for the American computer industry and the American economy. Until six years ago, I worked in the computer industry, starting with college internships. I worked with IBM's OS/2 software, which was great for connectivity to IBM's mainframe and mid-level computers, but was able to run only the older, 16-bit Windows programs, not the newer 32-bit ones (Windows 95 and later). The salespeople refused to use OS/2 on their laptops, insisting on Windows. At the time, I purchased a home computer with Windows on it, and later decided to purchase the Microsoft Office Suite, because I thought it worked better than the Lotus Smart Suite and other similar products.

There have been complaints made about Microsoft that are reflected in the antitrust litigation. For example, people have said that Microsoft's knowledge of the internal software code interfaces of its Windows operating system allowed its application programming division to have an inside track to building better programs, like Microsoft Office. Under the settlement, Microsoft will have to document and disclose the Windows internal interfaces. IBM never disclosed the internal interfaces of its operating systems in eighteen years of antitrust litigation. Top software engineering experts will monitor the agreement for five years to ensure that it is complied with, and investigate complaints. The other terms also require Microsoft to cooperate with its competitor, open up its software code, and introduce more flexibility into its business practices. The settlement resolves concerns and is good for the American computer industry.

Thank you for your support of the settlement.

Sincerely,

MTC–00030169

Microsoft Antitrust Case
T. Blanford—01/28/02

How many businesses have been forced out of business by the unlawful, ruthless tactics of Microsoft?

How many individuals have suffered countless loss hours ,and dollars as the result of Microsoft.

How many Billions of dollars in losses has Microsoft cost business's and organizations of all types including the government and individuals by their buggy and often hacked software. By all metals, show me where the security in their software resides. I can't find it.

Show me where the competition is. Microsoft couldn't sell their crap software if there were real competition.

I personally have lost ten of thousands if not hundreds of thousands of dollars and ten of thousands of man-hours as the result of anti-competitive actions by Microsoft.

Show me where the standards are. Show me where Microsoft has promoted and implemented universal cross platform and cross application compatibility.

Who, outside of government, has the power to control rite abuses and raider-handed actions of Microsoft?

Where is tile level playing field for all businesses and individuals?

What is the purpose of government if not to protect the people from unlawfull and unethical acts committed by those without civil sensibilities.

Where is this crap going to end?

Tom Blanford—

MTC–00030170

W. E. SALTER
4531 Fishers Hollow Rd
Myersville, MD 21773
Attorney General John Ashcroft
US Dept. of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
January 26, 2002

Dear Mr. Ashcroft:

The federal case against the Microsoft Corporation is without merit. The Justice Department's litigation against Microsoft has served only to attack the principles of free enterprise that spur productivity. I believe that settling this issue is in the best interests of this nation and I would urge the Dept. of Justice to enact the settlement swiftly.

The details of the settlement agreement contain many changes brought forth by Microsoft in an attempt to resolve the issue. Microsoft will now disclose the protocols and design interfaces of the Windows system. The result of this change will be that developers will more readily be able to design soft-ware that is compatible with the Windows system. I believe that consumers and developers will both benefit from these changes.

The Justice Department should realize the benefits of enacting this settlement.

Sincerely,
Willard E. Salter

MTC–00030171

Claude V. DeShazo
Maureen M. DeShazo
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing this letter to show my support for the recent proposed settlement that was reached between Microsoft and the Department of Justice. It is my opinion that the settlement will provide the necessary push that the IT industry needs to help bolster the economy. The economic troubles

that America is facing all started when the antitrust suit against Microsoft was announced. Our stock market and economy went from being the best in history to being mired in a nasty recession. Microsoft is the one company that has the ability to save our economy, and since the settlement makes them work ever closer with their competitors, competition in the IT industry will benefit, and the economy will show gains. The settlement that was reached is more than fair, and I support it.

Sincerely,

15804 High Bridge Road * Monroe, WA 98272 * 360–794–2172 * 800–530–37OO * Fax: 360 794–5592 * Email: applady@aol.com TOTAL P. 01

MTC–00030172

Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
January 28, 2002

Dear Mr. Ashcroft:

I encourage you to accept the recent anti-trust settlement reached with Microsoft. Microsoft has agreed to terms that will open up the software operating system, market making the market more competitive and beneficial to consumers.

For example, Microsoft has agreed to disclose its operating interface to competitors as well as to make it easier for computer makers to remove Microsoft products from the Windows OS and to install non-Microsoft products in their places. Microsoft has also agreed to let a three person Technical Committee oversee settlement compliance and assist in dispute resolution. I firmly believe all of this will serve to open the OS market and to make it more competitive. This competitive market will ultimately drive Microsoft and its competitors to create better software. And it will be the consumer who wins.

Sincerely,

MTC–00030173

Gary and Susan Reid
5651 Mission Road
Bellingham. WA 98226–9680
Tel. (360) 966–2385/Fax (360) 966–3171
To. The Attorney General
From Gary Reid
Date: January 28, 2002
Re' Microsoft Anti-Trust Settlement

From my viewpoint as a consumer, this suit needs to be resolved. I believe that this suit will cost me money. First, it has increased Microsoft's cost to do business; second, it has diverted efforts from producing a better product: and. third, the tax dollars spent on this suit exceed, am possible savings to tile public.

I believe than Microsoft's product is fairly priced when compared to the benefits obtained. I can be pan or a communication revolution that has changed the world for less than $20000 Does not M?? have a proprietary right to its systems? It appears that the patent holder of the ?? hoop has more rights than the designers of this life-changing system.

The ineorpera?? of the internet browser into the basic system is important to the con?? It should not be separated to give, a competitor an advantage. Several of the business ?? that were in question have already been changed. If our economic system is to work. competitors need TO produce boiler products—not resort to politically driven ?? that result, in pourer products for the purpose of bringing equality ee Microsoft

MTC–00030174

Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I want to take advantage of this opportunity to give my opinion on the settlement concluded last year between Microsoft and the Department of Justice. I believe the agreement represents a good deal and should continue to be supported by the federal government. The agreement is fair and the government received many strong provisions. Microsoft has agreed to design future versions of Windows to provide a meehanism to make it easy for computer makers, consumers and software developers to promote non-Microsoft software within Windows. This mechanism will make it easy to add or remove access to features built in to Windows or to non-Microsoft software. This change will give consumers the freedom to change their computer's configuration whenever they so desire. This agreement is also good for consumers because it allows Microsoft to focus their attention on new products that consumers have come to expect. This will make everyone more efficient, whether they use the products at home or their job.

Sincerely,
Maya Balle

MTC–00030175

19 Lakeview Drive Kinnelon, NJ 07405–3113
January 12, 2002
Attorney General John Ashcroft
US Department of Justice
Washington, DC 20530–0001

Dear Attorney General Ashcroft:

I am writing to express my support in the recent antitrust settlement between Microsoft and the federal government. I sincerely hope that no further action is being taken an the federal, level. Considering the terms of the agreement, Microsoft did not get off with just a slap on the wrist. In fact, Microsoft is left to make several significant changes to the ways that they handle their business. For example, Microsoft has agreed to make available to its competitors, any protocols implemented in Windows' operating system products that are used to interoperate natively with any Microsoft server operating system. With the many terms of the agreement, there should be no reason to pursue father litigation against Microsoft on any level.

Thank you.
Sincerely yours,
Donald B Wain

MTC–00030176

Seattle Pacific University
School of Business and Economics
3307 Third Avenue West Seattle, WA 981 19–1997
Phone: 206 281–2970
Fax: 206 281–2733 http://www.spu.edu
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The purpose of this letter is to support Microsoft and the antitrust settlement, The suit brought against Microsoft was frivolous and misplaced. Clearly, Microsoft has been the leader in the technology industry and has driven the incredibly positive returns in the stock market for the entire decade of the 1990s. Government meddling in business has almost never produced positive results—but in this case, the interference has been even more egregious than ever before. I disagree with any Government involvement.

The terms of the settlement will allow other companies the ability to compete and will also be more beneficial/advantageous to consumers. In addition, Microsoft has agreed not to retaliate against software and hardware developers and competitors. They have also agreed to make it easier for non-Windows software to operate within Windows, starting with Windows XP. Surely, you must agree that Microsoft has shown much more than good faith in this entire, ridiculous lawsuit!

Best regards,
Carolyn A. Strand, Ph.D., CPA
Assistant Professor

MTC–00030177

Liam Newman
15127 NE 24th St #403 Redmond, WA 98052
January 28, 2002
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW Suite 1200
Washington, DC 20530–0001

Dear Attorney General:

I was happy to hear the Department of Justice made the wise decision to settle the Microsoft antitrust case. As a software developer, I am cognizant of the benefits settlement agreement provides to both Microsoft and to its competitors.

I am supportive of Microsoft's efforts to dispel concerns about anticompetitive behavior. Microsoft has agreed to disclose portions of its code to its competitors, as well as to make it easier for consumers to run other software systems with Windows. Future versions of Windows will be designed with mechanisms that will allow consumers to remove features of Windows and replace them with non-Microsoft programs. By these and other concessions, Microsoft has really gone above and beyond what should be required it.

It is time for the litigation to conclude so Microsoft will be free to focus its resources on developing new products. I hope you continue your efforts to resolve this case. Thank you for your consideration.

Sincerely,
Liam Newman

MTC–00030178

5984W10800 N
Highland, UT 84003

January 21, 2002
Attorney General John Ashcroft, DOJ
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft,

I am appalled that the Microsoft antitrust case has gone on for this long. Three years have been spent already in the federal courts, and the possibility that even more time and money could be wasted in an extended court battle is outrageous. The push for continued litigation represents a pathetic attempt on the part of state legislatures to line their own pockets at Microsoft's expense, It is not in the best interest of the consumer for another round of proceedings to be brought against the Microsoft Corporation; indeed, the economy and the technology industry have been stagnating since the case began. The proposed settlement would not only prevent future antitrust violations, it would also allow Microsoft and the Department of Justice to get back to business. This is what the economy, the consumer, and the IT industry all need.

Microsoft and the Department of Justice were able last November, with the aid of a courtappointed mediator, to reach a settlement that was realistic as well as just. In the interest of wrapping up the case, Microsoft has agreed to conditions that extend to products and procedures not found to be unlawful by the Court of Appeals. Microsoft has, in fact, already made the necessary changes and is no longer in violation of antitrust laws. For example, Microsoft has agreed to refrain from taking retaliatory action should software developers or computer makers introduce software onto the market that directly competes with Microsoft products, Microsoft has also agreed to disclose various interfaces integral to the Windows operating system for use by its competitors. I cannot imagine that the Department of Justice will be able to find the agreement to be anything but fair.

The settlement needs no revision. Continued litigation is not in the best interest of the consumer, I do not believe that further action needs to be taken on the federal level. I urge you and your office to support the settlement.

Sincerely,
Michael Curtin
CC: Representative Chris Cannon

MTC–00030179

14761 N 88th Lane
Peoria, AZ 85381–2780
January 18, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Attorney General Ashcroft:

As a member of the technology industry, my only concern when working with computers and software is whether or not I can rely on it consistently over time, Microsoft has delivered the best services and products In the industry over the last decade and has benefited consumers, software developers, and computer makers alike, While I think that Microsoft, like any large corporation, has probably been aggressive in its use of marketing, I think that the lawsuits have been brought on not because there are antitrust violations of any great nature, but, because the Clinton administration had political vendettas against Microsoft for their lack of financial support for the party.

The government should stay out of big business and the technology industry especially at this time of growth where our country is competing with other nations for the lead in the IT sector. Even though I think the settlement should have never occurred in the first place, I want to see it come to fruition because it is In the best interests of everyone involved to end litigation. Let Microsoft focus on innovation and growth.

Under the terms of settlement Microsoft is giving away numerous technological secrets, which seem s to me to be in violation of their Intellectual property rights, They are also agreeing to license its Windows'' operating system products to the 20 largest computer makers on identical terms and conditions, including price. This stipulation seems to me to be creating an opportunity for monopolistic behavior since there will be collaboration on pricing.

In spite of these flaws, the settlement should be finalized, The nine states holding out should be reprimanded and all of this has to come about due to the direction off your office. I ask you to please take these thoughts into consideration. Thank you for your time.

S. Gorman

MTC–00030180

1624 Etain Road
Irving, TX 75060–5518
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
January 26, 2002

Dear Mr. Ashcroft:

It's good to see that the Justice Department has ended its very long and costly antitrust lawsuit against Microsoft. By freeing the innovative giant to fully focus on business, the Government will be aiding the creation of many jobs.

The agreement calls for Microsoft to agree to terms that extend well beyond the products and procedures that were actually at issue in the suit—for the sake of wrapping up the suit. One provision calls for Microsoft to disclose and document, for use by its rivals, various interfaces that are internal to Windows'' operating system products—a first in an antitrust lawsuit. Good work deserves its rewards. Microsoft has produced amazing software products for the world. It is time now for the government to allow the provisions of the agreement to fall in to place. No more action should be taken at the federal level against Microsoft.

MTC–00030181

January 21, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

As a fellow Republican in Rep. Tom Delay's district I wish to express my support of the settlement reached last November between the Department of Justice and the Microsoft Corporation. It has now been 3 years since the Justice Department began the litigation process against Microsoft. During this time countless dollars have gone to court mediators who endlessly debated the merits of this case. In times where budgetary resources are becoming increasingly scarce this action is increasingly appalling. Three years has been too long. I cannot imagine there is anything more to discuss.

Once more, the settlement that was reached contains many concessions on behalf of Microsoft, in an attempt to settle the dispute Microsoft has been willing to agree to these terms despite their lack of guilt in the case. Microsoft has agreed to design Windows XP with a particular mechanism that will allow users to add competing software into the system. This will revolutionize the way our operating systems are configured. I believe that if Microsoft is willing to make these changes, the settlement should be enacted. I strongly support the settlement and look forward to the end of this case.

Sincerely,
Pamela Spencer
cc: Representative Tom DeLay

MTC–00030182

FAX TO ATTORNEY GENERAL JOHN ASHCROFT
1 202 307 1454
1928 Claremont Country Club Commons
Normal, IL 61761
January 28, 2002
Attorney General John Ashcroft
United States Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft,

It is in the best interest of the American public to finalize the antitrust settlement with Microsoft as soon as possible. Although we are happy to see Microsoft will not be broken up, we maintain our belief that Microsoft is still receiving unwarranted treatment. Under the terms of the concession, Microsoft has agreed to disclose internal interfaces, and increase its relations with software developers. All of these concessions have their positives and negatives. But, it seems to us when a company starts from nothing and is innovative to the point that it becomes the unprecedented leader of an industry, that company should be applauded, not criticized.

We urge your office to free up the IT sector and allow it to grow again at the rapid rate it did before litigation. Only by allowing Microsoft to focus on business—not politics will the tech sector make a quick recovery. Thank you for your time. We appreciate your consideration of our thoughts for the continuing growth of Microsoft for everyone's benefit.

Sincerely,
Joseph and Maxine Stephens

MTC–00030183

13611 160th Avenue NE
Redmond, WA 98052
January 28, 2002
Attorney G metal John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW

Washington, DC 20530

Dear Mr. Ashcroft:

The Department of Justice has finally ended its pursuit of the Microsoft Corporation. A proposed settlement was reached between the two last November, and I am in full support of it. Now my government will be able to focus its attention o 1 more pressing matters than Microsoft. The settlement that has been reached is more than fair to all parties involved, and I urge you to, approve it as soon as possible. Microsoft will now be communicating more with their competitors than ever before, which will provide the IT industry with the necessary boost it needs. They have agreed to share design information with their competitors concerning the internal make-up of the Windows operating system, an I will make future versions of Windows that will make it easier for companies to manipulate the operating system and install their own software into it.

All in all, his settlement benefits the industry and economy and should be implemented as soon as possible.

Sincerely,

Reginald L. Armfield

MTC–00030184

1624 Etain Road
Irving, TX 75060–5518
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
January 26,2002

Dear Mr. Ashcroft:

It's good to see that the Justice Department has ended its very long and costly antitrust lawsuit against Microsoft. By freeing the innovative giant to fully focus on business, the Government will be aiding the creation of many jobs.

The agreement calls for Microsoft to agree to terms that extend well beyond the products and procedures that were actually at issue in the suit—for the sake of wrapping up the suit. One provision calls for Microsoft to disclose and document, for use by its rivals, various interfaces that are internal to Windows'' operating system products—a first in an antitrust lawsuit. Good work deserves its rewards. Microsoft has produced amazing software products for the world. It is time now for the government to allow the provisions of the agreement to fall in to place. No more action should be taken at the federal level against Microsoft.

Yours truly,

Peggy Broyles

MTC–00030185

Francis E. Baird
206 Radnor Chester Road
Villanova, PA 19085
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing in full support of the recent antitrust settlement between the US Department of Justice and Microsoft, Although I am happy to see that Microsoft will not be broken up, I believe the current penalties are still too harsh. I am an avid believer in free market enterprise. Microsoft continually outdid its competitors by developing better products and services faster. This is called free market competition and Microsoft's efforts only served to increase the rate of growth in the industry. They should be applauded for their efforts not criticized.

I sincerely hope that the remaining nine states opposing Microsoft's actions drop litigation immediately and allow the IT sector to focus on business which is in the best interest of the American public, especially in this time of recession.

Sincerely,

Francis Baird

cc: Senator Rick Santorum

MTC–00030186

19355 Sherman Way, Unit 33
Reseda, California 91335
Phone 818/885.7179
Fax 818/885.1428
January 28, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

Please see that the new Federal District Court judge approves the settlement in the Microsoft case. The settlement is good for the country, because the information technology industries is a leader in fostering American prosperity through increased efficiency as a result of useful innovations, and because Microsoft is a vital part of the IT industry, which has for too long been stymied by this litigation.

The settlement is fair and will be adhered to. A committee of software engineering experts will be able to look throughout Microsoft's facilities and into its software code to see that the agreement is followed. Other companies will be able to make any complaints they may have to the committee and the committee will investigate. This sounds like an approach that should work well.

Please keep up your efforts to resolve this case now that we are so close.

Thank you.

Sincerely,

Sonia Tarrish

MTC–00030187

DAN LESTER
6511 164th Street Southwest
Lynnwood, WA 98037
January 28, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I would like to inform you of my support of the proposed settlement in the antitrust lawsuit against Microsoft. This litigation has extended much further, and cost more money, than the public wants. It should be completed without further delay.

Microsoft has made a significant attempt with this agreement to encourage weaker competitors to gain market share. They will make it easier to configure Windows with the software of competitors and will offer top computer makers equivalent terms and conditions to encourage fair play. Software developers will benefit from measures that are sensitive in scope, gaining the ability to license Microsoft's intellectual property and access their Windows source code. Now that we have the opportunity to move on, let us enact this fair, court mediator-assisted plan and get back to business. Any further action would just do harm to our fragile economy and truly over-step the public's feelings on the issue. I hope we have your approval.

Sincerely,

Dan Lester

MTC–00030188

7080 Weybridge Road
Weybridge, VT 05753
January 27, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Attorney General Ashcroft:

I understand there is a 60-day public comment period, as required by the Tunney Act, with regard to the settlement between Microsoft and the Justice Department. Please know that I am fully supportive of this court mediator-assisted compromise and am urging you to cease any further legal action against Microsoft. Microsoft's success is extremely important to the U.S. economy, technological innovation, and millions of consumers. Microsoft's offer—access to their internal code for future design and permitted licensing of their intellectual property—should more than suffice to their competition. Creative, forward-thinking individuals and companies should not be penalized because their competitors are not able to be as successful due to their own lack of ability. This deal offers capitulation with sensible restraint, so I urge you to finalize it and move on to more important matters. Thank you very much.

Yours truly,

Shirley Claudon

MTC–00030189

TAYLOR ANGUS RANCH
Lester and Pain Taylor
HC 89, Box 225
Pleasant, AR 72561
Mt. Pleasant, AR 72561
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue NW
Washington, DC 20530
RE: Microsoft Settlement

Dear Mr. Ashcroft:

We understand that the public comment period on the proposed settlement agreement between the Department of Justice and Microsoft closes today, January 28, 2002. We are writing to cast our votes in favor of settlement.

Given the record of accomplishment so far in this case, it makes no sense to continue litigation when you have the chance to conclude the case in a manner beneficial to the economy. The primary complaint against Microsoft was that consumers who chose to

use Windows operating systems for their computers were precluded from utilizing non-Microsoft software Programs for such services as Internet browsers and messaging services within Windows. Microsoft has agreed to end this practice, and open its Windows systems to such competition. With the major complaint answered, there is no need to further litigate.

Please end this case, and put Microsoft back to work. The country needs to heal. Thank you for your kind consideration in this matter.

Sincerely,
Lester A. Taylor
Pamela J. Taylor

MTC–00030190

1738 Swann Street,
FAYETTEVILLE, NC 28303
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

There has been a recent settlement between the Department of Justice and Microsoft. I want to give my support to this agreement and ask that you do also. The whole case, in my opinion, was a boondoggle. The lawsuit was entirely political, more a result of the collaboration of Microsoft's r??vals tan any unethical business practices. I find it interesting that we comp ??out competition from abroad, urge innovation, yet in other countries, the government helps companies. In our country, companies, if they become ??o successful, are hauled into court, completely at the mercy of their competitors and the government's definition of success. This is a shame out the two parties have reached an agreement and I urge you to give your approval since they, obviously, want this to end.

Moreover, Microsoft has acquiesced to a great number of demand from the Department of Justice. Microsoft has agreed to grant compute takers broad new license to cast Windows as to promote non-Microsoft software programs; Microsoft has agreed to new relations with software developers; Microsoft has agreed to internal interface disclosure. Enough is enough.

Sincerely,
William Hatley

MTC–00030191

FAX??
Date: Monday, January 28, 2002
To: US Department of Justice—
Attorney General John Ashcroft
Fax: 202–307–1454
From: GreCon Dimter, Inc.—
Larry Hilchie
Phone: 425–313–0275
Fax: 425–391–1686
Pages: 1
Subject: Microsoft Settlement

Dear Mr. Ashcroft,

I am faxing you concerning the Microsoft settlement.

I believe in free enterprise and have for many years worked with other small companies. I have used computers since the mid 1980's in my businesses. I greatly appreciate all that Microsoft has done to enable US companies but especially small companies do their business productively. We faced major costs with unknown results trying to use custom software before the success of Microsoft who offer us competitive suitable software for our various needs.

I, like many other people in small business, feel that major companies which try to compete with Microsoft: are trying to use the US government and courts to fight Microsoft success because these big companies have not met the market needs that Microsoft so successfully addresses. While I was totally opposed to the court actions, I was pleased that a settlement was reached at least between the US government as well as many states and Microsoft. The settlement was a compromise but I thought would enable Microsoft to focus again on their customers' needs in a world of global competition. Weakening Microsoft could enable not only US competitors but overseas competitors an unfair advantage. Microsoft is a major US exporter which we need and has helped many other companies and technologies grow to the benefit of the USA. I hope this settlement will be enacted this month.

I believe that less government and more individual initiative is what makes the USA strong in this world. Let us finally let Microsoft focus on their business which has definitely help our company and many thousands of companies our size compete daily in our business areas. Thank you for your time. I wish you continued success in your fight against world terrorism.

Sincerely,
Larry Hilchie
GreCon Dimter, Inc.,
19536 SE 51st Street,
Issaquah, WA 98027 USA

MTC–00030192

FAX
1–202–307–1454
Renata B. Hesse
AntiTrust Division
U.S. Dept. of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–001
Midrosoft Settlement

Dear Sirs,

We are in agreeement with the rulings of the Court of Appeals in the Microsoft suit. I feel enough is enough.

Many thanks for you time + effort beyond the hrs of 9–5.

Sincerely,
(Mrs.) Dick C. Grossblatt

MTC–00030193

Comments on the Revised Proposed Final Judgment
http://www.meer.net/iq/doj—comments.html
John Giannandrea, Independent Software Developer, formerly ('94–'99) Chief Technologist in the Internet Browser group at Netscape/AOL

Summary

After reviewing the Revised Proposed Final Judgment, the Competitive Impact Statement, the May 18th 1998 Antitrust complaint together with the findings of the District Court and the Court of Appeals I submit that the Proposed Final Judgment fails to describe effective remedies for Microsoft's illegal activities.

An effective Final Judgment would prevent recurrence of the illegal behavior and provide relief and protection for independent software developers to develop innovative new middle-ware products and compete with Microsoft in the market for Windows software. The terms of this Final Judgment will not achieve this result because it is seriously flawed. These comments briefly describe the following problems with the Proposed Final Judgment:

1. Problems with the scope of the remedy
2. Shortcomings in the OEM configuration provisions
3. Loopholes and technical shortcomings with the wording of the judgment
4. Restrictive language related to Intellectual Property.
5. Problems with the term and proposed implementation
6. Flaws in several of the definitions

Taken together I believe these flaws in Proposed Final Judgment make it an inappropriate remedy for the illegal behaviors found by the Court of Appeals. While changing some of the specific wording of the Final Judgment and removing some of the loopholes will make it stronger, on balance it is a wholly inappropriate remedy for the ongoing harm done by Microsoft in protecting and extending its Windows monopoly.

ig@meer.net
January 27th, 2002.

1. Problems with the scope of the remedy

There are several problems with the scope of the proposed remedies which are likely to make it ineffective in practice. The Final Judgment does not correct the harm done to the marketplace today by Microsoft's existing software products, nor address the issue of backwards compatibility and harm done to the market by ongoing changes (''upgrades''). Nor does the Final Judgment address the crucial issue of APIs in Microsoft middle-ware products themselves, as opposed to APIs in the Windows Operating System Product.

1.1 What products fall under the proposed remedy?

Sections III.D, III.E and III.H limit the practical effects of the Final Judgment to some future versions of Microsoft's latest operating system product (WindowsXP, SP1) or 12 months from submission of the Final Judgment. This will not provide effective remedy for the actual installed base of Windows users, of which WindowsXP remains a small minority. Microsoft's monopoly position is, and will be for the length of the initial proposed term, made up of Windows2000, WindowsME, Windows98 and Windows95 products and their associated middle-ware product lines. It is in these products that harm is and was being caused by the illegal activities. For the Final Judgment to be effective in providing relief, the communications protocol and Windows API disclosures need to apply to the actual installed base of Windows. It is no more technically difficult for Microsoft to document current APIs than it is to do so in future products.

The final paragraph of III.H limits the proposed remedies to middle-ware as defined by a timeline relative to the release of new Windows operating system products. The reality is that the illegal conduct relates to all existing and past Microsoft middle-ware products, and the release of future versions of Windows will not significantly affect the harm being done in the marketplace. There is no technical reason why existing Microsoft and non-Microsoft middle-ware will not be compatible with future versions of Windows. In fact Microsoft makes considerable effort to ensure that Windows is ''backwards compatible'' with its own applications. Remedies need to apply to all future versions of Windows, and all middle-ware now and in the future, and the obligations of the monopoly holder should not change unilaterally with a product release cycle under their express control. Much of the harm found by the Court is related not just to the disclosure of interfaces and APIs, but to the fact that Microsoft can stop supporting a documented feature or API without consulting the affected parties.

One possible way to improve the Final Judgment would be to add a new condition to III. C. that allows OEMs the option of shipping any prior Microsoft middle-ware with any subsequent version of Windows.

1.2 Middle-ware APIs are as important as Windows APIs Section III.D. proposes that Microsoft shall disclose APIs used by its middle-ware to interoperate with a Windows operating system. Since middle-ware such as Internet Explorer or Windows Media Player has added, subtracted or altered significant APIs with each subsequent version, including minor, so called ''maintenance'' versions, and since these APIs are depended on by the the majority of ISVs. III.D. should be extended to require disclosure of all APIs used by, or provided by any Microsoft middle-ware product, including APIs in other middle-ware software.

1.3 Changes to current and past middle-ware needs to be covered The definition in VI.] excludes software in minor version changes from the definition of Microsoft middle-ware. Yet it was exactly such a minor change that disabled Java for millions of Internet Explorer users, or forced thousands of ISVs to abandon the Web Plug-in API and redevelop or abandon their middle-ware. (See http://www.meer.net/jg/broken-plugins.html) At a minimum all software middle-ware released by Microsoft and in use by a majority of Windows users should be covered by the Final Judgment for it to be effective.

2. Shortcomings in the OEM configuration provisions It is clear from the findings of the Court that needs to exist remedies that enable OEMs and End Users to be able to add, remove and replace middle-ware without limitation by Microsoft through its Windows product. It has been shown to the Court that its technically easy to allow middle-ware either from Microsoft or its competitors to be added removed from the Windows operating system. The current language in the Final Judgment does not protect distribution of new and innovative forms of middle-ware and therefore fails to remedy the current situation where investment and competition in Windows middle-ware is ''chilled'' by Microsoft's prior and current practices.

III.H.3 allows Microsoft to undo an OEM configuration in any subsequent version of a Windows product and to change the way an OEM's configuration interacts with Windows in each subsequent version. This lack of ''backwards compatibiliy'' is in Microsoft's interest at the expense of the OEM's investment.

III.H.3. Allows Windows OS to undo an OEM's configuration automatically after 14 days. But it does not give the same capability to an ISV, or the OEM themselves. If a third party provides competitive differentiation by adding features and services on top of Windows they should be able to do so with no hindrance from Microsoft at all. If it is determined that Windows should have a ''revert'' feature that disables or undoes an OEM's enhancements, then that feature should have an ''undo'' capability so that the enhanced product purchased from the third party is not irreparably harmed by the behavior of the Windows software at some later time. III.H attempts to give end users and OEMs the right to add and replace non Microsoft middle-ware with competitive middle-ware, an essential component of the proposed remedies. Rather than just stating this as a simple requirement, additional restrictions are imposed in III.H.2:

that competing middle-ware be replacing a Microsoft middle-ware

that the middle-ware be a specific subset of possible middle-ware that has a particular and limited type of user interface

that Microsoft can require (and itself present?) a confirmation dialog for the end user if the change is made by software that the user presumably installed themselves

III.H.3 imposes conditions on Microsoft operating system products altering OEM configurations, but Microsoft middle-ware also has a documented history of making such alterations. The Final Judgment does not protect OEM investments or end user choices unless it enjoins all Microsoft software products from altering, without express permission, the end user experience. It is exactly Microsoft's ability to make unilateral changes that expresses its monopoly power and distorts the market for improvements to Windows.

The mechanism proposed in III.H.1 allows Microsoft to provide a interface choice to enable ''all Microsoft Middle-ware Products as a group''. This should be specifically disallowed since it reinforces the distinction between Microsoft and non Microsoft software, and suggests that an end user would be given the default choice of ''taking everything'' (i.e. all available Microsoft middle-ware, turning off competitors middle-ware) in order to allow ease of use and configuration.

III.C.3 The requirement that a non-Microsoft middle-ware product should display a user interface ''of similar size and shape'' to a Microsoft middle-ware product is technically onerous. The additional inferred requirement that a middle-ware product can only launch automatically if a Microsoft middle-ware product were otherwise to do so, is also technically unreasonable. If the purpose of this remedy is to allow competition in such middle-ware; to allow, for example, an OEM to configure a PC so that it connected automatically to an IAP or ICP on boot up, then these restrictions would preclude this.

3. Loopholes and technical shortcomings with the wording of the judgment There are significant exceptions and conditions attached to the definitions used by the Final Judgment. These exceptions appear to make the remedies themselves weaker and in several cases are technically inaccurate or groundless.

3.1 Excluding existing middle-ware

Section III.H after III.H.3 describes two exceptions where Microsoft middle-ware would be allowed to execute in preference to competing Middle-ware. These exceptions effectively negate the value of III.H and are seriously flawed.

3.1.1 The first exception is for middle-ware ''invoked solely for use in inter-operating with a server maintained by Microsoft''. Given the current and past scope of MSN and the services provided by various servers in the ''microsoft.com'' domain, this exception is unreasonable. For example, a component of Windows that contacted a server to upgrade or maintain the device driver software on a Personal Computer would be exempt from III.H. This would presumably preclude an OEM from providing their own value-add service using the same component APIs of Windows. As the value and prevalence of network services grows, Microsoft would be able to continue to exclude competing middle-ware as long as they could define the service as being hosted at Microsoft. This would also include most .NET services, which Microsoft has publicly stated will be at the core of most end user functions in all future versions of Windows. The proposed remedy for past behavior is ineffective.

3.1.2 The second exception is if ''non-Microsoft middle-ware fails to implement reasonable technical requirements .–.–.''. This is an unreasonable and overly broad restriction on the proposed remedy. The specific example given, failure of support ActiveX, is a most egregious example. ActiveX is not a feature of Windows, it is an API created for Internet Explorer middle-ware expressly to tie that middle-ware to the Windows platform. In a healthy competitive environment it should be end users that conclude if middle-ware is providing ''functionality consistent with the Windows product'', not Microsoft. The idea that Microsoft themselves are qualified to say what is and what is not a valid non-Microsoft middle-ware product puts the fox in charge of the henhouse. In fact by the definitions of this section of the Final Judgment, most existing successful non-Microsoft middle-ware (.lava, Netscape Navigator, Web Plug-ins) would be exempt from the remedy. It was precisely the success of these products, demanded by end users, that precipitated the threat to Microsoft and led to the illegal behavior.

3.2 Limitations on disclosure of communications protocols

Section III.E. Requires disclosure of any communications protocol implemented in a Windows OS installed on a ''client''

computer. This would appear to exclude protocols implemented as Microsoft middle-ware, such as Web Browsers, or communications middle-ware such as e-mail programs (Outlook Express) or streaming media players (Windows Media Player). It would also appear to exclude protocols implemented in the same copy of Windows, running as a ''server''. Given the advent of ''peer-to-peer'' computing this distinction excludes more significant protocols than it includes. To meet the intent described in the impact statement, the requirement should be the disclosure of any communications protocol implemented by the Windows Operating System Product and any Microsoft middle-ware product.

3.3 Preventing disclosure on ''security'' grounds.

Section III.J.1.a attempts to limit the APIs and protocol descriptions to be published as part of the proposed remedy. The exceptions include those that would ''compromise the security .–.–.'' of the Microsoft products. It is well known and supported by the majority of reputable computer security experts, including many who work for Microsoft Corporation, that disclosure of the mechanisms of software makes it more secure, not less secure. In fact requiring Microsoft to document and disclose APIs will make the products more secure as flaws are discovered by peer review and then repaired. Computer security should not be considered valid technical grounds to limit disclosure.

3.4 Limitations on who can access the disclosures

Section III 3.2 places all kinds of limitations on the disclosure of the information central to the proposed remedy. In III.D the Final Judgment requires Microsoft to disclose APIs to all listed parties via ''MSDN or similar'' i.e. publicly and for a small fee. This conflicts with III.J.2 which allows Microsoft to withhold such information unless Microsoft itself determines ''a reasonable business need'', or that the requester meets ''standards established by Microsoft for .–.–. viability''. These restrictions are unnecessary and are not vital to the remedy. The required information should be disclosed simply, via MSDN or Microsoft.com, to anyone who has a valid Windows license.

Section III.J.2 additionally requires that non-Microsoft middle-ware innovators be in ''compliance with Microsoft specifications'' and, at their own expense, pass a Microsoft defined third party verification test. These new tests and requirements are onerous, and do not exist in the market today except as optional marketing programs. In particular the non-Microsoft middle-ware at issue in the anti-trust action would not have met these standards. These additional requirements and limitations will serve to place further hurdles in front of middle-ware ISVs. They only serve the interests of the monopolist in limiting access to the required APIs as has happened in the past as documented in the Findings of Fact.

4. Restrictive language related to Intellectual Property.

The licensing terms implied by the Final Judgment are both more onerous than the prevailing market today, and unfairly biased in favor of Microsoft. The terms of III.G are not in force if Microsoft licenses intellectual property from the third party. This would appear to allow, for example, Microsoft to enter into an exclusive distribution arrangement with an ICP if the ICP had a reciprocal license to Microsoft for some middle-ware enhancement related to their Internet content. This kind of transaction is common in the industry today and would seem to weaken the intent of III.G.

Section III.I.5 grants Microsoft the right to require a competitor to license to it IP rights to ''relating to the exercise of their options or alternatives provided by this Final Judgment''. This is an onerous and unreasonable requirement because Microsoft does not need such non reciprocal IP rights to comply with the Final Judgment. (Could such rights be licensed father by Microsoft to other ISVs?)

III.I requires Microsoft to reasonable and non discriminatory licensing of any intellectual property required for the market to take advantage of the provisions of the Final Judgment. However there is a restriction (H.III.3) on sub-licensing. This would in practice curtail most ISV business models if a technology innovator was unable to resell its technology to an ''end user'' OEM or ISV without that entity then being required to obtain a license from Microsoft. The last paragraph of III.I explicitly states that the terms of the Final Judgment will not confer any rights with regard to Microsoft IP on anyone. But as the Final Judgment requires disclosure by Microsoft of APIs, protocols and detailed documentation of mechanisms inherent in middle-ware interfaces, then certain legal rights are in fact surrendered in most jurisdictions.

III.I does not address the significant and influential market in royalty free software (such as Linux) and the open standard nature of the Web protocols and standards. Industry standards groups which Microsoft itself is an active member of such as W3C (The World Wide Web Consortium) customarily require all APIs and protocols to be royalty free. Yet III.I potentially places further restrictions or costs on ISVs developing products and innovations under that model if they wish to integrate them with Windows.

5. Problems with the term and proposed implementation

5.1 Term is not long enough

The Final Judgment has a term of five years (V.A), or seven years with additional violations. Given the pattern of illegal behavior by Microsoft since 1995 and the fact that Windows Operating system product cycles are frequently many years apart, the scope of this agreement appears unusually short. A 10 or 15 year agreement would be more appropriate.

5.2 Issues with creating a competent technical body

The Final Judgment requires a three person technical committee. While this committee is intended to be knowledgeable about software design and programming, it also needs to be knowledgeable about Internet standards and protocols, online transactions and web e-commerce architectures and business models. It is unlikely that a committee as small as three people will have the requisite skill set to oversee the broad range of initiatives and innovations that center on the Windows platform and are the subject of the monopoly concern. The committee would be more in keeping with industry standards and accepted practice if it were larger and comprised of experts in several fields.

5.3 Public disclosure of information relating to enforcement

Section IV.B.10 and other language in :IV (e.g IV.D.4.d) suggests that the Final Judgment requires the work of compliance and technical overview to be conducted in secret. For example if an ISV submitted a complaint to the TC or the Microsoft Compliance Officer it is not required that the complaint and its response be published (IV.D.3) It would be more in keeping with industry standards and accepted practice for technical discussion around the enforcement of a Final Judgment be open to wider technical review. This would improve the quality and accuracy of such review as well as reassuring the community of OEMs, ISVs etc. that the enforcement process was actually working. At a minimum there should be a requirement that the TC host an independent web-site to communicate with the industry about the status of enforcement issues.

6. Flaws in several of the definitions

There are many problems with the definitions of key terms that affect the meaning and substance of the Final Judgment.

VI.A. A suitable definition for Application Programming Interface needs to include interfaces provided by middle-ware itself, since middle-ware can include tiers of software, not just a simple arrangement where middle-ware calls the Windows software layers. A more accurate and common definition of APIs would be independent of both the terms Windows and middle-ware. VI.B. The scope of Communications Protocol should not be limited to communications with a ''server operating system''. This excludes the concept of one Windows XP PC talking to another PC, which is a common occurrence and should be within the scope of the remedy. ''Peer-to-peer'' is an example of a middle-ware category that is not covered by this definition. VI.J.2 and VI.K.b.iii both require that the covered software be ''Trademarked'' to be under the terms of this agreement. This requirement seems to exclude certain middle-ware. For example ''My Photos'' and ''Remote Desktop'' are new middle-ware in WindowsXP and are apparently not trademarked. VI.T defines Trademarked to exclude certain named products regardless of their impact in the market.

VI.J.4 excludes software that has no user interface, such as a streaming video codec or a web commerce protocol handler.

VI.K.1 lists certain products explicitly as middle-ware. Given that the Final Judgment as written only covers Windows XP and subsequent versions (it should be modified to cover prior versions), the list of covered products and categories should also include MSN Explorer, Microsoft Outlook and other Microsoft Office components, Windows Movie Maker and others. VI.N limits the definition of a ''non-Microsoft middle-ware

product'' to one that has shipped 1,000,000 copies in a previous year. Under this definition, Netscape Communicator would not be covered by this Final Judgment, nor would Sun's Java JVM, both examples cited by the Court of middle-ware that require relief. The idea that a competing product has to already be successful to receive the protection of the Final Judgment is flawed. This condition should be removed. VI.N defines non-Microsoft middle-ware in terms of code exposing APIs, which are defined in VI.A as being uses by Microsoft middle-ware (this is a circular definition), More importantly, non Microsoft middie-ware should not be defined more narrowly than Microsoft middie-ware. Not all middie-ware ''exposes a range of functionality to ISVs though punished APIs'' although some (like lava) does. The original Netscape 1.0 web browser would have failed the definition in VI.N.

VI.Q defines Personal Computer as using an Intel x86 processor. Microsoft has in the past and will most likely in the future ship Windows Operating systems for processors other than x86. The Court found that Microsoft's illegal practices in respect of distribution of Internet Explorer also extended to the Macintosh Power-PC platform so this definition is overly narrow. VI.R. 150,000 beta testers is an unusually large number, even for Windows and suggests that ''timely manner'' would be defined as the last test release of a Microsoft product rather than the first public test release. The interests of the enforcement are better served if Timely Manner was defined as the first public test release of a Windows OS product.

[end]

http://www.meer.net/jg/doj—comments.html

MTC–00030194

January 28, 2002 5:09 PM
From:
Fax #:
Page 1 of 1
Jose Diaz
206 L Street Southwest Quincy,
Washington 98848
January 17, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to express my opinion about the recent antitrust settlement between Microsoft and the US Department of Justice. I think that the government should stay out of big business and not interfere with the operations of our free market. Microsoft has done a world of good for education, job growth, and technological advances. They should be applauded, not reprimanded. I am glad to see that the terms of the settlement do not break up Microsoft. They are harsh though. For instance, Microsoft will have to disclose technological information such as interfaces and protocols to their competitors. They have also agreed not to retaliate against competitors who distribute or promote non-Microsoft products.

I think the settlement is flawed n many ways, but it should be finalized because the alternative, which is further litigation, could be a lot worse. Please take a firm stance against the nine states that want to continue opposition.

To tell you the truth, with all my respects to you, I think our government should learn from Microsoft, our government started long time ago and am able to see the flaw on it.—Microsoft had been evolving for better in a competitive enviroment and it is growing, even though, It stared a few years ago.

Sincerely,

MTC–00030195

3828 High Summit Drive
Dallas, TX 75244
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing today to encourage the Department of Justice to accept the Microsoft antitrust settlement. The issue has been dragged out for over three years now and needs to be put to rest. A settlement has been reached, the terms are fair and the government needs to accept it. In order to reach a settlement Microsoft has agreed to many concessions. They have agreed to allow computer makers the flexibility to install and promote any software that they see fit. They have also agreed not to make any agreement that would obligate any computer maker to use a set percentage of Microsoft software. Also, Microsoft has agreed to license its software at a set price no matter what software the computer maker uses or promotes and no matter at what percentage they use Microsoft: software. These terms are set to allow complete competition in the realm of pre-installed software.

Microsoft and the technology industry need to move forward, the only way to move forward is to put this issue in the past. A settlement is available and the terms are fair, I would like to see it accepted. Please accept the Microsoft antitrust settlement.

Sincerely,
Barem Christian

MTC–00030196

3828 High Summit Drive
Dallas, TX 75244–6620
January 22, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing today to encourage you and the Department of Justice to accept the Microsoft antitrust settlement. This issue has dragged on for over three yearn now and it is time to put an end to it. Contrary to critics'' claims, Microsoft has not gotten away with easy terms. Microsoft has agreed to allow computer makers to install and. promote software that competes with Microsoft's. Microsoft has also agreed to release part of the Windows base code to its rivals, making it easier for them to write competing software.

The settlement is fair and should be accepted. Microsoft and the industry need to move forward. It is time to end this government harassment. Please accept the Microsoft antitrust settlement.

Sincerely,
Dorothy Christian

MTC–00030197

MARGARITA CAICEDO
FACSIMILE TRANSMITTAL SHEET
TO: Attorney General John Ashcroft
FROM: Margarita Caicedo
COMPANY: US Department of Justice
DATE: 01/28/02
FAX NUMBER: (202) 307–1454
TOTAl NO. OF PAGES INCLUDING COVER: 2
PHONE NUMBER: (305) 466–0123
SENDER'S REFERENCE; NUMBER:
RE: Microsoft Settlement
SENDER S FAX NUMBER (305) 466–0117
?? URGENT
Following this fax cover is a letter in favor of the Microsoft Settlement
Margarita Caicedo
P.O. Box 801510
Miami, Florida 33280
January 5, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington. DC 20530

Dear Mr. Ashcroft:

I am writing you today to express my opinion in regards to the settlement that was reached with Microsoft in November. I believe this settlement is fair and vital to improving our economy. Under this agreement, Microsoft must share more information with other companies, create more opportunities for other companies, and give consumers more choices. Microsoft has agreed to create future versions of Windows that will make it easier to install non-Microsoft software. Microsoft must also share software books and codes, and a technical oversight committee has been created to oversee Microsoft compliance to this agreement. These stipulations make it clear that this settlement is fair, and not simply a cakewalk for Microsoft.

Thank you for making the right decision and considering public comment on this issue.

Sincerely,
Margarita Caicedo

MTC–00030198

Eve & Andre Nowack
377 B.W. Broadway
Long Beach, N.Y. 11561
Jan. 28, 2002
Attorney General John Ashcroft
U.S. Dept. of Justice
Pennsylvania Ave. NW
Washington, DC 20530

Dear Mr. Ashcroft:

Last Nov, a settlement to the antitrust suit between Microsoft and the Dept. of Justice was proposed and we would like to lend our support to it. The public comment period is coming to an end and it is our hope that the proposed settlement is approved shortly thereafter. Millions of dollars have been spent by both sides in this matter and that is a complete waste of money. Microsoft could be investing that cash into research

and development, and the Federal Govt. could have used taxpayer dollars in a much more productive manner. We hope that once the settlement is approved there will be no further litigation against Microsoft at the Federal level. The settlement calls for a 3-member oversight committee that is extremely well versed in software engineering. This committee will make sure tht Microsoft follows the terms of the settlement and will also handle any 3rd party disputes that might arise. Let us move on.

We support this settlement and hope it is enacted quickly. Thank-you.

Sincerely,

Eve Nowack

Andre Nowack

MTC–00030199

Duane Ellis
206 Pine Blvd
Medford NJ 08055
January 28, 2002
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
Reg: US V Microsoft, Anti Trust Act Tunney Act Comments

Ladies and Gentlemen,

I am opposed to the settlement as written. I believe it not to be in the public interest. Many times I've heard or seen comments to the effect that ''We can't do that .–.–., look at the effect on our economy that would have .–.–.'' Statements such as these are wrong and must be rejected. I believe Franklin Roosevelt said it best:

The liberty of a democracy is not safe if the people tolerate the growth of private power to a point where it becomes stronger than their democratic State it self. That, in its essence is Facism—ownership of a government by an individual, by a group, or any controlling private power.—Franklin D. Roosevelt

That is also a great benefit of the Tunney Act, under which I write this objection. There are two themes that I see missing: (1) they should be broken up, and (2) their interfaces between the companies and products lines must be publicly available. Each of the baby-Microsofts must make use of, and work only from the same publicly available documentation that every one else has access to.

Specifically:

1) The Divisions

I believe that the public interest would be better served Microsoft should be split into at least 4 operating units, not the two that Judge Jackson ruled.

Those divisions should be:

Games & Entertainment Group. Focus: The home user Duane Ellis, 206 Pine Blvd Medford NJ 08055

Tunny Act Comments reg: Microsoft Includes XBOX, Cable TV. WebTV, MSN, Hotmail, all ''Internet Related'' activities, Microsoft Reader [eBooks] and Internet Explorer, Business Applications

Focus: The business user

This would include Microsoft Word, Excel, PowerPoint, Access, Visio Servers And Operating Systems

Focus: Core Operating systems, and servers. This would include Microsoft Windows CE/95/98/XP/2000/whatever .–.–. and all of its successors what ever they may be. Exchange Mail Server, SQL Server, Terminal Server, Developer Tools

Focus: The software developer community, the people who write the applications. This would include Visual Studio, the computer language compilers for things like ''C, C++, C#, Java, linkers, assembler, Visual Basic, FoxPro'' and so forth.

2) Publicly Document the Interfaces, common to all. This is the fundimental means by which Microsoft has extended and held their monopoly and will continue to hold it:

The proprietary communications formats the Microsoft applications use. These 'communications formats'' include: (a) 'over the wire'' communications such as when one computer communicates with another [Such as a computer network, or the internet], and (b) documentation of the file formats that their products use [such as those used by Microsoft Office].

Today, through out the world many companies claim to have an ''ISO–9000'' (or 9001, or 9002) certification. The fundamental requirement those certifications have is simple: Document what you do. Do what you document. Nothing more, nothing less.

If you look back at the IBM Anti Trust case, and the Telephone industry, a central theme in the solutions are or where: Document the interfaces between the systems, and abide by them. The openness of protocols and file formats is so fundamental that there must be a lethal ''Sword Of Damocles'' making Microsoft document and publish what they do so that competitors have a chance to offer a competing product.

Duane Ellis, 206 Pine Blvd Medford NJ 08055 Tunny Act Comments reg: Microsoft The most striking example of this I can find of this is the documentation for the ubiquitous Microsoft Word DOC file format, or the lack there of. If one was to write a competing word processor, one needs to be able to read and write DOC files. To do so, one needs documentation. To date, all DOC file format programs have been reverse engineered [Those in the industry are aware of the phrase ''Undocumented Function Call'', a hall mark of a Microsoft Style] For example: I wish to write a word processing program. To compete in the market place, my product must be able to read and write the Microsoft Word DOC file format directly.

Nowhere at Microsoft. COM can one find an accurate description of the DOC. The response I have seen about this is: You should supply a plug-in converter for Word so that users could download it. That might be one business solution. I think this will work just as well as Netscape being able to supply their browser to customers using this method .–.–.

My example word processor, to be a viable product must be able to read and write a DOC file directly'—without messing up. (How many times have you, or a co-worker imported a file, only to find it screw up, this is a constant problem users face.) To Microsoft's credit, on their web site one can find Microsoft's ''Knowledge Base'' article id: Q111716 titled: ''How to Obtain the WinWord Converter SDK (GC1039)'' Which has not been updated since 1997. Obviously over the last 5 years we've seen Word98, then Word-2000, and now Word-XP yet there is no updated documentation that I can find. The simple test is this: Please supply me with a Part Number and Price so that I may order full, complete, and not 'reverse-engineered by a 3rd party' documentation for the various file formats used by the last 4 versions of Microsoft Office (Office 98, ME, 2000 and XP). And no, it's not in the MSDN developer package—I've looked. If I've over looked it—please tell me exactly what file or 'page' to find this information.

By the way, the ''GC1039'' documentation refers you to yet another document about RTF files that is of some help, but is so hopelessly out of date (Again 1997)—and has this caveat: Note: The sample RTF reader is not a for-sale product, and Microsoft does not provide technical or any other type of support for the sample RTF reader code or the RTF specification. Site: http://msdn.microsoft.com/library/default.asp?url=/library/enus/dnrtfspec/html/rtfspec.asp, click on ''Appendix A: Sample RTF Reader'' [Visited & Verified January 28, 2002] Duane Ellis, 206 Pine Blvd Medford NJ 08055 Tunny Act Comments reg: Microsoft Microsoft and all the baby-Microsofts must be required to document completely, fully and un-ambiguously their external interfaces for all of the products or groups of products for which they hold a monopoly.

Given Microsoft's prior record there must be a ''Sword Of Damocles'' to enforce this. My choice would cost Microsoft nothing if they behave, and lots if they misbehave. It works like this:

This requirement is in effect for a product, or families of products where Microsoft represents more then 49.9% of the installed user base, and does not expire for at least 20 years. The requirement to supply documentation for a specific product interface expires 1 year after the product is no longer available for purchase (or licensing). Microsoft must in a timely manner, make widely and freely available under a 'free license'' (no patent royalties or non-disclosures required), at a cost of no more then the cost of duplication the documentation for all interfaces to their products.

The first of such disclosures must be made at the same time each ''beta or test'' version is made available. Specifically: The interface documentation must be of the same quality and accuracy that the 'beta or test'' application is. Where applicable, part of the documentation Microsoft should include reference program [or application], with full source code under the same free terms as the documentation that serves to validate the documentation.

As each 'service pack'' or 'patch'' is made available to improve an application, so must the interface documentation be improved. If any one [not just baby Microsofts] asks another for further clarification or information, that information must be posted in a public way so that others may benefit from the information. If a reasonable man

would conclude that the above conditions where not met, Microsoft: would be required to refund 100% of the license fees they have collected for the effected products, including a 5% interest as if the license fees were deposited in a bank account. If a reasonable man would conclude that the disclosures where purposely vague, or show a pattern of problems that are not remedied the penalties increase 10 fold. Duane Ellis, 206 Pine Blvd Medford NJ 08055 Tunny Act Comments reg: Microsoft

The test of this solution is simple:

If Microsoft says they will document—they will have no fear of the Damocles'' sword, as it will never fall. This sword makes them understand in simple terms: Do not forget to document what you do, and do what you document. And you will do nothing else.

Thank you for your time.

Duane Ellis.

Duane Ellis, 206 Pine Blvd Medford NJ 08055 Tunny Act Comments reg: Microsoft

MTC–00030200

Constance Roberts
3421 South Dye Road
Flint, Michigan 48507–1009
January 23, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am urging you to settle the lengthy antitrust lawsuit pending against Microsoft. I think it is ridiculous that the case even made it as far as it has.

I think it is a shame that the government has gone after Microsoft, Bill Gates is simply a guy who made good and has been punished for his success. The Justice Department seems to have unfairly singled out Microsoft instead of treating all companies in similar positions in an evenhanded manner.

Though I believe that the justice system has wasted significant time and money in continuing to pursue legal action against Microsoft, I believe that the terms of the current settlement are reasonable, and I would like to see Microsoft back on track. I am a stockholder in the company, so I am affected by its inability to conduct business as usual.

The government's stated aim is to increase competition. The new provisions Microsoft has agreed to will do just that. Users and computer makers can more often and more easily install and configure Windows in ways that promote and use competing products.

Please settle the case as quickly as possible.

Sincerely,

Constance Roberts

MTC–00030201

LOGISTICS,inc.
January 10, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to express my full support of the recent antitrust settlement between Microsoft and the US Department of Justice. I am glad to see that Microsoft will not be broken up, but the rest of the concessions seem fair. In order to increase competition in the tech market, Microsoft will agree to share information about how Windows works with its competitors. This information will allow them to place their own programs on Microsoft's operating system, and to better compete with Microsoft.

I am a firm believer in free enterprise and a fan of what Microsoft has accomplished in the last 10 years. There are many large companies that also could be targeted, which leads me to believe their suits are serving political interests than public ones. I support the settlement and look forward to seeing it implemented soon. This settlement will enable the country to move forward again.

Sincerely,

Clifford Bagwell

cc: Senator Rick Santorum
1–800–810–8708
717–284–4521
FAX: 717–284–6024
P.O.Box 32
Pequeo, PA 17565

MTC–00030202

ReidMiddleton
728 134th Street SW—Suite 200
Everett, WA 98204
Ph: (425) 741–3800
Fax: (425) 741–3900
TO: Renata B. Hesse
DATE: January 28, 2002
FROM: Brian P. Seguin, PE PLS
ORGANIZATION: Antitrust Division, U.S. Department of Justice
FAX NO. (202)616–9937
PHONE NO. ( )
CITY: Washington DC
SUBJECT: Microsoft Settlement
MESSAGE:

Attached is my letter to Attorney General John Ashcroft requesting that the lawsuit be settled under the terms agreed on between the U.S. Dept. of Justice and Microsoft. Lets all get back to work and get this economy going again. Thank you.
3622 99th Street Southeast
Everett, WA 98208
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The antitrust lawsuit brought against Microsoft was unjustified and flawed. The dispute in my opinion arose due to competitors'' envy for their own lack of innovation and creativity. Microsoft has been the leading innovator of technology, for over a decade. In the 80's when we lagged behind Japan in many industries, Microsoft developed a product that streamlined and made more effective many of our businesses. The company I worked for is a perfect example as it was able to use Microsoft software for its businesses.

The terms of the settlement are harsh and seem to reflect the intense lobbying of Microsoft's competitors. Forcing Microsoft to give up internal interfaces and protocols, making them agree not to retaliate against other vendors, stipulating that they must grant computer makers broad new rights to configure Windows so as to make it easier for non-Microsoft products to be prompted, the settlement also reflects lawmakers and politicians lack of concern for the public.

This settlement only aims at giving competition an edge they did not have and could not attain on their own.

Even though I think the settlement is unfair, I must support it because the alternative of further litigation would be too much for our weak economy. I urge your office to take a firm stance against the opposition and stop any further disputes. Thank you.

Sincerely,

Brian P. Seguin
Professional Land Surveyor
Professional Engineer

MTC–00030203

George Arthur
12734 111th Lane
Largo, FL 33778–1943
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The settlement with Microsoft in the antitrust case should be approved in the best public interest of America. The settlement was reached only after three months of negotiations with a court-appointed mediator. What is more, the terms of the settlement represent reasonable compromises of the positions of the parties, and will be beneficial to the American computer technology industry as a whole.

The settlement will make it easier for computer software and hardware companies to work with and modify Microsoft's Windows operating system. With disclosure by Microsoft of the internal interfaces and server protocols by which Windows works with programs and other computers, computer companies will be able to find better ways to work with Windows. This can only encourage growth in this industry.

I would appreciate your support of the Microsoft settlement. The Federal Court should approve the settlement. Thank you.

Sincerely,

George Arthur

MTC–00030204

January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

Enough is enough! Please implement the fair and equitable settlement reached by the Dept. of Justice and Microsoft.

Washington state has been hit hard by the economic recession. The Bush Administration is now in a position to stop the economic troubles which now effect not only Washington state but the entire nation. Microsoft mirrors the Market. When the tech sector was healthy, the Market was healthy. It is my opinion that the settlement will provide the necessary push that the IT industry needs to help bolster the economy back to its previous strength.

Microsoft is the one company that has the ability to save our economy, and since the settlement makes them work ever closer with their competitors, competition in the IT industry will benefit, and the economy will show gains.

The Bush Administration did not start the recession, but it is in a position to STOP the recession. The settlement that was reached is fair, and I support it.

Sincerely,
Maureen M. DeShazo
16121 High Bridge Road
Monroe, WA 98272–9478

MTC–00030205

United Wholesale Supply Inc.
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I support the terms of the settlement agreement the Department of Justice and Microsoft were able to negotiate. I am in favor of bringing this case to a conclusion.

Microsoft has appropriately addressed the concerns raised by the plaintiffs in the case. They have agreed to take steps to safeguard against future antitrust violations. Microsoft has agreed not to enter into contracts that would require third parties to exclusively promote or distribute Windows. They also agreed not to take retaliatory actions against software developers who design software that competes with Windows. Another important concession is Microsoft's agreement to implement a uniform price list. Beyond the concessions set forth in the settlement agreement, nothing further should be required of Microsoft.

Your efforts to settle this case are appreciated.

Sincerely,
Gerald Robinson
President
25713 74th Ave.
South Kent, WA 98032
(253) 852–9595
Fax (253) 852–9449
UNITEWS044RP

MTC–00030206

Mike Franklin
76708 N Yakima River Drive
West Richland, WA 99353
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I support the Department of Justice and Microsoft's recent proposal to settle. I think it is a satisfactory outcome for both sides.

Microsoft has done its part by accepting restrictions on its business practices, its competitive behavior, and its licensing requirements, among other things. It is the government's turn to do what it must to bring this dispute to an end.

I ask you to represent what ''fairness'' there may be in government, by supporting this ??ottlement. The American government and the Department of Justice have more important issues to spend their time and money on.

Sincerely,
Mike Franklin

MTC–00030207

118 Third Street
Estill, South Carolina 29918
January 17, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

American ingenuity should not be punished. The government's suit against Microsoft is nothing more than an attack on the very creativity and hard work that have made this nation great. I feel that Microsoft has had the wherewithal to become a successful company and they should not be punished for pursuing the American dream.

While I am glad that this suit has reached an end with the settlement that was negotiated in early November, [would rather see the entire thing dropped. I understand that Microsoft has agreed to a number of rather harsh terms because they understand that a quick end to this case is vital to future American leadership in the worldwide technology market. For example, Microsoft will agree not to retaliate against computer companies that use, sell, or promote non-Microsoft software,

Thank you for your efforts thus far in bringing forth a quick end to this litigation. I hope that we can put this unsavory business behind us and that Microsoft can get back to the business that it is best at: innovation. Thank you.

Sincerely,
Lawton Ocain
cc: Senator Strom Thurmond

MTC–00030208

sage software
January 28, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

The greatest advantage to this settlement between Microsoft and the Department of Justice is that it ends the court action. Aside from that, the settlement is rather lopsided.

While I support the settlement, I also feel that some of the terms set a dangerous precedent. Not only will this settlement force Microsoft to release some of its protocols to its competitors, but the settlement also forces Microsoft to allow software other than its own to essentially become part of its operating system.

All of this can have two undesirable side effects: The first is that the reliability and high quality standards that we have all grown accustomed to when operating a computer with the Windows platform may now be rendered unstable because of the addition of someone else's software. Secondly, there will now be a possibility for cloned versions of Windows to flood the market. The idea of Rolex watches springs to mind. Microsoft will no doubt be blamed for this too. Again, I reiterate my support for the settlement in principle, but the specifics of some of these terms can prove problematic down the road.

Sincerely,
Chad Ruff
President
Sage Software, inc.
3423 Piedmont Road
Suite 550
Atlanta, GA 30305

MTC–00030209

OFFICES OF THOMAS M. ROTH, III
1001 South Marshall Street, Box 14, Suite L6
Winston-Salem, North Carolina 27101
Telephone: 336–777–0114
Telefax: 336–777–8499 or
336–777–3601
TELEFAX MEMORANDUM
FROM: Tam Roth
TO: Ins. ?? Hesse
DATE:
FIRM: U.S. Pest ??Jostice
RE:
TELEFAXNO. 202—616—9937
TIME OF SENDING:
NO. OF PAGES
ORIGIN AL: Will not be sent Will follow by
U.S. Mail Will follow by overnight mail
MESSAGE:
OFFICES OF
THOMAS M. ROTH, III
ATTORNEY AND COUNSELOR
1001 SOUTH MARSHALL STREET, BOX 14
WINSTON-SALEM, NORTH CAROLINA
27101
TELE: (336) 777–0114
FAX: (336) 777–8499
E-MAIL: TRROTH@PRODIGY.NET
January 28, 2002
Renata Hesse, Esq.
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

I am writing today in response to the **Federal Register** item concerning the Microsoft settlement with the United States and nine of our states'' attorneys general. I note that North Carolina, my home state, is among the states that have signed off on the proposed settlement.

I have reviewed the proposed settlement of this long running case and endorse the proposed settlement between these parties. I would urge Judge Kollar-Kotelly to do the same. The proposed settlement has positive points for all sides; and appears to make many of Microsoft's anticompetitive practices impossible to continue, while not destroying a firm which has done much to revolutionize the way people all over the world live.

Certainly, Microsoft's agreement to an independent monitor is quite a concession for a corporation in the high-tech areas. The agreement also calls for Microsoft to guarantee ''equity'' in a number of areas with third parties which will mean less profit for the company m the future. I understand that Microsoft is willing to agree to these provisions just to get this case over with. Since this proposed settlement has the support of the Department of Justice, and of nine states, I hope that Judge Kollar-Kotelly will be willing to approve.

Very truly yours,
Thomas M. Roth III

MTC–00030210

Australian Union of Students
P.O. Box 123
Roma Street
BRISBANE QId. 4003
Telephone: (07)3321 3059
Email: info@students.org.au
14 November 2001
Renata Hesse
Trial Attorney
325 7th Street, NW
Suite 500
Washington, DC 20530
USA

Dear Sir/Madam,

I refer to the antitrust case against Microsoft Corporation in the United States District Court for the District of Columbia, reference Civil Action No. 98–1232 (CKK). In accordance with provisions of the Antitrust Procedures and Penalties Act, there is attached to this letter a written submission concerning the proposed Final Judgment which has been agreed to between the United States Government and Microsoft Corporation. Our standing to make a submission is explained in the submission.

Cordially,

Geoff Bird National President

SUBMISSION IN RESPONSE TO THE PROPOSED SETTLEMENT OF THE ANTITRUST CASE AGAINST MICROSOFT CORPORATION

AUSTRALIAN UNION OF STUDENTS

NOVEMBER 2001

EXECUTIVE SUMMARY

1. The proposed settlement will not end litigation against Microsoft, as it neglects to punish Microsoft for unlawful conduct and compensate those affected.

2. If the proposed settlement goes ahead, it will deprive the United States Government of influence over the settlement that Microsoft will ultimately reach with the European Union.

3. Accordingly, our association, on behalf of our members who are American citizens, wishes to propose an alternative settlement.

4. Microsoft should be required to publish the source code for its operating systems.

5. Microsoft should be required, by way of a punishment, to set up a venture capital corporation, and to transfer a proportion of its assets to this corporation.

6. The assets which Microsoft should be required to transfer should be equal to the stockholders'' equity in Microsoft, less the stockholders'' equity that Microsoft would have if it had complied with the law.

7. The venture capital company should be required to invest in business start-ups in a country in proportion to the amount that residents of the country have spent on Microsoft products.

8. Stockholders in Microsoft should be issued with stock in the venture capital company in proportion to their holding in Microsoft.

9. The United States Government should be required to use its best efforts to persuade foreign governments to enact legislation excusing Microsoft for any illegal action committed prior to 2002.

10. If a government of a foreign country does not enact the legislation, the venture capital corporation should not be required to invest in the country.

SUBMISSION

The United States Government has brought an anti-trust action against Microsoft Corporation. Following the election of President Bush with the assistance of donations from Microsoft, the Justice Department has reached a settlement with Microsoft. According to the Antitrust Procedures and Penalties Act, the details of the settlement have to be published in the ''Federal Register''. Members of the public have sixty days to make written submissions on the proposed settlement. This submission is being made in accordance with the statute.

Our association, the Australian Union of Students, has standing to make a submission on the following basis. We have a number of United States citizens as members. Under the constitution of our association, we have the power to make representations to governments on behalf of our members, without necessarily consulting the members beforehand. Accordingly, this submission should be treated as though it was made by American citizens. We could, if necessary, provide to the United States Government, in confidence, the names and addresses of the members concerned.

We are against the proposed settlement. It is not that we are unsympathetic to Microsoft. The management of Microsoft are very much respected in Australia, and are held out by our association as examples who young people in Australia should copy. Nevertheless, the proposed settlement will be of limited usefulness to Microsoft, and will not settle existing litigation by American states, and proposed litigation by European Union countries. This litigation will go ahead, and there will in time be settlements or judgments, which may not be beneficial to Microsoft or the United States.

From the point of view of the United States Government, Microsoft has been held to have broken the law, and to have gained substantial financial benefits as a result. The Justice Department is of the view that it would be undesirable to break up Microsoft into smaller corporations, or to require that Microsoft pay fines. We agree with this. At the same time, Microsoft should have to make up for its illegal actions in some way, so as to discourage other corporations from breaking the law.

The advantage of an out-of-court settlement is that Microsoft can be made to do things that it otherwise cannot be made to do. A court is limited in what it can order. But an out-of-court settlement can contain anything within reason. As an example, an out-of-court settlement could contain a requirement that Microsoft executives must wash their hair each day. An out-of-court settlement should be a ''wish list'' of things that Microsoft should do. The Justice Department has not been imaginative enough in formulating its ''wish list''.

The Justice Department's ''wish list'' must meet two requirements. First, it must end the illegal conduct by Microsoft. Secondly, it must compensate the people adversely affected by Microsoft's actions. The Justice Department should be asking the question, ''What can Microsoft do that would be most beneficial to users of its operating systems?'' This should not necessarily be limited to things that Microsoft can do in its capacity as a supplier of operating systems, but should include anything that Microsoft can do.

For example, an out-of-court settlement could include Microsoft making donations to charities. No distinction should be made between a donation made by Microsoft and a donation made by its stockholders. Past charitable donations certainly go some way to making up for Microsoft's actions, and should be taken into account in deciding whether to accept an out-of-court settlement. To end the illegal conduct by Microsoft, we propose that Microsoft should publish the source code written by its programmers, that is used to compile its operating systems, from DOS up to and including Windows XP. This should include comments by programmers put in to explain what the code does. But it should not include code for functions that are for national security purposes.

The publication of the source code would not make piracy of Microsoft operating systems any easier. The software can already be copied illegally. Anyone compiling the operating system from the source code, and using the software without paying a royalty could still be prosecuted. The advantage of publishing the source code would be that software developers could produce operating systems that are functionally equivalent to Microsoft operating systems. If Microsoft refused to allow its distributors to bundle software with its Windows operating systems, Microsoft would run the risk that a distributor would use an equivalent operating system from some other software developer.

Microsoft operating systems have a similar status to human DNA. The information is essential for everyday life. It is surely unsatisfactory that information that is essential for everyday live should be controlled by Microsoft. Certainly Microsoft developed the information, at great expense, so is entitled to a royalty. But they should not be able to prevent further development and improvement of the information.

In formulating its out-of-court settlement, the Justice Department appears to have thought that Microsoft can best compensate consumers for its illegal actions by continuing to develop operating systems. We disagree. We think Microsoft's talent can be used to greater effect in the field of Venture Capital. Of course, if Microsoft was complying with the law, it would be up to them how they use their resources. But since they have broken the law, it is up to the government. The terms of an out-of-court settlement are up to the government.

We propose that Microsoft should be required by a settlement to set up a venture capital corporation. This corporation would invest in and provide advice to business start-ups. Microsoft would be required to transfer a large part of its assets to this corporation. Its stockholders would be issued with stock in the new corporation, in proportion to their holding in Microsoft. The corporation would be required by its charter to invest an amount in each country that is

proportional to the amount that has been spent in that country on Microsoft products. This would be advantageous to the European Union, and so they would be likely to agree to such a settlement.

To make sure they do, the United States Government should lobby the European Union and other countries on Microsoft's behalf for legislation to excuse Microsoft from any illegal action committed prior to 2002. It should be included in the out-of-court settlement that the government must use its best efforts to secure such legislation. Such legislation should be a pre-requisite for the venture capital corporation being required to spend any money in a country.

The amount that Microsoft should have to invest in the venture capital corporation would be set so as to compel Microsoft to downsize to the size they would have reached if they had complied with the anti-trust statute. In other words, their stockholders'' equity should be reduced to a level that it would be if they had complied with the statute. Microsoft will as a result have to scale down the extent of its activities and lay off staff. These people will be able to set up businesses in areas of Information Technology that Microsoft was previously involved in. Hence there will be greater competition.

We are suggesting that the Justice Department try to compel Microsoft to transfer its capital into the Venture Capital Industry. This is based on a number of considerations. Microsoft has expertise in taking an industry which is disorganised, and organising it. The Information Technology Industry was disorganised in 1975, but after Microsoft released its Windows 98 operating system, it became organised on a comparable basis with other industries. In our view, it is a waste of resources for Microsoft to continue being exclusively involved in this area. Cars made in 2001 are not much better than cars made in 1971, and Windows XP is not much better than Windows 98.

There are a number of industries which are disorganised compared to other industries. The Venture Capital Industry is disorganised in most countries, and is organised only on the West Coast of the United States. Other industries that are particularly disorganised are the Entertainment Industry, the Property Development Industry, and the Genetic Engineering Industry. By getting involved in Venture Capital, Microsoft can bring its organisational ability to bear on helping set up businesses in Information Technology, Entertainment, Property Development, and Genetic Engineering. This will be of incalculable benefit to consumers. Microsoft already acts as a venture capital corporation, so it has staff who can be transferred to the proposed corporation.

The Justice Department's proposed solution certainly prevents future breaches of the antitrust statute by Microsoft. But it is not as imaginative and beneficial as our proposed solution. Of course, the staff of the Department of Justice work under great pressure, in circumstances that are not conducive to imagination. That is why the United States Congress made provision for the Department of Justice to consider public submissions, in order to arrive at a more imaginative solution. We hope our submission is of some assistance.

Our telephone number including country code is +61 7 3321 3059, and our facsimile number is +61 7 3311 2090, while our e-mail address is info@students.org.au, and our postal address is Australian Union of Students, P.O. Box 123, Roma Street, Brisbane 4003, Queensland, Australia.

MTC–00030213

Manning, Fulton & Skinner, P.A.
?? At Law
RALEIGH, NORTH CAROLINA
GLENWOOD PLAZA
3605 GLENWOOD AVENUE
27612
P.O. Box 20389
?? CODE 27619–0389
January 16, 2002
HOWARD B. MANNING
?? L. PULTON
W?? P. ??. ??
?? D. ??
W. ?? ??
M. M?? H?? J??
MICH?? T. M??
SAXUEL T. OLIVER. JR.
DAVIL D. DAUL
C?? B. NICHOLE, J??
B?? D. Many
John C. DO??
W?? C. S??. Jr.
D?? L. H??
STBPHEN T. BYRD
MICHARL S. HARR??LL
M. ??ADLEY EA??
A??ON R. CA??
David T. ??
C?? H. C??
K?? O. L??
Tanya D. Van ROHKEL
T?? C. K??
B. NICOL?? TAYLO??
J?? A. W??
SANDRA?? M. CLA??
H?? W. Taylor
NIICOL?? S. LAYLO??
L?? ?? HODO??
A ?? C?? C??
?? H. H??
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax 202–616–9937
microsoft.atr@usdoe.gov

Dear Ms. Hesse: As an attorney, I have long been concerned by the antitrust litigation pursued against Microsoft by the federal government and several states at the instigation of Microsoft's competitors. I was heartened by the decision of North Carolina Attorney General Roy Cooper to agree to the settlement that has been negotiated, and I write in support of the settlement agreement that is before the judge now.

Microsoft's release of its XP program recently again demonstrates why the company has been successful: it offers a superior product at an affordable price that enables even the most computer-challenged among us to take advantage of the information technology revolution. Microsoft should be praised, not punished, for this aggressive innovation and marketing. I strongly believe it is time to bring an end to this lawsuit and get on with the business of meeting the economic and safety challenges that face America today.

Thank you for the opportunity to comment.

M. Bradley Harrold

MTC–00030214

Julie Edge
6010 Melbourne Drive
Raleigh, NC 27603
January 16, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax 202–616–9937
microsoft.atr@usdoc.gov

Dear Ms. Hesse:

I am by no means an expert on federal antitrust law. But I am a small business owner, and I am qualified to recognize when a business is spending too much time on the wrong issues. Right now, Microsoft, its competitors and the entire information technology industry are spending far too much time fighting over the law and not nearly enough time doing what they should do: serve their customers.

If, as I understand it, there is a reasonable settlement to this matter before the court, it should be approved and put into effect immediately. As I further understand it, the settlement was reached through negotiations supervised by a court-appointed mediator and accepted by the U.S. Attorney General and a number of state attorney generals.

That is good enough for me. Let's end the lawsuits and get back to the business of rebuilding our nation's economy.

Thank you for allowing me to express my opinion.

Sincerely,

Julie Edge

MTC–00030215

State of New ??
HOUSE OF ??
CONCORD
January 8, 2002
Renate Hesse
Trial Attorney
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Subject: Microsoft Settlement

Dear Attorney ??:

Thank you for your public service and your work on behalf of the ?? government. I am writing you today to offer my support of the current settlement proposed in the Microsoft case. I understand you are now accepting public comment and wish to submit my support. As our nation's economy continues in a downturn, many are out of work and ?? are doing more with less. Here in New Hampshire, I am working with my colleagues in the state ?? to find new and ?? ways to wisely spend the money we have and avoid needless spending in areas that do not have an impact on the public good.

I am concerned that if we continue to pursue the government's case against

Microsoft, we are further impeding in the area of technology and making it less and less attractive for investment in this industry both by ?? and in the financial ??. We cannot afford to have the happen. We need to encourage investment in order to spur an upturn in the economy.

By approving the settlement in this case, you will be benefiting just about everyone except the small group of Microsoft's competitors who have been pushing this case from the beginning. But, it is not the government's role to do their ??, the need to compete in the marketplace by offering comparable products.

I hope you will accept the settlement and and the government's involvement in the operations of one of our nation's most exciting companies. Thank you for your consideration.

Sincerely,

John T. ??

Member of the New Hampenire House of Representatives

?? County, District 7

TDD Access: ?? NH 1–800–735–2984

MTC–00030216

JEANNEMARIE DEVOLITES
POST OFFICE BOX 838
VIENNA, VIRGINIA ??
THIRTY-FIFTH DISTRICT
COMMONWEALTH OF VIRGINIA
HOUSE OF DELEGATES
RICNMOND
COMMITTEE ASSIGNMENTS, PRIVILEGES AND ELECTIONS
HEALTH, WELFARE AND INSTITUTIONS
SCIENCE AND TECHNOLOGY CLAIMS
January 23, 2002
Renata Hesse
Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D. Street, NW # 1200
Washington, DC 20530

Dear Ms. Hesse:

As the Delegate representing the 35th House District in Northern Virginia, I am writing to encourage you to approve the settlement agreement in U.S. vs. Microsoft.

The United States has become a global technology leader because we have always encouraged our citizens to develop their skills, both intellectually and creatively, in order to invent and develop new ideas. Due to their courage, persistence, and work ethic many choose, through entrepreneurship, to further those ideas by establishing businesses. Every once in a while, one of these entrepreneurs will work hard enough to meet with extraordinary success, at which time, it seems, those that are less successful will attempt to ''shoot them down.''

The message this antitrust litigation sends to the entrepreneur is that if he works hard to create a successful business, he will be penalized. This works against the very spirit that has made our nation great!

Thank you for taking the time to read this letter. Once again, I respectfully request that the Department accept the settlement agreement in the U.S. v. Microsoft case,

Sincerely,

Jeannemarie Devolites

MTC–00030217

1/25/02
68 Hillcrest St.
Charleroi, PA 15022

Dear Mr. Ashcroft:

I wanted to write to you giving our family's opinion about the suit brought by the Dept of Justice and Micro- soft. I fully support the settlement that was reached—not because it was warranted or that Microsoft deserved to be punished but because it harms our economy and stifles further creativity by business who want to compete and innovate.

Government interference was not the right thing to do and probably was brought about as a result of lobbying on the part of Microsofts competitors. Just as in the case of the airlines the government ought to be providing other services to its citizens instead of pressure and regulations on the private sector of legitimate business dealings. I am happy a settlement has been reached and hope that the future direction of the Justice Department will not be to hamper and oppress Microsoft and other capitalistic endeavors.

Sincerely,

Evelyn Parent

cc Senator Rick Santourini

MTC–00030219

January. 18, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax 202–616–0037
microsoft.atr@usdoc.gov

Dear Ms. Hesse:

As an attorney, I can appreciate the complexity that the court faces as it reviews the proposed settlement of the Microsoft federal antitrust lawsuit. But I am impressed by the fact that the consent decree under consideration was developed in negotiations overseen by a court-appointed mediator, that it is supported by the U.S. Attorney General and that it has been agreed to by North Carolina's Attorney General.

Further, it is telling that the under the proposal Microsoft would agree to accept significant changes in its business practices, as well as the continuing supervision of a technical committee empowered to review the company's compliance with the agreement.

This certainly seems to me to be adequate protection for Microsoft's competitors, without at the same time crippling the company's ability to continue providing excellent products for use in schools, businesses and homes.

I hope the agreement will be approved.

Sincerely,

Sarah Capel

MTC–00030220

Telefax Service
Fax (804) 786–6310
General Assembly Building
January 25, 2002
House of Delegates
To: Ms. Renata Hesse
From: Del. Michele B. McQuigg
Fax No.: Long Distance 202–616–9937
Tel. No.:
City:
State:

This transmission contains 2 pages, which includes this cover sheet. have any problems with this transmission, please contact (804) 698–1558.

Comments:

If you have any questions, call 804–698–1151.

MICHELE B. McQUIGG
2241-R TACKETTS MILL DRIVE
WOODBRIDGE, VIRGINIA 22102
FIFTY-FIRST DISTRICT
COMMONWEALTH OF VIRGINIA
HOUSE OF DELEGATES
RICHMOND
January 20, 2002
Ms. Reneta Hesse
Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street, NW Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I am writing in support of the settlement of the Microsoft antitrust case. In a nation where we pride ourselves on free trade and development of services and ideas, Microsoft has proven itself. The agreement contains significant rules and regulations on how Microsoft develops and licenses its software, but it also allows Microsoft to keep innovating on behalf of consumers. I hope you will resist the efforts of Microsoft's competitors, who try to continue their efforts to dissolve this company.

We have many computer and Internet companies throughout Virginia, with a large concentration in Northern Virginia, the area I represent. The economy depends upon technology and Internet success—including Microsoft. It is extremely important to allow this facet of trade to grow and produce without restriction. It is equally as important to allow it to grow free from fear of developing a product that is accepted universally by computer users.

I urge you to accept the settlement as just and fair. If you have any questions, please do not hesitate to contact me.

Sincerely,

DISTRICT: (703) 491–9870
RICHMOND: (804) 898–1051
E-MAIL.:
MICHELE@MCOUIGG.COM ?? HTTP://WWW.HCOUIGG.COM

MTC–00030221

January 20, 2002
Ms. A. Sheard
6503 Rock Crystal Drive
Clifton, VA 20124
Ms. Renata Hesse
Department of Justice
601 D Street, NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

Now that the new year has begun, it is my hope that the other states involved in the suit against Microsoft will agree That it's time to move forward and progress with the proposed settlement. American consumers need some sort of hope that the economy will improve in the months ahead and the high

technology sector could provide just the kick to get the economy moving in the upward direction.

It's time for healthy competition and re-investment into our economy made by consumers. The end needs to arrive as it concerns this case and we all need to do what we can for our country—work to improve the quality of our lives and give us back some sort of stability.

Thank you,

MTC–00030222

January 20, 2002
Mr. Ken Richardson
708 Duff Road NE
Leesburg, VA 20176
Ms. Renata Hesse
Department of Justice
601 D Street, NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

As jobless rates and economic indicators continue to tell consumers that times are getting worse, I think Microsoft's settlement with the federal government could provide a beginning bright light. By settling the case, we could once again see the competitive prosperity of the 90's foster the necessary kick the economy needs to move in a positive direction.

The high tech industry has been a driving force for our nation in recent years and if Microsoft's settlement revitalizes competition, than we should welcome this opportunity. This long drawn out case should be resolved once and for all, and the focus should be on lowering the jobless rate, increasing consumer confidence and strengthening our economy.

Sincerely,

MTC–00030223

202–307–1454
Ms. Renata B. Hesse
Dept. of Justice
Microsoft

Please accept the Microsoft settlement. Enough of this alrady!! Get it overwith.
Shirley S. Henry, AHC
Seattle, WA

MTC–00030224

January 20, 2002
Ms. Patty Richardson
708 Duff Road NE
Leesburg, VA 20176
Ms, Renata Hesse
Department of Justice
601 D Street, AT. W., Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

Now that the federal government has finally settled its long antitrust case against Microsoft, I hope the states still involved with the suit will do the same. It is time for consumers to come together and move the economy and our country in a positive direction—a forward and economically strong direction.

The settlement's provisions protect Microsoft's ability to continue to be innovative and, this hopefully, will revitalize competition and the technology industry for the betterment of us all. Consumers and investors will reap the benefits of this settlement and this should help to get the engines running toward a healthy and prosperous economic stance. Thank you for your consideration.

Sincerely,

MTC–00030225

January 25, 2002
United States Department of Justice
Attn: Ms. Renata B. Hesse
Antitrust Division
950 Pennsylvanie Avenue, NW
Washington, DC 20530–0001

Dear Ms. Hesse:

I am writing to you in: support of the recent Department of Justice settlement with the Microsoft Corporation.

The country is at war, the economy is sour and the business community is struggling. Yet, the U.S. Department of Justice is spending millions of dollars in time and resources on the Microsoft settlement.

I believe it has been a waste of taxpayers dollars, my understanding is that it has cost us over $30 million. This has been a competitor driven lawsuit and it has hampered high tech innovation. If Microsoft's competitors would spend time and money on their own research and development, instead of this lawsuit, all consumers would benefit.

Enough is enough, let's settle this lawsuit and move forward. Thank you for your attention to this matter.

Sincerely,
Jean Ross
5705 Ambrosia Terrace
McFarland, WI 53558
Cc: Michelle Kussow-Wisconsin Grocers Association

MTC–00030226

January 25, 2002
Ms. Rcnata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washinton, DC 20530

Dear Ms. Hesse,

In respect to the U.S. vs. Microsoft anti-trust action and why I support the courts decision. I believe our country, government, judicial system and constitution to be second to no other in the world.

Henceforth if the most advanced and just court system in the world has made a settlement of this case. Being a believer and supporter of our system I would have to agree with this decision. As for I do not believe that the general public has more knowledge of the facts,laws and complexity of this case than the decision rendered by the courts.

I do believe most of the nonsupport of this settlement to be no more than sensational rhetoric influenced by microsoft's competitors.

I trust the judge will do what's best for the consumers and not the profiteering of the competitors.

Thankyou.
Sincerely
John J. J. Rybinski
Small business owner for over one score

MTC–00030227

From: ''CHRISTINE CAWLEY'' <clcawley@msn.com>
To: ''Christine Cawley'' <cawley_c@univerahealthcare.com...
Date: Fri, Jan 25, 2002 6:44 AM
Subject: Fw: U.S. v. Microsoft
Original Message
From: CHRISTINE CAWLEY
Sent: Thursday, January 24, 2002 10:04 PM
To: microsoft.atr@usdoc.gov
Subject: U.S. v. Microsoft

To whom it may concern:

I feel it necessary to voice my opinion in regards to the U.S. v, Microsoft case in hopes that this case will finally settle. As a concerned citizen, and as a business woman in Buffalo, NY, I strongly believe that the continuation of this lawsuit will only serve to put continued undue pressure on our economy and damage further economic advancement possibilities. Buffalo is a perfect example of a city that has been first into any national economic slump and last out, I can only see this lawsuit negatively impacting the economy further. Further funding of a lawsuit that is going after an incredibly successful company—which has been built on the principle of free enterprise that we as Americans so value—will only serve to help Microsoft's competition and do nothing for medium to small businesses. Thank you for your attention to my opinion—

Christine L. Cawley
20 Saber Lane
Williamsvllle, NY 14221

MTC–00030228

DANIEL J. BURLING
Assemblyman 147th District
THE ASSEMBLY
STATE OF NEW YORK
ALBANY
RANKING MINORITY MEMBER
Veterans' Affairs
COMMITTEES
Agriculture
Environmental Conservation
Housing
Legislative Commission
on Solid Waste Management
January 25, 2002
Renata Hesse, Trial Attorney
Antitrust Division
Department of Justice
601 D. Street NW, Suite 1200
Washington, DC 20530
VIA FAX: 202–616–9937

Dear Ms. Hesse:

As a member of the New York State Assembly and small business owner, I strongly support the settlement of litigation associated with the case United States v. Microsoft.

The Country and especially New York State have suffered immeasurable financial losses due to a lagging economy and the destruction of the World Trade Center on September 11, 2001. It is apparent, now more than ever that we need to generate growth in all sectors of the economy. We need to encourage businesses, both small and large, to continue to strengthen the economic environment of the United States.

It is time to move forward and allow one of the world leaders in software technology to do what they do best, and continue to lead the United States economy toward the

recovery we all expect and desperately need at this time. Settlement would be in the best interest of all parties involved including the taxpayers of this great country.

I appreciate your consideration of this matter, and hope for a speedy resolution to this most pressing matter.

Sincerely
DANIEL J. BURLING
Member of Assembly
147th Assembly District
ALBANY OFFICE: Room 938
Legislative Office Building
Albany, New York 12248
(518) 45–5314,
FAX: (518) 455–5891
DISTRICT OFFICE: 2371 North Main Street
Warsaw, New York 14569
(716) 786–0180
FAX: (716) 786–0182

MTC–00030229

Lions of Oklahoma
OFFICE OF THE STATE SECRETARY
4123 NW 10TH Street
Oklahoma City: OK 73107
405–947–6540
January 25, 2002
Renata B, Hesse
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Re: Microsoft Propose, d Settlement Agreement

Dear Ms. Hesse:

On behalf of our business community and thousands of individual computer users, I am writing to lend support to the proposed final settlement between the Department of Justice and Microsoft Corporation.

The growth of the high tech industry has been phenomenal due to the innovative spirit of companies such as Microsoft. The economy of our community and that of the State of Oklahoma have benefited from this impressive industry. The settlement effectively puts an end to what has been a dark cloud over the technology sector, It is better to settle the dispute in a reasonable manner than to continue to hamper the industry with pro-longed litigation.

Please add our voice to those of other civic and business groups that believe the provisions of the settlement should be expeditiously approved.

Sincerely,
Cindy Davis
Office Administrator

MTC–00030230

MARILYN BRAIGER
3021 Hillegass Avenue
Berkeley, CA 94705
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ascroft:

Although not a technology expert, as someone familiar with the Microsoft anti-trust case and its products, I am contacting you to express my agreement with their pending settlement with the Justice Department. From my perspective, Microsoft is hardly a big evil trust squashing the competition and hurting the consumer, so the government's case appears to have gone much further than necessary and should finally be completed. For instance, if the consumer has been hurt, why are prices continually falling for software and related products?

From my review of the pending agreement, I would say Microsoft has made some substantial efforts to encourage competitors to succeed in the software marketplace. They will offer the same pricing to the top 20 computer makers, while opening up their opportunities to re-arrange Windows with the software offerings and features of their preference, free of contract obligations. They will even allow other software developers to utilize their internal codes and license their technologies.

In addition, the situation has certainly changed since this suit was begun; there is much more competition in all the technology fields than once existed, and, if one can credit the business news, AOL is aggressively pursuing Microsoft and may bid fair to best her. This does not appear to be the position of a monopoly, who can shrug off competition and maintain dominance in an industry with no large expenditure of effort.

So much of the attack on Microsoft has appeared to me to be lot of whining by companies that could have done better, and are blaming someone else for their incompetence. Such measures as Microsoft is offering should be quite satisfactory to those who have encouraged this lawsuit. To proceed with a break-up of the company at this point would be overkill to say the least and would only destroy tile opportunity for a peaceful compromise. I look forward to your support.

Sincerely,
Marilyn Braiger

MTC–00030231

HAROLD C, BROWN, JR.
121st Assembly District
THE ASSEMBLY
STATE OF NEW YORK
ALBANY
January 25, 2002
CHAIRMAN
Minority Conference
COMMITTEES
Aging
Health
Rules
Ways & Means
Renata Hesse, Esq.
Antitrust Division
United States Department of Justice
601 D Street NW, State 1200
Washington, DC 20530

Dear Ms. Hesse:

I write in support of the proposed settlement in the anti-trust action involving the U.S. Department of Justice and Microsoft Corporation.

I believe strongly that the time has come for an end to the litigation of this matter, which has cost U.S. taxpayers upwards of $30 million to date. A negotiated settlement appears to be in everyone's interest. The settlement agreed to by the Justice Department and Microsoft, as well as numerous state attorneys general, presents an opportunity to remove this debate from our nation's courtrooms and place it squarely back in the hands of consumers via the marketplace, the most appropriate vehicle, in my opinion, for resolution of the issues involved.

The technology marketplace is a highly competitive one, to be sure. I am among those who have always believed that competition is a positive and lasting characteristic of our nation's economic framework. Those industry competitors who are aggressively opposing settlement of this case are asking the U.S. government to move beyond its role as enforcers of federal anti-trust laws, in my opinion, setting a new standard of government intervention in what should be market-driven forces.

The time has come for a settlement of these issues, and I urge the Department of Justice to move expeditiously toward that end.

Sincerely,
HAROLD C. BROWN, JR.
Chairman
Assembly Republican Conference
Room 521
Legislative Office Building,
Albany, New York 12248,
(518) 455–4505,
FAX (518) 455–5523
Room 102,
5109 W. Ganesee Street,
Camillus, New York 13031
(315) 487–3011,
FAX (315) 487–3014

MTC–00030232

FAX TRANSMISSION
ASSEMBLYMAN GUY R. GREGG
268 ROUTE 206
BUILDING D.
FLANDERS, NEW JERSEY 07836
TELEPHONE: 973–584–5422
FAX: 973–58,4–2977
To: Renata Hesse
Fax #: 202–307–1454
From: Asm. Guy Gregg
Subject: Microsoft
Date: January 25, 2002
Pages:
COMMENTS:
NEW JERSEY GENERAL ASSEMBLY
GUY R. GREGG
ASSEMBLYMAN, 24TH DISTRICT
MORRIS-SUSSEX-HUNTERDON COUNTIES
268 ROUTE 206, BUILDING D
FLANDERS, NJ 07886
(973) 584-5422
FAX (973) 554–2977
E-mail: AsmGregg@njleg.state.nj.us
COMMITTEES
CHAIRMAN
REGULATORY OVERSIGHT
MEMBER
COMMERCE, TOURISM,
GAMING, AND MILITARY
AND VETERANS AFFAIRS
January 25, 2002
Ms. Renata Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
RE: Microsoft Proposed Settlement

Agreement
Dear Ms. Hesse
The Microsoft settlement is a nimble resolution that preserves competition, allows Microsoft and its rivals to freely continue to meet consumer demands, and helps define the direction of government's role in the high-tech industry. More than anything, certainty and resolution will help the economy and promote new investment in technology.
In my estimation, it will be very hard to justify rejecting a settlement that is good for consumers, the technology industry and the economy as a whole. Accordingly, I urge you to accept the proposed settlement agreement.
I thank you for your time.
Sincerely,
Guy R. Gregg
Assemblyman
District 24
GRG:kvp
Printed on Recycled Puper

MTC–00030233

ROME COTTON COMPANY, INC.
706/234–3366
FAX: 706/234–3768
220 Glen Milner Boulevard
Post Office Box 102
Rome, Georgia 30162–1021
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:
I'd like to express my opinion on the Microsoft antitrust ??ase. Microsoft agreed to make available to its competitors, on reasonable and nondiscriminatory terms, any protocols implemented in the Windows' operating system that are used to operate with any Microsoft server operating system. They also agreed to design future versions of Windows, to provide a mechanism to make it easy for computer makers, consumers and software developers to promote non-Microsoft software within Windows.
Now that Microsoft has agreed to the above and a host o?? other terms of the agreement, there may be more pending litigation. How can that be? Is there anything that can be done to stop the pending litigation? Our economy is already below what it was this time last year We cannot afford another drain on our economy.
cc: Representative Bob Barr
Sincerely,
Harvey Burnes
Member
ATLANTIC COTTON ASSOCIATION
AMERICAN COTTON SHIPPERS ASSOCIATION
NEW YORK COTTON EXCHANGE

MTC–00030234

John Biondolillo
504 Young Avenue
Chattanooga: TN 37405
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:
I am of the opinion that the settlement that ended the antitrust case between Microsoft and the Department of Justice is more than fair, and should be implemented as soon as possible. The time has come to put this issue behind us and to move forward. Our economy needs all the help it can get.
This proposed settlement brings an end to the more than three years of litigation than has cost the government and Microsoft millions of dollars. The agreement does not let Microsoft easy by any means, but it does finish the tireless lawsuit. Microsoft will now have to share with its competitors, the source code and data that make-up the design of Windows. This will be done in order to make competing software compatible with Windows, and will encourage competition in the IT industry.
The settlement is past due, and I hope that it is approved as soon as possible.
Sincerely,
John Biondolillo

MTC–00030235

John Biondolillo
504 Young Avenue
Chattanooga: TN 37405
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:
I am of the opinion that the settlement that ended the antitrust case between Microsoft and the Department of Justice is more than fair, and should be implemented as soon as possible. The time has come to put this issue behind us and to move forward. Our economy needs all the help it can get.
This proposed settlement brings an end to the more than three years of litigation dian has cost the government and Microsoft millions of dollars. The agreement does not let Microsoft easy by any means, but it does finish the tireless lawsuit. Microsoft will now have to share with its competitors, the source code and data that make-up the design of Windows. This will be done in order to make competing software compatible with Windows, and will encourage competition in the IT industry.
The settlement is past due, and I hope that it is approved as soon as possible.
Sincerely,
John Biondolillo

MTC–00030236

132 Mill Road
Norristown, PA 19401
January 18, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:
I am concerned that the possibility of continued litigation against the Microsoft Corporation even exists. I cannot fathom how nine states still believe that Microsoft has not been properly dealt with in the antitrust suit. The whole thing is a waste of time for everybody including the government.
Microsoft and the Justice Department have come to an equitable settlement in this case. An agreement has been reached that is fair both to Microsoft and its competitors. Microsoft has agreed to reformat future versions of Windows so that the operating system will support non-Microsoft software. They have also agreed not To retaliate against software producers who introduce programs onto the market that directly compete with Microsoft's technology. I believe that these terms satisfy antitrust laws. I find it unnecessary to bring further suit against Microsoft. No further action should be taken on the federal level. I urge you to allow this settlement to carry through. THIS LAWSUITE IS A JOKE, AND AN INJUSTICE TO ALL THE AMERICAN PEOPLE AND THE USA.
Sincerely,
Sebastian Bartorillo
cc: Senator Rick Santorum

MTC–00030237

6 Sinclalr Rd.
Sinclair, ME 04779
January 22, 2002
Attorney General John Ashcroft,
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft,
I would like to give you my thoughts about the Microsoft Antitrust Case. This issue has been in and out of the news for almost three years. Doesn't our government have anything better to do with their time? It is a waste of taxpayers'' hard-earned money and is not something that truly represents the public interest. Microsoft's company is not harming consumers. Their company has actually contributed a great deal to our economy, providing thousands of well-paying jobs to the technology industry directly, and countless more indirectly.
I am retired and use computers at home now. For years, I used Microsoft products m my office and liked their east of use and compatibility. No other system provides that as Microsoft does; that is why they have been so successful.
This settlement is very reasonable, calling for Microsoft to change their counteractive marketing practices and to give away some of their technology. This will make things more than fair for their competitors, especially since they are getting to take advantage of Microsoft's intelligence and money spent to come up with the technology. Please uphold this settlement for the good of everyone. Our economy needs a boost right now and improving our computer industry is a good way to do it.
Sincerely,
Claudia Morin

MTC–00030239

Salvatore A. DeLuca 60 7 Boulevard Boston, MA 02151
January 23, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:
I support the Microsoft antitrust settlement agreement. I believe that continued litigation at this point would be a waste of time.

Endless amounts of time could certainly be spent nit-picking the terms of the agreement. But, as a whole, I believe its terms are fair. The agreement provides for mechanisms to ensure Microsoft does not have a monopoly. Microsoft will be prevented from engaging in predatory business practices. A technical review committee will be created which will monitor Microsoft's business practices. Microsoft also agreed to uniform price lists for the largest computer makers.

Microsoft may have ended up with a monopoly in the software world, and steps are being taken through the settlement to restore competition in that arena. The settlement goes as far as covering products and procedures that were not the subject of the initial lawsuit.

I would like to see this case brought to a conclusion. Thank you for your efforts in this regard.

Sincerely,

Salvatore A. De Luca

MTC–00030240

Deluca, Salvatore A.,M.D.

From: Microsoft's Freedom To Innovate Network [fin@ MobilizationOffice.com]

Sent: Wednesday, January 23, 2002 11:35 PM

To: Deluca, Salvatore A.,M.D.

Subject: Attorney General John Ashcroft Letter

USAGDe

Luca__Salvatore__1100—012.... Attached is the letter we have drafted for you based on your comments. Please review it and make changes to anything that does not represent what you think.

If you received this letter by fax, you can photocopy it onto your business letterhead; if the letter was emailed, just print it out on your letterhead. Then sign and fax it to the Attorney General. We believe that it is essential to let our Attorney General know how important this issue is to their constituents. The public comment period for this issue ends on January 28th. Please send in your letter as soon as is convenient.

When you send out the letter, please do one of the following:

* Fax a signed copy of your letter to us at 1–800–641–2255;

* Email us at fin@mobilizationoffice.com to confirm that you took action.

If you have any questions, please give us a call at 1–800–965–4376. Thank you for your help in this matter.

The Attorney General's fax and email are noted below.

Fax: 1–202–307–1454 or 1–202–616–9937

Email: microsoft.atr@;usdoj.gov In the Subject line of the e-mail, type Microsoft Settlement.

For more information, please visit these

websites:www.microsoft.com/freedomtolnnovate/www.usdoj.gov/atr/cases/ms-settle.htm

MTC–00030241

COVER PAGE
TO:
FAX: 12023071454
FROM: LUREY PSYCHOLOGICAL
FAX: 910–3738948
TEL: 910–3738947
COMMENT: CONFIDENTIAL

January 24, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

Please support the proposed settlement between Microsoft and the Department of Justice. There needs to be a resolution of this case. I think that the terms agreed to are reasonable, since they offer increased competition, without calling for the break-up of Microsoft.

The settlement calls for improved design features, more competition among computer makers and software developers, and a technology committee to review complaints. The settlement would benefit the state, the IT industry, and the economy.

Since many of the obligations extend to products that were not part of the original lawsuit, I believe this is more than a reasonable compromise by Microsoft. Again, I ask you to please support this settlement.

Sincerely,

Edward Lurey

cc: Representative Howard Coble
902 NORTH ELM STREET
GREENSBORO, NC 27401–T513
(336) 373–8947
FAX (336) 373–8948

MTC–00030242

P.O. Box 381107
Germantown, TN 38183–1107
901–753–8797 or 800–842–0052
FAX 901–753–8796 Fax
To: Attorney General John Ashcroft
From: Carolyn Skinner of Ro?? SKinner
Date: 1–25–02 Pages: 3
COMMENTS:
Carolyn Skinner * 8252 Park Ridge Drive * Germantown, TN 38138
January 25, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The purpose of this letter is to express my support of the Microsoft settlement. The settlement, which was reached last November after three years of litigation, is extensive, and equitable. I strongly urge the Justice Department to enact the settlement.

Enacting the settlement is in the best interest of the technology sector, consumers, and the economy. It will increase confidence in the technology sector and provide for heightened productivity. What's more, Microsoft has agreed to redesign Windows to allow users to reconfigure their operating system at their discretion. Further, the surge in the technology sector that the enacting of this settlement will catalyze will strengthen the economy as well.

Finally, I would hope that the Justice Department recognizes the benefits of this settlement and suppresses any opposition to it.

Sincerely,

Carolyn Skinner
8252 Park Ridge Drive
Germantown, TN 38138

January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The intent of this letter is to urge the Justice Department to enact the federal antitrust settlement reached with Microsoft. As a Microsoft supporter, I have followed the case against Microsoft with great interest. have been increasingly annoyed by the amount of time and money that has been squandered over this issue. Microsoft has been generous in this mediation process. Any continuation of this case would serve only to waste federal resources.

Further, the settlement agreement that was reached is extremely equitable. Microsoft has agreed to license the rights to Windows to competing computer manufacturers at the same rate. Also, Microsoft will disclose some of the interfaces of the Windows system. The disclosure of interfaces will help developers to create software and hardware that is more compatible with the Windows system.

These changes will greatly benefit technology, consumers. Once more, the settlement is fair and should be enacted.

Sincerely,

Rodger Skinner

MTC–00030243

JEFFERY J. RHODE
311 Cherry Lane
Wynnewood, PA 19096
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I understand the Department Of Justice is accepting and publishing public comments for the first time since the antitrust suit was brought against Microsoft more than three years ago.

Microsoft did not get off easy. The settlement was reached after extensive negotiations with a court-appointed mediator. The Company agreed to terms that extend well beyond the products and procedures that were at issue in the suit, for the sake of wrapping up the suit. Now several states anti competitors want to pursue further litigation.

I personally fell the agreement reached m November was fair. I urge you to please end all litigation against Microsoft. Let's focus on other far Important issues such as getting us out of the Recession and other pertinent issues.

Sincerely,

Jeffrey J. Rhodes

cc: Senator Rick Santorum

MTC–00030244

A.C.D. ENTERPRISES
WILLIAM A YOCHUM
34166 STATE STREET
FARMINGTON, MI 48335–4168
PH, (248) 474–2700
FAX (248) 426–0171
To D.O.J.—c/o RENATA B. HESSE
FAX—(202) 307–1454
DATE 1–25–02
SUBJECT MICAOSOFT SETTLEHENT

D.O.J.—Gentlemen and Renata B. Hesse

Please use this fax communication to register my approval of the proposed subject.

William A. Yochum—Owner

MTC–00030245

Vernon George
1273o S Oak Park Avenue
Palos Heights, IL 6o463–2254
January 22,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

As a retiree who has been following this Microsoft antitrust case, I thought the settlement was more than fair. Now I understand that several states want to reopen this case and pursue further litigation. Hasn't this dragged on long enough?

After all, Microsoft did not get off easy. They settled after extensive negotiations and agreed to terms well beyond the issues in the suit. Microsoft has agreed to not retaliate against computer companies that ship competing software.

This lawsuit needs to stop. The economy cannot afford further litigation. No more action should be taken at the Federal level.

Sincerely,
Vernon George

MTC–00030246

DifferentDrummer Lenox
TEL:1–415–637–2910
Jan 25,02 10:13
No.004 P.01
January 24th., 2002
Department o% Justice
Washington, DC
Ref, Proposed Microsoft Antitrust Settlement, Public Comment Opportunity

I wish to weigh in on this matter from the perspective of someone (n small business owner) who has suffered substantial harm as a result of Microsoft's dominance in the past is being harmed at this moment, and will continue to be adversely affected unless major changes occur in the future. First, I would ask you to consider some history. We began a major involvement with computers some fifteen years ago. The operating system in use for IBM compatible computers was DOS. It is important to remember that while Microsoft acquired the rights to this system and IBM used it, there were a number of operating system software producers.

Each system was guaranteed to operate any DOS program and each one offered particular features which might recommend them to the user. Then there were producers of software that dealt with functions viz word processing, spreadsheets; and utilities viz: backup, file management, hard drive maintenance. There was constant competition between these software producers to gain a competitive edge and thereby gain new users far their offerings. It is important to remember that at this time while Microsoft produced certain offerings they were not dominant, or even a major player, in any category.

We had perhaps ten or twelve 8oftware vendors in those days. Of that number the vast majority are out of business as a direct result of Microsoft's practices. Those that are still in business survived by a capitulation to Microsoft and a willingness to stay within the parameters in which they were permitted to operate.

While reason forces one to admit the unknowableness of ''what might have been'', I can feel confident in saying that the damage to the advancement of computer applications as a result of Microsoft having crushed their competition is beyond measure.

We have applications that perform tasks in a manner superior to any offering from Microsoft but they are essentially obsolete as they will not run in a Windows environment. Their developers long since were rolled over by the microsoft behemoth. I could go on for pages about why this monstrous monopoly developed and the interests that supported and abstained it. I will forebear this as it is, at this point, not relevant. What is relevant is.

Different Drummer Lenox
TEL:1–413–637–2910
Jan January 24th., 2002
page two whether or not the situation is going to change or just get worse, No one seems to realize the potential being lost to our economy as a result of computer applications that will be never be developed due to the Microsoft monopoly.

In order to break the Microsoft monopoly two things must be required. First The Windows operating system must be made available for license under terms that will truly allow one or more competitors. Second, Microsoft must be prohibited from being a developer of any applications or utilities software by setting these operations under the control of an unrelated company.

Any remedies short of this will not solve the problem. A problem that is far more onerous and detrimental to our economy than can be imagined save by those who live with the results every business day. I implore you to stop now that which should have been stopped earlier and thereby reintroduce competition to the computer software industry. Thus you will allow the American computer industry to fully achieve its potential.

Respectfully submitted,
Raymond F. Meisberger, President
Different Drummer's Kitchen, Inc.
374 Pittafield Rood
Lenox, MA 01240

MTC–00030247

From: John P. O'Donnell
To: Fax#1–202–307–1454
Date: 1/25/02
Time: 10:03:50 AM
John O'Donnell
13 Old Dutch Road
Harleysville, PA 19438
January 15, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am disturbed by the fact that the Microsoft settlement is in jeopardy. It concerns me that, regardless of the comprehensive and impartial settlement reached in November of 2001, nine out of eighteen plaintiff states continue to seek federal action against Microsoft. What grounds can these nine states possibly find for additional litigation? The terms of the settlement do not allow Microsoft to further violate antitrust laws; how then can the antitrust suit be pursued?

Microsoft did not get off easy. Once the settlement is final, Microsoft will be required to disclose any Windows operating system protocols that allow native interoperation with any Microsoft server. Microsoft has agreed to reformat future versions of Windows so that competing software producers can introduce their products and programs into the Windows operating system without complication. Property rights violations are not an issue here, because Microsoft has also agreed to provide third parties acting within the terms with a license to applicable intellectual property rights. There is nothing in the agreement that does not benefit competitive software makers and prevent antitrust law violations.

I urge you and your office to support this settlement. The only thing that can come of additional litigation is a stagnation of growth in the IT industry and further economic decline for all Americans. I support this settlement, and I believe you should do the same. cc: Senator Rick Santorum

Sincerely,
John O'Donnell

MTC–00030248

City of Salisbury
Human Resources Department
City Office Building
132 North Main Street, 2nd Floor
PO Box 479
Salisbury, NC 28145–0479
General Phone: (704) 638–5217
General Fax: (704) 638–8454
Web Site: www.ci.salisbury.nc.us
Name: Attorney General John Ashcroft
Company:
Fax Number: 1–202–307–1454
Voice Phone:
From:
Name: Brenda Allman
Fax Number: 704–638–8456
Voice Phone: 704–638–5226
Notes:
Date and time of transmission:
Number of pages including this cover sheet:
Friday, January 25, 2002 9:49:36 AM 02

This fax was transmitted directly from a network PC using RightFax for NT.

3605 Lowerstone Church Rd.
Rockwell, NC 28138
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

As a Microsoft supporter I felt it was necessary to write and disclose my opinion of the settlement that was finally reached in the antitrust lawsuit against this company. I believe that this settlement must be passed and that the continued litigation involved in this case has done nothing but bog down the American economy as well as the 1T sector in general.

It is my personal belief that the terms of the settlement are reasonable. Microsoft will

no longer commit antitrust violations and in return they will be allowed to continue trading as a whole entity. The settlement will include the implementation of a technical oversight committee that will monitor Microsoft's compliance to the terms. I feel that the acceptance of this settlement is vital to a positive future of American business. Please ensure that this settlement is accepted. Thank you.

Sincerely,
Brenda Allman
Representative Mel Watt

MTC–00030249

January 24, 2002
Attorney General John Ashcroft
(US Department of Justice,
950 Pcnnsylvania Avenue, NW
Washington, DC 20530–0001

Dear AG Ashcroft:

Microsoft had been responsible for some business practices that could be construed by others as anti-competitive. Whether this had actually been over the point of legality or not is, in my opinion, an open question. There are many examples of other IT companies that have—and and do—exert this kind of anticompetitive behavior who have not been as visible as has Microsoft.. or for whatever reason have remained closer to the political mainstream. Nevertheless, it is far better that this litigation has ended with a settlement. The terms of the settlement address the main points of the original lawsuit, such as the problems of retaliatory action and allegedly u/flair licensing, Settling the lawsuit has the advantage of causing less disruption in the IT industry than would have resulted in Microsoft had been broken up. For this reason, I support the settlement, though I remain skeptical that the original suit should ever have been brought originally.

Sincerely,
David Phillips
President

MTC–00030250

TO: Attorney General John Ashcroft
Company: US Department of Justice
Fax Number: 9,12023071454
Phone Number:
FROM: Veronica S. DeLuca
Fax Number: 61 7–783–7666
Phone Number: 61 7–783–7600/800–545–7685
NOTES:
Date and time of transmission: Friday, January 25, 2002 9:50:38 AM
Number of pages including this cover sheet: 02

This document was faxed using a RightFAX v7.0 electronic document delivery solution. RightFAX
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

Last November there was finally a settlement hammered-out between Microsoft and the Department of Justice, which ended the three-year ant/trust lawsuit. This settlement was a long time coming, and I hope that it will be approved as soon as possible.

Microsoft had to concede more than they would have liked in the settlement, but after everything is all said and done, the biggest winner will be the economy. Microsoft has agreed not to retaliate against software or hardware developers who develop or promote software that competes with Windows or that runs on software that competes with Windows. This will allow the competition to bring their product to the marketplace without having to worry about being punished by Microsoft. This will give a much-needed shot in the arm to the economy.

I am in favor of the settlement between Microsoft and the Department of Justice, and would like to go on record as being so.

Sincerely,
Veronica S. Deluca

MTC–00030251

1032 Coronet Road
Warminster, PA 18974
January 23, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I understand the Courts will make a final decision at the end of January on whether the proposed Microsoft settlement is in the best interest of the public. I don't believe this case should have gone to litigation at all. Since it did, and an agreement has been reached, why not end this case? Microsoft did not get off easy, as its opponents would have people think. They have agreed to not enter into any agreements obligating any third party to distribute or promote any Windows technology exclusively or in a fixed percentage. Microsoft has also agreed to not retaliate against software or hardware developers who develop or promote software that competes with Windows or that runs on software that competes with Windows.

I urge you to put an end to this litigation. No more action should be taken at the Federal level.

Sincerely,
Randall Seller
cc: Senator Rick Santorum

MTC–00030252

P.O. Box 5804
Baltimore, MD 21282–S804
January 22, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Attorney General Ashcroft:

I am writing to express my support for Microsoft and the government for reaching a settlement on the antitrust issue. The government did what they thought was in the best interest of the consumer. Microsoft showed in this settlement that they have always done that and will continue to.

Microsoft took the initiative and offered a very reasonable settlement. They have agreed not to retaliate against software or hardware developers who develop or promote software that competes with Windows or that runs on software that competes with Windows, not to enter into any agreements obligating any third party to distribute or promote any Windows technology exclusively or in a fixed percentage, subject to certain narrow exceptions where no competitive concern is present, and agreed that if a third party's exercise of any options provided for by the settlement would infringe any Microsoft intellectual property right, Microsoft will provide the third party with a license to the necessary intellectual property on reasonable and nondiscriminatory terms.

Microsoft has lived up to its corporate responsibility, and I, the consumer, never doubted that they would. I support this settlement, and hope it stands.

Sincerely,
Michael Nelson

MTC–00030253

BRIAN SCOTT OLSON
4627 TARAY LANE
HOLDAY FLORIDA 34690–3822
Phone & Fax 727–937–4766
Thinskate@yahoo.com

I am 71 years old and not influenced by keeping up with the Jones or AOL. I have been teaching the use of computers since 1988 and was thrilled when Netscape help drive the Interact, but I do not buy Edsels.

Internet Explorer works so much better now then Netscape, you wonder what AOL programmers are doing. AOL should be in court because of their blatant rejection of material from other services. You can not use their buddy system, even from the greatest Home Page ''Yahoo.'' If you send video or photos outside of AOL you are very fortunate if they arrive. I constantly send Video and photos to my one Son who has the bad judgment to use AOL, those efforts rarely get delivered. My other three children seem to have no problem viewing my efforts. My opinion on a company that is out of control (I assume because they think they are GOD) has to be AOL. I am pragmatic, I had AOL for five years, I now use AT&T. If Netscape and AOL were better they would be on my computer.

When you go on-line with AOL & CS, you are not on the Internet, you are on AOL & CS. AT&T, Earthlink, Juno you are on the Internet. SO? It means AOL is not faster, it also means they control the content on your home page. You pick the content on other servers, not the choices AOL gives you. INTERNET EXPLORER WORKS BETTER AND THE UPGRADES ARE FREE

This is supposed to be about the public, not AOL, Correct?

MTC–00030254

To:
From: Tom Cope
Fax: Pages:
Phone:
Date:
Re:
CC:
Comments:
STEWART E. IVERSON, JR.
STATE SENATOR
Ninth District
Wright, Franklin, Hamilton & Hardin Counties
Statehouse: (515) 281–3560

HOME ADDRESS
3020 Dows-Wiliams Road
Down, Iowa 50071
Home: (515) 852–3350
January 25, 2002
STATE OF IOWA
Seventy-ninth General Assembly
STATEHOUSE
Des Moines, Iowa 50319
SENATE MAJORITY LEADER COMMITTEES
Rules & Administration, Chair
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street, NW, Suite 1200
Washington, DC 20530–0001
Re: Comments in Support of the Microsoft Proposed Settlement Agreement

Dear Ms, Hesse:

I am adding my support as Majority Leader of the Iowa Senate for the efforts by the Department of Justice and a number of Attorneys General to settle the Microsoft case. I am not an economist or a lawyer, but I know the marketplace. The markets have responded very positively to the prospect of this settlement agreement being accepted by the Court. That would be good news here in Iowa as we struggle to regain the momentum our economy had in the 1990s, much of it because many smaller businesses were able to partner with Microsoft and others in the high-tech industry. The markets have said it's time to clear away the cloud cover and bring some sunshine again.

I know the government has some role in overseeing the market place. The settlement helps define that role. It is also important that we not destroy this company. Thank you for the efforts of all involved in crafting this proposed agreement. Keep urging the Court to accept your work product.

Sincerely,
Stewart Iverson, Jr.
Iowa Senate Majority Leader

MTC–00030255

3195 Old Trail Road
York Haven, Pennsylvania 17370
January 14,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to address the settlement reached in the Microsoft antitrust case. I am in favor of ending these proceedings against Microsoft as soon as possible. To that end I am in favor of the current antitrust settlement, although I am opposed to the antitrust suit as a whole. I do not believe that Microsoft should have been involved in antitrust proceedings at all. As I understand it, Microsoft agreed to terms that exceed well beyond the original products and procedures that were at issue under the antitrust suit. Under the terms of the settlement, Microsoft has agreed to license their Windows products out to the 20 largest computer makers on identical terms and conditions, including cost. In addition Microsoft must document and disclose information to its competitors regarding the internal interfaces of the Windows product line for the purposes of further software development on there part.

While I feel that many of the terms of the settlement are overly restrictive to Microsoft, I am in support of the settlement for the sake of getting back on track economically. Bringing an immediate end to the litigation process will benefit the slumping economy. There for I strongly urge you to bring an end to the antitrust proceedings, as we have many more pressing issues currently at hand.

Sincerely,
Millard Wolfgang
cc: Senator Rick Santorum

MTC–00030256

To Whom It May Concern:

Under the Tunney Act, I wish to comment on the proposed Microsoft settlement. The current proposed settlement will not put any constraints on Microsoft that Microsoft can not maneuver out of easily. It is imperative to restore competition to the marketplace for the benefit of consumers and businesses alike. Microsoft has maintained its monopoly in the marketplace by controlling who has access to the API's, file formats and protocols used in it s products. These API's file formats and protocols should be available to other vendors and the general public, so adequate competitive products can be developed and to ensure that users have access to their data and computers if Microsoft raises prices. I have always believed in fair competition and letting the best product win. However. Microsoft used its dominance in one area to take over another area. They were able to do this by controlling API's, file formats and protocols available to other vendors. If Microsoft claims its products are superior then it should not have a problem competing on a level playing field where each competitor has the same API's, file formats and protocols available. So I ask the court to consider requiring Microsoft to publish all API's, file formats and protocols on all products prior to their release. This should be monitored by an independent monitoring board appointed by the court with stiff penalties for non-compliance. I also ask the court to require Microsoft to publish the amount it charges for each copy of its products shipped with a new computer to allow consumers to determine the actual value of the software they receive. I also ask the court to provide protection to 0EM manufacturers from Microsoft if the 0EM manufacturers determine that another configuration other than the default windows configuration is best for its customers. Thank you for your time.

George King

MTC–00030257

Ms. Renata B. Hesse
Antitrust Division,
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
FAX (202)307–1454/(202)616–9937

Dear Ms Hesse:

By way of introduction, my name is John A. Mulhall. I am a practicing pharmacist with Eckerd Drug in Syracuse, New York. As a taxpayer and consumer, I strongly support the proposed settlement with Microsoft in the government's long-standing Clinton-era antitrust lawsuit. So far, it has been estimated that the lawsuit has cost the American taxpayers more than $35 million. What a waste of taxpayer dollars in this witch hunt! I urge you to put a stop to this travesty of justice NOW.

The way I see it, this lawsuit has been nothing more than a form of welfare for Netscape and other competitors of Microsoft, as well as a way for states to get ''free'' money. It has done absolutely nothing for those supposedly harmed by Microsoft, the computer users of this nation, and has greatly discouraged technological innovation. This is not ''the American Way''. At least not the America in my mind's eye.

The waste of taxpayer dollars aside, I, for one, hold the United States government, and specifically he Department of Justice, responsible for crippling this premier high-tech cog in the nation's economy. Is this really an opportune time when we can afford to continue to harm the backbone of this country? Has not the DOJ suffered enough ''black eyes''? Microsoft has already agreed to hide its Internet Explorer icon from the desktop. The proposed settlement is in the best interest of all involved:

—Microsoft: can continue to provide innovative software that integrates new products
—Competitors: can return to the creation &new products which can be incorporated or made compatible with Windows
—Consumers: can have more software choice
—Investors: can have marketplace stability

If the lawsuit is allowed to continue, the expenditures involved will be even more outrageous to the American taxpayer than they already are. The nine states and the District of Columbia still involved in the case have retained many high-priced lawyers intent on dragging this out for a very long time. They have issued twice as many requests for information including frivolous subpoenas of non-involved third parties, during the remedy phase of the trial than the previous 19 states did in the entire liability phase.

It is high time to put an end to this abuse &hard-working American taxpayers. The economy is in dire need of a remedy to this situation. The proposed settlement is a fair one, I thank you in advance for your time and consideration in this very important matter. It is my hope that you and your staff can keep me up-to-date regarding the status of the settlement.

Sincerely Yours,
John A. Mulhall, RPh
7 Evergreen Lane
Cazenovia, New York 13035
(315) 655–4859

MTC–00030259

January 24, 2002
To: Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
From: Jim W Myers
40835 244th Ave S E
Enumclaw, WA 98022

Dear Mr. Ashcroft:

I strongly recommend that the Court approve the Microsoft antitrust settlement agreement. The uncertainty of this situation

continues to damage the economic condition of our country far more than any actions taken by Microsoft. As a business person, I am all too familiar with the dog eat dog climate in the business world. All Microsoft did was play the game too well and the other teams got mad and jealous.

The restrictions that will be placed on Microsoft pursuant to the settlement agreement will allow the competition an extra edge, but they will still have to learn to play the business game as well as Microsoft. Microsoft has agreed not to retaliate against computer makers who promote non-Windows software. They have also agreed to make it easier for consumers to replace features of Windows with non-Microsoft software. Additionally, a technical review committee will monitor Microsoft's business practices to ensure no further antitrust violations occur. No settlement can make Microsoft competitors stronger competition; they have to do it themselves. This settlement is good for the country but still unfair to Microsoft. Microsoft has approved it and so should the country! This case has dragged on for long enough. I am anxious to see the settlement agreement finalized and the case brought to an end.

Thank you,
Sincerely,
Jim W Myers

MTC–00030260

Annc Otcrsen
207 Swansboro Drive
Apex, NC 27502
January 18, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax 202–616–9937
microsoft.atr@usdoc.gov

Dear Ms. Hesse:

As a public school teacher now on sabbatical, I know the importance of computer literacy to students in today's world. The products and services that Microsoft provides to schools, businesses and residences have played an important part in providing many people with opportunities to learn, work and improve their lives. So I hope the proposed settlement of the federal litigation against Microsoft will he resolved soon

I understand that the settlement now before the court strikes a balance between restricting Microsoft's potentially anticompetitive business practices and allowing the company to get back to what it does best. Clearly, that is a difficult balance to achieve. But the fact that this settlement has been negotiated under court supervision, accepted by the U.S. Attorney General and accepted by a number of state attorney generals, including North Carolina's, makes a compelling case for its value.

I sincerely hope the court will approve the settlement and resolve this matter soon.

Regards,
Anne Otersen

MTC–00030261

From: REDMOND CHAMBER
FAX/VOICE MESSAGE (206) 882–0996
GREATER REDMOND CHAMBER OF COMMERCE
16210 N.F. 80TH St.
P.O. Box 628
Redmond, Washington
Phone: (425) 885 4014
FAX: (425) [illegible]
www.redmondchamber.org
January 25, 2002
Ms. Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D. Street NW
Suite 1200
Washington, DC 20530.0001
Re: Proposed Microsoft Settlement Agreement

Dear Ms. Hesse:

Redmond is proud and honored to be the home of Microsoft [illegible] American entrepreneurism. The success stories of its founders and employees [illegible] are e ncouragement and example to thousands of other entrepreneurs [illegible] company which has nearly 15,000 employees in Redmond, [illegible] out community by providing family-wage jobs [illegible] and contributing talent and resources to non-profit [illegible] Microsoft job creates five additional jobs.

The company makes good products in high demand [illegible] and businesses. The Greater Redmond Chamber of Commerce believes [illegible] provisions of the settlement will be good for consumers, business, the technology industry and the economy as a whole. On behalf of the Board of Directors [illegible] full support of the Department of Justice and the nine Attorney Generals [illegible] to finally put an end to this case and agree to a settlement that [illegible]

Sincerely
John P. Plovie
Chairman

MTC–00030262

GRANITE STATE TAXPAYEBS
P O Box 10473
Bedford NH 03110–0473
Tel (608) 472–3421
Fax (803) 471–0425
@Mall GST@lopaner.net
January 10, 2002
Attorney Renata Hesse
Antitrust Division, Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Deer Attorney. Hesse:

It is my understanding that your office is now accepting letters of comment in the settlement proposed in the U.S. v Microsoft case. Please accept my letter of supper[for this agreement. Granite State Taxpayers is a coalition of taxpayers and taxpayers associations throughout New Hampshire that work together to stop attempts to increase taxes and : help make sure taxpayer dollars are spent efficiently.

That is why I find this cage so appalling. It has already cost the taxpayers of this nation over $30 million $30 million to prosecute one of the most exciting companies our nation has seen This case never should have been brought forward in the first place. Microsoft has been an innovator in the area of technology, and because of that, their competitors have not been able to keep up with their technology. As a result, they successfully lobbied the government to fight for them In the courtrooms and now we have this kind of money being wasted on our hands. After many, many months, a settlement has been reached that has something for everyone. This is an opportune time to end these proceedings and remove the federal government's involvement in the operations of this area marketplace.

I urge you to stop the needless wasting of taxpayer delivers and approve this case quickly. Thank you for your attention.

Sincerely,
Roy Stewart
Immeditate Past Chairman

MTC–00030263

ANITA GULLICKSON
Post Office Box 223—
Alexandria, South Dakota 57311
—605–239–4664
January 19, 2002
Renata Hesse, Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

The settlement in U.S. v. Microsoft has my support because I believe this case has reached a reasonable conclusion for all parties concerned, including the American economy. I believe It Is Important to point out that the case did not show that consumers were adversely affected by Microsoft's actions, and that the essence of the matter is centered around Microsoft and its highly competitive marketplace adversaries.

In my professional life, personal life and endeavors as a family farm activist, I have depended upon Windows systems, and I have been very satisfied with the product. For farm families in South Dakota, Windows systems have the right price, the most important functions and accessibility needed to remain competitive in agriculture. Windows empowers people, and in the rural areas of our nation Windows becomes a ''great equalizer'' by giving farm people equal access to market information and financial transactions.

A feature I particularly like in the settlement is the requirement that Microsoft will send software, computer systems and technical support to schools in low income areas, and I am sure South Dakota will ultimately become a significant beneficiary in that distribution. Thank you for the opportunity to provide input On this settlement.

Sincerely,
Anita Gullickson

MTC–00030264

SHARI ROWLAND
2105 S. Blauvelt Avenue Sioux Fails, South Dakota 605–339–1424
January 17, 2002
Renata Hesse, Trial Attorney
Antitrust Division
U.S. Department of Justice

601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

The settlement in United States vs. Microsoft has my strong support because four years is plenty of time to examine all of the issues and reach logical conclusions in this highly visible antitrust suit. From everything I've seen on this issue, this case has exhausted every possibility of wrongdoing, and I think it is remarkable that none of the findings have indicated consumers were being harmed by Microsoft Corporation. For your information, I have worked with many businesses in Sioux Falls in a consulting capacity, and I can tell you that the vast majority of them use Windows systems, and they are very pleased with the products they use. From what I've learned, the remedies sought in this settlement are not only fair, but also would be beneficial to improving the education and career preparedness of disadvantaged kids. This would be a commendable result from a case which has threatened to tie the hands of research and development in information technologies.

I hope this case can be allowed to end fairly and quickly, and that Microsoft can continue to produce the great innovations which have helped to strengthen America's economy, and to keep our nation in the leadership position in technological breakthroughs.

Sincerely,
Shari Rowland

MTC–00030265

SIOUXPERIOR STRATEGIES
5305 Lake Placid Circle
Sioux Falls, SD 57110
(605) 336–6321
338–7395 fax
January 18, 2002
Renata Hesse
Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street NW—Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

My comments are to be directed for public commentary In U.S. vs. Microsoft's settlement phase. I support the settlement because it is time, after four years, to end this dispute in the American courts system. The important issues have been addressed in this settlement, and continuing this dispute for another year or two would not serve justice nor the American economy, which benefits from a strong presence by Microsoft Corporation.

Microsoft has been the world's leader in the development of innovative software because of its strong competitive nature and the brilliant people who work hard to stay in front of the competition. This antitrust case acts to keep some of the issues involved in the rapid growth of Information technologies in check, That much of it is healthy to the process of growth. But there comes a point when detaining a vibrant company like Microsoft in the courts system beyond e reasonable time becomes burdensome to its viability in a harsh, competitive climate. I hope this settlement obtains permission to be enacted and that this antitrust action is put to rest, It would ultimately serve the best interests of all involved, including Microsoft's competitors.

Thank you.
Sincerely,
Patrick Starr
A CREATIVE MARKETING & PUBLIC RELLATIONS

MTC–00030266

January 22, 2002
Renata Hesse
Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Here:

Protecting the best interests of business and consumers, as I understand the law, is the purpose of antitrust law and court actions. As U.S. v. Microsoft Corporation has moved along in its winding four-year path through the federal courts system, I think it is interesting that the court has not established that consumers were harmed by Microsoft's policies and decisions. What has mattered in court process has been Microsoft's relationship with its marketplace competitors, and I question whether Microsoft's actions were inappropriate when considering the predatory and pressurized nature of competition between companies striving to get ahead in information technologies. It's a tough business.

It is my hope that this case ends soon, so that one of our nation's most important corporations is allowed to continue serving the quickly shifting needs of consumers with the most versatile and reliable line of software for business and home use. It is remarkable that, despite being sidetracked in the courts for the past four years or more, Microsoft Corporation remains a vibrant force in our national economy. Considering that our economy needs all the help it can within the private sector, we need Microsoft back in the ring putting its full energies into its research and development to keep American information technologies development ahead in the world.

Thank you for your attention to my letter.
Sincerely,
Randy Stratton
THE STRATTON GROUT. INC.
100 S. DAKOTA AVE
SIOUX FALLS, SOUTH DAKOTA 57104
BUSINESS 605–338–6829—FACSIMILE 605–332–4860
www.theseratrongroup.com
Received Time Jan 23. ??:17PM

MTC–00030267

REBECCA J. DUNN
320 N. Summit Avenue—Sioux Falls, South Dakota 57104
–2933
605.33.6524 residential & business telephone
January 22, 2002
Renata Hesse, Trial Attorney
Antitrust Division
U.S. Department of Justice
60i D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

From a South Dakota perspective, I believe the agreement to settle the U.S. vs. Microsoft antitrust case is not only fair, it is appropriate because it creates a public benefit which will be helpful for our nation's poorest children. By targeting school districts with the highest percentages of students who qualify for government assisted lunches, this settlement will put disadvantaged students on a fast track to learning through the internet. Certainly, many of the targeted school districts in this settlement will be here in South Dakota. They will be set on a more level playing field to compete for opportunities with students in wealthier school districts.

My career is as a trainer of children and adults to enable them to realize and fully develop their potential in business and in life. As a State Senator in South Dakota, I worked with many local and state educational leaders to develop positive alternatives for growth, especially for disadvantaged children, I cannot think of a better result for this antitrust suit than to enable these economically challenged children with the tools they need to open their worlds to the internet and Its infinite educational resources.

Additionally, I want you to know that I believe that It would be in the best Interests of our nation's economy and of Justice to accept this settlement and put this case to rest. The case has examined virtually all relevant issues Involved in Microsoft's business practices, and the settlement appears to have addressed these Issues as well as anyone could reasonably expect.

Thank you for considering my opinions on this settlement.

With best regards,
Rebecca .J. Dunn

MTC–00030268

House of Delegates
Telefax Service
Fax (804) 786–6310
General Assembly Building
January 25, 2002
To: U.S. Wept of ??tice : Renata Th??
From: ??gat?? go?? A. Reid
Fax No.: 202–616–9937
Tel. No.:
City: Washington, DC 20530
State:
This transmission contains
pages, which includes this cover sheet. If you have any problems with this transmission, please contact (804) 698–1558.
Comments:
JOHN S. (JACK) REID
POST OFFICE BOX 29566
RICHMOND. VIROINIA 23242
SEVENTY-SECOND DISTRICT
COMMONWEALTH OF VIRGINIA
HOUSE OF DELEGATES
RICHMOND
January 25, 2002
COMMITTEE ASSIGNMENTS:
GENERAL LAWS (CO-CHAIR) PRIVILEGES AND ELECTIONS EDUCATION
TRANSPORTATION FINANCE
Reneta Hesse, Trial Attorney
Antitrust Division
United States Department of Justice
601 D Street, NW
Suite 1200

Washington, DC 20530

Dear Ms. Hesse:

It is my understanding that a settlement agreement has been reached between the Microsoft Corporation and the United States Attorney's office, and that the proposed settlement is based on the competitive principles of the free market system. It is my hope that Microsoft and its competitors will be encouraged to operate and provide the most technically advanced products at the most reasonable cost to consumers.

The growth of the technology industry has been of enormous benefit to the Commonwealth of Virginia providing jobs for our citizens and tax revenues to state coffers. Thus, an expeditious settlement of this dispute should be in the best interest of all concerned.

Thank you for your consideration of my concern.

Sincerely,

JSR:ecr

PHONE: (804) 741–2927

RICHMOND: (804) 898–1072

MTC–00030269

kinko's?? fax cover sheet
Kinko's of Ann Arbor I
Telephone: (734) 761–4539
Fax: (734) 761 1416
Date 2002–01–25

Number of pages 5 (including cover page) to: Name United States Depatment of Justice
Company: Antitrust Department
Telephone
Fax (202) 307–1454
Comments 616–9937
Comment on Microsoft Antitrust Case,
from: Name Elliot Glaysher
Company
Telephone (248) 608–6424

To Whom It May Concern,

As both a member of the public who has been watching this case very carefully, a contributing member of the open source community, and as someone who has been programming for over six years, I feel it is my civic duty to inform you to several problems with the proposed antitrust settlement in the Microsoft case. The proposed settlement addresses does not address any of Microsoft's past anticompetitive behavior, does not force Microsoft to atone for it's past transgressions, and appears to be, as Red Hat CEO Matthew Szulik says, ''an agreement reached for the purpose of expediency, not for ensuring an adequate remedy.''

Not only does the settlement fail to address any of Microsoft's behavior outside of coercing cooperation from original equipment manufactures (OEM), but it also specifically gives Microsoft a government enforced monopoly, with the loophole-ridden Section III.J. Using emotionally and politically loaded phrases like ''anti-piracy, anti-virus, software licensing, digital rights management, encryption or authentication systems'' gives all the ammunition Microsoft needs to maintain it's monopoly, as these systems are vital components that allow Microsoft to leverage it's monopoly, while at the same time, causing problems for Microsoft's largest competitor: Open Source Software.

Open Source Software1 (OSS) is a new form of software development, relying around a model based on community involvement and the principle that the underlying source code2 should be freely available for all to see, modify, and distribute. This is significant as this allows anyone to contribute to an Open Source project. It also must be noted that the open nature of source code means that the full details on the inner workings of a program or protocol are available to any programmer who wants them, as will become significant latter. Because of the uniqueness of the Open Source Model, special attention must be taken in the settlement to make sure that the does not harm Microsoft's largest competitor as a side-effect.

But let us look at certain problems with the settlement that are problematic: First, I must examine the term ''authentication systems'' in Section III.J.1.a, and show why this term is problematic by looking at some recent actions by Microsoft. When Microsoft released Windows 2000, Microsoft included support for an authentication protocol developed at Mir called Kerberos. The problem was that Microsoft deviated from the protocol specifications ever so slightly as to only introduce incompatibilities with other implementations of Kerberos. This means that Windows 2000 only grants access if the Kerberos ''ticket'' (the method of authentication in a Kerberos security model) was issued by a Windows 2000 server. It would reject what would be valid tickets from other vendor's versions of Kerberos for the sole effect of customer lock-in.

1 For a detailed description of the Open Source model, please read Eric S. Raymond's The Cathedral and the Bazaar, available in print format from O'Reilly Press, or http://tuxcdo.org/-esr/writings/cathedral-bazaar/cathedral-bazaar/.

2 Source Code is the programming instructions that describe the intricate operation of a program. Microsoft's later actions show why this situation is dangerous: Microsoft insisted that the changes were trade secrets. Microsoft later released information about their modifications to the Kerberos protocol under the condition that the contents be kept a secret. The agreement was mutually exclusive with the development of Open Source Software, where anyone and everyone has access to the source code, where there arc no secrets.

Another fine example would be the wording regarding ''anti-piracy'' and ''digital rights management.'' Section III.J.I, in effect, gives Microsoft a monopolistic position in regards to digital content, as Microsoft will argue that their distal media file formats are inseparable from their digital fights management scheme and will allow competitors access to neither. For example, what would happen if an Open Source project wanted to extend one of the many Open Source video players on an operating system other than Windows to play Microsoft's video format, including files protected under Microsoft's digital fights management software? Microsoft would deny the project the specifications, as the openness of the code would allow anyone who wished to know how the distal rights management system worked to find out easily. At the same time, Microsoft would be under no obligation to help the other operating system by writing a video player that would play Microsoft's video format, allowing Microsoft to maintain it's monopoly.

In fact, Microsoft has already kept others from using their digital video formats. Microsoft owns patent #6,041,345, which is a patent on the ASF file format. In May of 2000, Microsoft forced Avery Lee, the main author of the popular Open Source project VirtualDub to remove support for their ASF files. This is dangerous because ASF has become the dominant streaming format on the Internet, and only Microsoft can control it. ASF files are now only legal on Microsoft desktops.

In both examples, Microsoft was able to use patents or trade secrets to prevent competition, and force customer lock-in to Microsoft products.

Also troubling is Section III.J.2, as it gives Microsoft the right to discriminate on whom it to licenses information to. Microsoft can easily say that a competitor ''has a history of software counterfeiting or piracy or willful violation of intellectual property fights'' and can deny them access to vital interoperability information. I would be surprised if Microsoft doesn't use this as an excuse to deny information to Linux vendors, as they have already used the unorthodox development process of Open Source Software as the basis of flat out calling it ''un-American.'' Jim Allchin, Microsoft Corporation's Platforms Group Vice President, has also said ''Open source is an intellectual-property destroyer,''3 in a blatant attempt to break down the distinctions between software pirates and OSS writers.4 Microsoft will, beyond a shadow of a doubt, abuse this provision if it's allowed to stand as it is.

3 http://news.cnet.com/news/0–1003–200–4833927 html?tag=mn—hd

4 The argument is fundamentally flawed, as software pirates take the work of others, while OSS programmers freely give out their work as an act of generosity, both creating new intellectual-property, and holding to the American values of volunteerism and community service.

Moreover, Section III.E gives Microsoft even more ways to hurt the competition. The use of the terms ''reasonable and non-discriminatory'' may, at first, not appear to be problematic, yet one must consider the people who write Open Source Software: The majority of Open Source programmers write these programs in their spare time, as non-corporate entities for the benefit of the community. The mere term ''reasonable'' is relative. Is it ''reasonable'' for a large business like Apple or Sun Microsystems? Is it ''reasonable'' for a small start-up that has great ideas but can't implement them due to these fees? Is it ''reasonable'' for a middle-class programmer who wants to write software to better the community.'? Any licensing scheme that Microsoft may come up with which requires monetary compensation to Microsoft in return for information will, by definition, be discriminatory, as Microsoft's largest competitor will be unable to afford the licensing fees for the information necessary to compete.

This proposal is woefully inadequate. Between the combination of Section III.E and Section III.J, we, in effect, have a settlement that gives Microsoft full license to continue it's anti-competitive practices with the government's blessing. A good settlement to halt Microsoft's anticompetitive and destructive behavior must specifically assert the following points:

1. Microsoft must be forced to open any and all technical specs to anyone who asks for any reason. Microsoft must not have the right to discriminate who has access to this information. This solves the problems with Section III.E and III.J, and allows true interoperability to exist, in contrast to the facade presented in the current settlement. Technical specs includes, but isn't limited to:

a. All file formats that Microsoft saves information to. including Word Documents, Excel Spreadsheets, et cetera

b. All distal media file formats. I mention this separately to reiterate the loopholes opened by Section III.J.I.

c. All network protocols, including authentication and encryption protocols

d. All extensions and modifications to existing file formats and network protocols. (Recall that Microsoft's version of Kerberos was only a modification to an open standard.)

e. The Windows API (Application Programming Interface) in its entirety

2. Microsoft must also comply with the following terms regarding the licensing of said information.

a. Microsoft may not be allowed to require monetary compensation for the previously mentioned technical information. While Microsoft may argue that it must be compensated for this information, there is no way in which the information can be reasonably priced for everyone, especially for those that have the largest chance of breaking Microsoft's monopoly.

b. Microsoft may not use the excuse of trade secrets, patents, or any other forms of Intellectual Property protection to withhold information from competition, or to break compatibility. Microsoft has used both patents and trade secrets as an excuse to bully software developers, as seen with the above Kerberos example, and Microsoft's threatening of Avery Lee of the VirtualDub project.

3. New computers must be sold ''naked,'' meaning without an operating system or other bundled software. This would allow people to install the operating system of their choice, whether that be Windows, Linux, BeOS, et cetera. The operating system and related software become an added cost; meaning people who would rather use an alternative operating system would not be forced to pay Microsoft for software they wouldn't use.

4. Microsoft must not have the right to sell its software to anyone at a lower price then anyone else. This means that the price of a computer without Microsoft Windows would be drastically lower then the cost of a computer containing Microsoft software. This is necessary, as the difference in price between a computer loaded with Microsoft's software and a ''naked'' computer would otherwise be insignificant.

5. Any settlement that requires Microsoft to make financial reparations, must specifically forbid Microsoft from repaying the debt in the form of Microsoft software. In closing, I'd like to direct you to the points of Red Hat CEO Matthew Szulik, one of which I mentioned in the opening of this letter: ''...contrary to the statements of the US Department of Justice in its impact statement discussing the Consent Decree, the remedies settlement embodied in the Consent Decree fails to achieve the ends mandated by the Court for the following reasons:

—it fails to deny Microsoft the fruits of its statutory violations,- it fails to ensure that competition is likely to result,

—it was an agreement reached for the purpose of expediency, not for ensuring an adequate remedy and,

—it establishes an untenable precedent for future antitrust cases.''

Thank you,
Elliot Glaysher
Current Residence:
1410 Little House
1503 Washington Heights
Ann Arbor, MI48109–2015
Permanent Address:
668 Bolinger
Rochester Hills, MI 48307
(248) 608–6424

MTC–00030270

12 Lansing Avenue
Trumbull, CT 06611
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing you today to express my opinion in regards to the settlement that was reached in November between Microsoft and the government. This settlement is fair and reasonable, and I am anxious to see this dispute resolved at the federal level. Microsoft has agreed to all terms and conditions of this settlement. Microsoft has pledged to share more information with other companies and create more opportunities for them. Under this agreement, Microsoft must disclose for use by its competitors various interfaces that are internal to Windows operating system products. Microsoft must also make available any protocols implemented in Windows. A technical oversight committee has been created to monitor Microsoft compliance to this agreement.

This settlement will serve in the best public interest. Please support this settlement so we can focus our resources on more pressing issues. Thank you for your support.

Sincerely,
Tej Ram

MTC–00030271

14171 Bahama Cove
Del Mar, California 92014
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

As a supporter of Microsoft, I write you concerning the recent developments in the Microsoft settlement. The terms of this agreement have been determined through a well thought out process and should, at this time, be supported.

Our technology industry, has been working toward a more unified IT sector, and needs our support. By supporting the agreement as it stands, we allow our technology, industry to work together to maintain our position in this highly competitive global market. Not only has Microsoft agreed to make changes in licensing and marketing, but has agreed to design future versions of Windows for easier installation of non-Microsoft software. Also, as an and-trust settlement first, Microsoft has agreed to disclose various interfaces that are internal to Windows'' operating system products. All of these concessions clearly point toward the IT sector working together to continue to advance in this industry.

I urge you to help support this agreement by stopping any further actions against it. Please help to get our technology industry back to business. I thank you for your help.

Sincerely,
Amy Caterina

MTC–00030273

BH&S
Builders' Hardware &
Supply Co., Inc.
1516 15th Ave. West—P.O. Box C 79005
Seattle, WA 98119–3185—
Phone 281–3770
Fax No: 202–307–1454
Attention: Ms. Renata B. hesse
Company: Dept. of Justice
Subject: Microsoft
Pages Including Cover: 1
Date: 1–25–02
From: Shirley S. Henry, AHC

PLEASE accept the Microsoft settlement. Enough of this, already!!

Get it overwith

MTC–00030274

FAX
Date: 1/25/02
Number of pages including cover sheet:
To: Attorney General
John Ashcroft
Phone:
Fax phone: 202–307–1454
CC:
From:
Robert burns
Phone: 615–333–3958
Fax phone: 615–361–0788
REMARKS:

Mr. Ashcroft,

Please consider my letter regarding the Microsoft settlement.

Thanks,
Robert Burns
Robert W Bums
3716 Valley Ridge Dr
Nashville, TN 37211
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing to you today to express my support of the Microsoft settlement. The

settlement that was reached constitutes significant compromise from the Microsoft Corporation. After three years of court mediation, continuing the federal case against Microsoft still further would serve only to waste necessary federal resources. Hence, I urge the Justice Department to enact the settlement at the end of January.

Microsoft serried on generous terms for its competitors and for the public. It will now agree to disclose protocols and internal interfaces of the Windows system. This will allow competing companies to design both hardware and software that is more fully Windows-compatible. Additionally, with an upcoming revision of Windows XP, users will be able to more easily reconfigure their desktops, including the ability to remove access to Microsoft applications and features.

These changes wi11 clearly benefit consumers and developers. I believe that Microsoft has been generous throughout this mediation process and further that the settlement agreement is just. Please finalize the settlement.

Sincerely,
Robert W Bums

MTC–00030275

JAMES WANG
3925 Jamestown Place
Plano, Texas 75023
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing today to encourage the Department of Justice to accept the Microsoft antitrust settlement. The case has languished long enough and it is time to put an end to it. Microsoft and the technology all need to move forward; the only way to move forward is to put this issue in the past.

Microsoft and the government have reached a compromise on all of the major issues involved in the suit. Microsoft has agreed to give computer makers the flexibility to install and promote any software that they see fit. Microsoft has also agreed to release part of the Windows base code, to their competitors, so other software developers will have the ability to develop more compatible software. The terms of the settlement are fair and cover the major concerns that are at issue in the suit.

This case has for over three years and it is time to put an end to it. Microsoft and the industry need to get back to business. It is time to stop this government over regulation. Please continue your support of the Microsoft antitrust settlement.

Sincerely,
James Wang

MTC–00030276

ELC, Inc.
302 888 7030
01/25/02
04:17P
P.001
Edward Land
27 Rose Hill Drive
Bear, DE 19701
January 25, 2001
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft,

According to the Tunney Act, I am free to comment on the Microsoft antitrust settlement; I briefly wanted to express my approval of the settlement between Microsoft and the Department of Justice. I believe that the lawsuit was a bit unwarranted to begin with, in that Microsoft has always endeavored to make its software compatible with its operating system, This compatibility—which is the very heart of the government's claim that Microsoft was monopolistic-is the one thing that has allowed the average computer user to actually make use of modern computer technology. Whether the issue is a spreadsheet program that works well with the word processor; or either (or both) working at all on the operating system; or the latest release of DirectX that allows for sophisticated gaming that the young people like so much—all of this is possible because of Microsoft's commitment to integration.

I am confident that the review process for the Department of Justice will bear this out. I am hoping that many other Microsoft detractors both in the corporate area, as well as within our government, will allow this settlement to proceed.

I appreciate the hard work that you and your colleagues do to safeguard the American people from abusive business practices. But this Microsoft suit is not one of those areas of corporate abuse. I believe that in fact, it is much more beneficial to have Microsoft continue to do what it has, as unhindered as possible. Thank you.

Sincerely,
Edward Land

MTC–00030277

01/26/2002 03:18 FAX
P.O. Box 111
Highmore, SD 57345
January 23, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to participate in the public comments on the Microsoft antitrust settlement. I support the settlement. It is not perfect, but it. is far better than continuing to have lawyers haggle in court over the fate of one of America's chief engines of prosperity and innovation. It is gratifying to know that you directed your department to work to settle this case. and let Microsoft continue to innovate.

Since the settlement is acceptable to Microsoft, it is acceptable to me. Microsoft agreed up a lot of its property and a lot of its rights. That must not have been easy. Microsoft gives up to the software industry the code of its internal interfaces and server interoperability, It will license its intellectual properly to any company that wants to use it. on reasonable and non-discriminatory terms. It wi11 make it easy for computer makers, software companies and consumers to remove the programs Microsoft includes gralis in Windows, like Internet Explorer, and replace them with their own.

This case has gone on too long, with too little to show for it, and at too great a cost. Your efforts to have the federal court approve this settlement will be greatly appreciated.

Thank you.

cc: Senator Thomas A. Daschle

Sincerely,
Roger Ballew

MTC–00030278

01/25/2002 05:09
FAX 2024663801
ALEC AMERICAN LEGISLATIVE EXCHANGE COUNCIL
FACSIMILE TRANSMITTAL SHEET
TO: Renata B. Hesse
FROM: Duane Parde
COMPANY: Department of Justice, Antitrust Division
DATE:1/25/02
FAX NUMBER: 202–307–1454
TOTAL NO. OF PAGES INCLUDING COVER: 2
RE: US v. Microsoft
01/25/2002 05:09
FAX 2024663801
ALEC AMERICAN LEGISLATIVE EXCHANGE COUNCIL
Bo?? OF D??
N?? C??
O??
Jim Dunlap
F?? V?? CMA??
Louisi?? Stam Rep??
Donald R?? Kenn??d
St?? V?? CHAIRMAN
Mich?? State Senatar
Philip ??offman
T??
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Susan Wagle
SECRETARY
M??ppi S?? Senator
Biliv H??s
Immkd?? Pax?? CHA??
Tenn?? State Represent??ve
Steve K McD??n??el
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James F Boyer
North C?? State Repreven??ive
Harold J. Brubnker
?? State S??
Br??d Bu??
Taxas State ??
Bill Carter
G?? State Re??
??
?? State S??
L. P??
A??
Steve Fans
C??
George L. Gunth??
Coli?? State Senator
Ray Havn??s
N Y S?? Free Pr?? Pro Tom
Owen Johnson
?? State Representatr??
Dolor??s M??
Colorado State Senator
D?? Owwn
N?? Senate M?? L??
Wi??
Navada State Senator

Dean Rhoads
His?? State Senator
Robert Weleh
P??
C??FMAN
Michacl K. Morgan
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F??
Harry M. Winters
U??
SECOND VICE CMAIDNAN
L??S Goldbere
Am?? Expr?? Company
TURA??
Pete Poy??
Re??
St??
Edward D Fall??. Sr.
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A??
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C?? EMERITUS
Ronald F Schc??
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R?? Bagger
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Jane Caltill
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C.T. Kip Howle??
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Roger L. Moxing??
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J. Pa?? Rooney
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A National Association for America's State Legislators Jeffersonian Principles in Action!

January 25, 2002
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001

Re: Comments on the Microsoft Proposed Settlement Agreement

Dear Ms. Hesse:

As you know, on June 28, 2001, the U.S. Court of Appeals for the District of Columbia Circuit overturned a lower court ruling that Microsoft be broken into two companies as remedy for so-called anti-competitive practices. On November 2, 2001, Microsoft and the Department of Justice announced a settlement to the U.S. v Microsoft antitrust case. Nine of the 18 states that were party to the suit have agreed to join this important settlement.

Innovations in technology and telecommunications are an important contributing factor to our nation's economic success. It is, therefore, vitally important that this innovation continues and accelerates, as the economy struggles to rebound from its recent downturn. Settlement of this suit will help ensure this happens.

As the nation's largest, bipartisan individual membership association of state legislators, the American Legislative Exchange Council (ALEC) applauds your efforts to settle this case. We hope that the states that are not party to this settlement will follow the lead of the Justice Department and seek a fair settlement that encourages innovation and secures our economic growth.

Sincerely,
Duane Parde
Executive Director,
American Legislative Exchange Council

MTC–00030279

01/25/02 FRI 13:04
FAX 360 664 0228
ATTY GEN ADMINISTRATION
Christine O. Gregoire
ATTORNEY GENERAL OF WASHINGTON
Administration Division
PO Box 40100 .
Olympia WA 98504–0100 .
(360) 753–6200
FAX COVER SHEET
Date: January 25, 2002
Time: 12:01 PM
Please deliver the following one page(s)
TO: Chief Deputy Peter Siggins
916–327–7154
Chief of Staff Erie Tabor
515–281–4209
Renata Hesse, Department of Justice
202–307–1454
FROM: Attorney General Christine Gregoire
Fax Number: 360–664–0228
Voice Number: 360–664–8565
If there is a problem receiving this fax, please call Barb Winkler at 360–664–9082.
Christine O. Gregoire
ATTORNEY GENERAL OF WASHINGTON
1125 Washington Street SE .
PO Box 40100 .
Olympia WA 98504–0100
January 25, 2002
Ms. Renata Hesse
Antitrust Division
U.S. Department Of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001

Dear Ms. Hesse:

This is a comment submitted pursuant to the Tunney Act, 15 U.S.C. section 16, on the proposed settlement between the Department of Justice and Microsoft. The Attorney General of Washington (''Attorney General'') enforces state and federal antitrust laws. The Attorney General oftentimes works cooperatively with the Department of Justice on enforcement issues which impact the public on a national and local level, and works cooperatively with other state Attorneys General Offices on cases of national interest.

The Attorney General participated in the initial multi-state review of numerous allegations of violations of the antitrust laws by Microsoft. Even before the suit was filed, the Attorney General urged the parties to consider settlement.

The Attorney General did not join the Department of Justice lawsuit for several reasons including:

1. The lawsuit alleged harm to each state's general welfare and economy. This argument was problematic for the state of Washington.

2. We had received very few comments concerning consumer harm in Washington arising from Microsoft's conduct. In fact, we had received contrary comments.

3. If the Department of Justice did successfully obtain an injunction, the injunction would benefit any injured consumers in Washington.

We have reviewed the proposed settlement agreement with the Department of Justice, including the additional requirements negotiated by nine of the litigating states. We compliment all parties on their efforts to fashion a settlement agreement to resolve the litigation. We also acknowledge and respect that nine of the litigating states believe that the proposed settlement does not fully address outstanding issues and are continuing forward with the litigation.

Under the circumstances, with the Federal District Court having found violations of antitrust laws, and the parties formulating an agreement which addresses the contested issues, we support the proposed settlement as being in the public interest and believe it should be approved as proposed by the parties.

Sincerely,
CHRISTINE O. GREGOIRE
Attorney General

MTC–00030280

1–25–2002 2:54PM
FROM JIM CRUMLEY 610 558 3998
1521 N. Hunting Horn Turn
Glen Mills, PA 19342–2248
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am in favor of an immediate settlement of the Microsoft anti-trust case by the ter now before your office for review. I see no reason to further delay an end to this long controversy. It has hobbled a great and productive corporation at a time of national economic decline. It has proved a drain on our entire IT industry. A settlement plan exists and stands endorsed by your own department and the court, Please see that it's ratified and adopted as soon as feasible.

This case arose out of the government's consternation with Microsoft's seeming monopolistic hold on the IT industry. The settlement amply addresses the government's concerns by directing Microsoft to open itself up to more competition by surrendering its hold on near-exclusive Windows software integration in Microsoft platforms. Microsoft will now not just tolerate competition; it will be constrained to promote it. It will in fact be required to radically alter its corporate ethos.

Please help bring an end to this case and allow Microsoft to work untethered towards a more dynamic future for this industry and this country.

Sincerely,

Jim Crumley

cc: Senator Rick Santorum

MTC–00030281

FAULKNER UNIVERSITY
FACSIMILE TRANSMITTAL SHEET
TO: Attny Gen John Ashcroft FROM: Christi S. Lones
COMPANY
DATE: 1.25.02
FAX NUMBER: 202.307.1454/616.9937
TOTAL NO OF PAGES INCLLUDING COVER 2
PHONE NUMBER
SENDER'S REFERENCE NUMBER:
RE
NOTES COMMENTS
Christi Lones
5345 Atlanta Highway
Montgomery, AL 36109–3323
January 21, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue,
NW Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am delighted that a settlement has finally been reached between Microsoft and the federal government.

Microsoft has cooperated beyond what was required. They have agreed not to retaliate against computer makers and software or hardware developers that ship, develop or promote software that competes with Microsoft's operating systems, features, or applications.

Microsoft's compliance with this settlement will be monitored by a three-person Technical Committee established under the settlement by the Department of Justice and by those plaintiff states that are party to the settlement. In addition, any violations of the settlement are punishable as contempt of court.

So why isn't that enough?

This lawsuit has got to stop. The settlement should be accepted, and no more action should be taken at the Federal level.

Sincerely,

Christi Lones

MTC–00030282

Horst Seweron
12028 26th St. NE
Lake Stevens. WA 98258
12028 26th Street NE
Lake Stevens, WA 98258
January 23, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

Last November the Microsoft Corporation reached a settlement with the Department of Justice, which brought an end to the three years of antitrust litigation between the two. I am writing to express my support for this settlement since it is in the best interests of the IT industry, and America.

There were concessions made in the settlement that went further than Microsoft would have liked, but the terms were agreed to because the ending the suit was the best thing to do. Microsoft will now work much closer and actually ??n This will make competing software more compatible, and encourage competition to work harder than they ever have before. They will do that because Microsoft has also agreed not to retaliate against competitors. ??s.

You cannot go wrong with this settlement. I fully support m and hope it is approved as soon as possible.

Sincerely,

Horst Seweron

MTC–00030283

FROM: 2002. 01–25 10:51
#913
P.01/02
FAX MBE
MAIL B??XES ETC
Transmitted Via:
Mail Boxes Etc.
12995 N. Oracle Rd. #141
Tucson, AZ 85739–9594
Fax: (520) 825–2070
If there are any problems with this transmission, please call (520) 825–123I.
Date: 1–25–2002
Time:
To: Attorney General JoHN Asbcro??
Fax: 1–202–301–1454
From: Cal?? Rab??ks
Phone: 1–202–616–99??7
Total Pages (including cover page): 2
Message: Attoched
FROM: 2002.01–25 10:51
#313
P.02/02
1397 W Blooming Desert Way
Oro Valley, AZ 85737
January 24, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to express my full support of the recent settlement between the U.S. Department of Justice and Microsoft. Although I believe that the lawsuit was not justified in the first place, after three long years, I am happy to see that Microsoft is not being broken up and that a settlement has been reached.

Under the terms of the settlement Microsoft is not getting off easy. They must give up internal interfaces and protocols to their competitors. They must not retaliate against soft-ware developers or computer makers who promote no-Microsoft products. They must also grant computer makers broad new rights to configure Windows so as to more easily promote competitors'' products. Although I do not fully agree with the terms of the settlement, I want to see it finalized because it is in the best interests of the American public that there be no further litigation. I ask that your Office takes a firm stance and ends the lawsuits from the nine states trying to drag this thing through the mud.

Thank you.

Sincerely,

Calvin A. Roberts

MTC–00030284

TEL:
BETTY GRA??SSL??
Graphi?? Dev??gnor
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft: Microsoft has done more for our economy in the last 5 years than many other companies. They have created jobs, made technological breakthroughs, and contributed to education and social causes for the good of our nation. Yet, three years of lawsuits still haunt their ability, to grow further. I am appalled that nine states want to continue litigation even after settlement has been reach

The terms of the settlement are more than fair and should appease competitors The reason being that they will be given access to internal interface technology and protocols that Microsoft has worked long and hard to develop. They will also be granted broad new rights to configure Windows so as to make it easier to promote non-Microsoft software.

While I believe parts of settlement are unjustified and in violation of Microsoft's intellectual property rights, I still believe the settlement is in the best interests of the public. We cannot afford further litigation. Please lake a strong stance against the opposition and make the settlement a reality.

Sincerely,

??

Betty Graessle

25 Midchester Avenue . While Plains . New York ??

914. 949. 7909

Fax 914. 949. 7991

MTC–00030285

01/25/2002 14:02
3149971774
FULLERTON
David Fulle??on
Full Circle Computing
??S Greenridge Avenue
White Plains. NY 10605–1248
Telephone/FAX 914997 1774
E-Mail: DCFullenon??ullcircle-ccomputing.com
January 24, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

Throughout this entire Microsoft lawsuit, it has been evident that the issues were obscured by all the animosity. While I have felt that there have been certain things that Microsoft gas done that should merit some control, this litigation was not adequately addressing them.

This is why I think that the settlement is so important. Rather than wasting time with all the divisive contentiousness, the settlement clearly enumerates specific remedies. It addresses the unpleasant quarrel over Microsoft using its OS to steamroll over other companies who wish to sell other software, and calls for interface disclosure so that software companies can write better software. These are just two provisions that help

to increase competition, which is what the antitrust case was supposed to do in the first place.

While some of the terms of the settlement certainly do not favor Microsoft, the settlement itself ends all the acrimony. For this reason, I am writing in support of its acceptance, and hope that with it, our country can get beyond this and move forward with more important priorities.

Sincerely,
David Fullerton=

MTC–00030286

To: Renata Hesse, Trial Attorney
Suite 1200, Antitrust
Division, Department of Justice
Fax: 202–616–9937 or 202–307–1454
From: Robert Wood, 256–895–9286
RE: Comment on Proposed Microsoft Settlement
25 January 2;002
Robert Wood
117Gibbon Drive.
Harvest, AL 35757
25 January, 2002
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001

Dear Ms. Hesse:

The following document is a brief objection to the terms of the proposed settlements to Civil Action No. 98–1232 and 98–1233. It i, being sent on 25 January 2002 both as a signed FAX (202–616–9937 or 202–307–1454) and as an e-mail message (microsoft.atr@usdoj.gov) to aid in any transcription that might take place. As a defense engineer whose work has been associated with Information Technology for the past 15 years, I have witnessed the damage done by the monopolistic activities of the Microsoft Corporation. I am concerned that if these activities are allowed to continue (and the proposed settlement does not seem to do anythin8 to curb these practices) the company will continue to squeeze out competing operating systems and ISVs until there are no practical alternatives to the Microsoft products. For the sake of innovation, competition, and security we need viable alternatives for operating systems and applications that have been developed independently of Microsoft's codebase. The high numbers of macro viruses (both in documents and e-mail attachments) as well as the recent US worms demonstrates the danger of widespread adoption of a single product, With healthy competition, there are enough alternative products that it is impossible to attack them all since they will have different weaknesses.

Paragraph III. J of the proposed settlement is especially troubling, since the argument can be made that any component of a Communications Protocol has the potential to ''compromise the security of a particular installation or group of installations...'' Considering that Microsoft has recently announced that they are finally going to ''make security its first priority,'' I believe that this section will be used to withhold any useful data from release.

I recognize the positive aspects of Microsoft's role as the dominant provider of Intel Operating system software, middleware, and applications. The software industry can benefit from the leadership of one entity who has the power and resources to introduce new technologies. Unfortunately, I have seen Microsoft's dominance increasingly used to force alternative products and approaches out of the marketplace. For example, in my organization, no alternative to Microsoft Word is considered by management because it is presumed that no other product can read/write Word formatted text fides perfectly. Even those products that currently do a good job on Word file reading/writing are not guaranteed to be able to continue to be able to keep up with the changes to the largely undocumented Word format. The documentation of the modifications Microsoft made to the widely-accepted Kerberos authentication protocol was distributed under a restrictive license designed to prevent the information about the changes to an open standard to be used to create compatible software. This is a disturbing trend.

The proposed settlement does not appear to do anything to curb the monopolistic practices of Microsoft. It appears, in fact, to simply formalize them and allow the company to continue its practices with little interference. It does not touch on some of the most commonly used Barriers to Entry that the company puts up to discourage competition such as document formats and changing communications protocols. The proposed settlement appears to set up a system where any potential competitor is relegated to the role era Microsoft Developer (MSDN is explicitly mentioned as a delivery medium for some of the information) rather than a competitor. It is difficult to compete in an environment whet0 you can not get necessary information on a product until it is almost ready for release. Quality software demands extensive testing in addition to basic development time and if the required information is only released ''no later than the last major beta release,'' then by the time a competitor's product can be finished and tested, the Microsoft product would have long since been deployed.

In the interests of competition, security, and interoperability, Microsoft should be compelled to develop and deploy those protocols required for communication and authentication in cooperation with an appropriate standards body for the widest possible examination and testing. The standards body could then properly oversee the distribution of the protocol to ensure that competitor's software is truly interoperable with the Microsoft product as well as ensuring that competing products do not introduce incompatibilities with the Microsoft product. Microsoft should be compelled to disclose upfront which elements of a new and existing API, Communications Protocol, or Middleware product are covered by the company's own or licensed intellectual property as a part of this standards acceptance process. The result would be a set of protocols that benefit from community involvement and more extensive security testing than Microsoft is capable of on its own.

Sincerely,
Robert Wood

MTC–00030287

January24,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

This is to give my approval to the recent Department of Justice and Microsoft settlement. This has gone on long enough and it is time to put this thing to rest. I didn't agree with the initial lawsuit. I think if someone is smart enough to come up with something, then it is their right to sell it. Microsoft is just smarter than everyone else and the company keeps coming up with bright ideas. The other companies are just jealous. It is time to act like grown-ups and move on.

Further, I understand Microsoft has given away a great deal. Microsoft has agreed to allow computer makers to ship non-Microsoft product to a customer; Microsoft has agreed to a uniform price list; Microsoft has agreed to help companies better achieve a degree of reliability with regard to their networking software. Enough is enough. I urge you to let this settlement stand. We have more important things to worry about.

Sincerely,
Robert Willetts
1251 St, Rt. 726 New M???, Ohio 45346
Phone: 937,996–5103
Fax: 937–996–5103
Email: ??@??
TOTAL P. 01

MTC–00030288

John R. With
420 Palmer Ave
Aplos. CA 95003
Fax. 831–687–0552
SEND TO
Company name Department of Justice From John P. Wirth
Am??mion Ms. Renate B ??esse
Date 1–25–02
Office location Washington, DC
Fax number 202–307–1454
Phone number 931–586–0297
URGENT URGENT URGENT URGENT URGENT
Total pagas, including cover.

COMMENTS

I am writing to ask that you accept the settlement proposed in the Microsoft case. It is total waste of my tax dollars to pursue this any ??urther. Spending 35 million dollars is enough.

Thank you for your kind consideration.

MTC–00030289

January 25, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

I am writing to express my relief and my support for this lawsuit between the Department of Justice and Microsoft having ended in a settlement. From what relatively little specific information I have about the details of this settlement, I can say that it

appears to satisfy most of the complaints of the lawsuit. There is, for example, this provision that allows for Microsoft to refrain from penalizing computer manufacturers from installing non-Microsoft applications onto any new Microsoft OS. This is a good thing that will obviously allow more flexibility in the industry.

My greatest fear throughout this process has been that serious damage could have resulted from the splintering of a company like Microsoft. While it must be readily admitted that Microsoft has maintained a rather rigid control over the use of its product, even by its own customers, breaking apart a company of this size, as envisioned by the litigation, could have had far-reaching negative effects upon the entire industry.

With this settlement, it appears as if this eventuality is less likely. For this reason I am hoping that the settlement will ultimately prevail.

Sincerely,
Todd Epp??e
Senior Partner

MTC–00030290

18000 72 Ave. S., Suite 217
Kent, WA 98032
Fax
To: Attomey General—John Ashcroft
From: Dave Hafermann
Fax: (202) 307–1454
Pages: 2
Phone:
Date: 1/25/2002
Re: Microsoft Settlement
cc:

Attached, please find my letter regarding the Microsoft Anti-Trust Settlement.

Regards,
Dave Hafermann
cohesion
MARKETING
www.cohesionlnc.com
January 23, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I support the Microsoft antitrust settlement agreement. I have witnessed first hand how this case has created a great deal of uncertainty in the technological industry. It is time for the litigation to end so that companies that are within and/or dependent on the industry can get back to focusing on their own business and the delivery of great new technologies. Continuation of litigation will result in a never-ending legal cycle as companies attempt to use the legal system to accomplish what they were unable to do when competing within the marketplace (as the recently filed AOL/Netscape case shows). More litigation has a negative Impact on the industry and economy, and with the current economic status, this is something the hl-tech industry does not need.

The terms of the agreement are both fair and reasonable. Microsoft will be subjected to restrictions that will help ensure no future antitrust violations occur. For example, Microsoft has agreed to not retaliate against computer manufacturers who install computers with its competitors'' software. They have also agreed to license out code to competitors that would normally be protected under intellectual property statutes. Additionally, a technical oversight committee will be created as a result of the settlement agreement. The oversight committee will act as a watchdog to ensure Microsoft does not engage in anticompetitive business practices. Nothing more should be required or expected of Microsoft.

I appreciate your efforts to resolve this case. I hope the court makes the wise decision to approve the settlement agreement.

Sincerely,
Dave Hafermann
EVP Technology
Cohesion, Inc.

MTC–00030291

Bottomline Technologies (de), Inc.
155 Fleet Street
Portsmouth, NH 03801
(603) 436–0700
Fax: (603) 436–0300
www.bottomline.com
TO:
FROM:
DATE:
TIME:
Pages, including cover sheet
Technologies
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to express my support of the settlement agreement in the Microsoft antitrust case. The agreement's terms are both fair and reasonable, and the Court should approve the settlement. This settlement is important for our economy.

In the interest of resolving the litigation, Microsoft has agreed to a wide variety of concessions. They have agreed to design Windows in such a way that it will be easier for consumers to replace features of Windows with software programs made by Microsoft's competitors. This will result in greater choice for the consumer. Additionally, in an effort to allay fears of predatory behavior, Microsoft has agreed not to retaliate against those who distribute or promote software that competes with Windows. Microsoft has also agreed to give up its right in many cases to go after those who infringe on Microsoft's intellectual property rights. These types of concessions illustrate how the agreement provides the appropriate remedy for the complaints lodged against Microsoft.

I would like to see this case resolved. I appreciate your efforts in this regard.

Sincerely,
D. M. McGurl
Chairman & CEO
Bottomline Technologies, Inc.
155 Fleet Street
Portsmouth, NH 03801
Phone 603 436–0700
FAX 603 436–0300
www. bottomline.com

MTC–00030292

Software Development And Consulting
701 Merlin Dr.
Green Bay WI 54301
Phone: 920–983–9365
Fax: 920–988–9359
Email: msuls@co??pubrain.com
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

Having spent 15 years as a computer programmer, I would like to share my approval of the pending Microsoft settlement being completed at the end of the month and letting the company continue as a successful innovator that has driven the growth of the PC industry. This lawsuit was brought on by desperate competitors, such as Sun and AOL, leading to an expensive litigation that has only succeeded in lost taxpayer dollars and should be ended immediately.

Judge Jackson overstepped his authority with his ruling, as a break up would be a disaster for this fragile economy. Microsoft has not been perfect, but they are superior to any alternative on the market, and should be allowed to continue their progress unimpeded by more government intervention. The negotiated deal already sacrifices several aspects of the company's autonomy and gives the rival factions a broad spectrum of tools to make their mark on the competitive playing field.

I ask for your go-ahead with this plan, which unfortunately provides a level of regulation unheard of in the IT industry. Yet no matter the obstacles, Microsoft deserves a compromise and to exist as one company.

Sincerily
Michael Sule
COMPUBRAIN
cc: Representative Mark Green

MTC–00030293

JAN-25–2002 14:15
PBG/FINANCE 212 304 4060
P.01/05
21 Bennett Avenue
New York, NY 10033–3628
January 22, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing you today to express my opinion in regards to the Microsoft settlement issue. I support the settlement that was reached in November and I support Microsoft in this antitrust dispute. I believe it will benefit all of us to settle with Microsoft and stop this litigation.

Microsoft has agreed to carry out all provisions of this agreement. Microsoft has agreed to grant computer makers broad new rights to configure Windows so as to promote non- Microsoft software programs that compete with programs included within Windows. Microsoft has also agreed to design future versions of Windows, beginning with an interim release of Windows XP, to provide a mechanism to make it easy for computer makers, consumers and software developers to promote non- Microsoft software within Windows.

I urge you to support this settlement and allow Microsoft to devote its resources to designing innovative software, rather than litigation. Thank you for your support.

Sincerely,

Felix Yukilevich

MTC–00030294

JAN-25–2002 14:15
PBG/FINANCE
2i2 904 4060
P.82/85
21 Bennett Avenue APT, 26
Now York, NY 10033
January 11,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

To Whom It May Concern:

Subject: Microsoft Settlement

I'm writing you about the DOJ v Microsoft antitrust lawsuit, I've heard how important it is for the government, the interest of Americans. According to the Tunney Act, we (the people) have a given period of time when we can express our opinions on the case.

I want to take this time to express my opinions about the case. I'm a high school student (18 years of age), and in my senior year. I attend the Urban Academy High School (In Manhattan, the Borough of New York City). This case is very important 1:o Americans, and the students as well, for we are all American.

I've been following this case for quite a long time, and I believe, and know that Microsoft is guilty of no crime, unless you can count innovation as one. If we all take a brief moment end think, we can't remember who invented the steering wheel of the automobile; and yet every automobile company features this mechanical part in the car. So far, nobody has cried foul yet.

For another example: when Nissan manufactures its car, the company includes a (Nissan) thermos, and only Nissan's, no one else's; so companies have a right to litigate because the thermos is in any way ''anti-competitive''? So, if Microsoft doesn't feel that it needs to include more programs into its Operating System, it has the constitutional right not to. Why don't you bother Ford, or GMC about them being ''uncompetitive'' about their products if they happen to withhold their secret to their car engineering, and locking out competitors'' parts? I'll tell you why, because it's ludicrous to persecute a company (constantly)just because they don't want to pre-install certain programs.

Microsoft's main competitor Apple should be litigated for locking out competitors as well. The fact that Apple's Macintosh Operating system only runs on Apple's Macintosh computer, and no one else's. No other company has a pre-loaded Mac OS, and that is anti-competitive. Microsoft is being forced to include what we computer people call ''bloat ware''——loading up the OS with unnecessary programs, graphics, etc. People can install these programs on their own. Some of those (major) programs include:

. AOL (and all its products)
. NETSCAPE
. PRODIGY
. AT&T WORLDNET

By counting the hard drive space that these programs take up, the result would be unbelievable. Microsoft doesn't have to include them all, due to the fact that we can install programs of our choice. The same way you download software, freeware, and shareware off the Internet, you can install them just the same way. Why do we need all those programs bundled with Windows? I purchased Windows, so why do I have to get all those Online Services, and all those Instant Messengers (AOL, and Yahoo!)? It Just slows down the computer, no wonder Windows is the OS that is most expected to crash. Why isn't Apple being forced to do the same? How about Corel with its Linux OS? Mandrake's Linux, or Redhat's Linux?

Microsoft is a very innovative corporation. If not for Microsoft, I shudder to think how the world would look like today. Think about this: what do you at the DOJ use for word processing? Do you use the Windows OS? Or do you still use one of those typewriters? Think about it. The briefs for the U.S. Supreme Court cases are written on PC Computers, with Microsoft Word. The sad part is, is that the 9 Justices don't realize that they (or their clerks) are using them. Every court in The Nation uses Laptop computers, and I know they are not Apple's. I, as a professional computer user in the technical fields, I know the necessities, and making sure that Netscape has its browser pro-loaded in Windows is not one of them. AOL is a company that people have a tendency to dislike. My parents and canceled our AOL account, we now use Road Runner Cable service. So why are we being forced to include AOL's buggy software on Windows? We can install it if we want to. AOL's Instant Messenger has a new security problem that gives hackers the control of the victims'' computers.

Microsoft was also accused of forcing consumers to view pictures, play music files, etc... with Internet Explorer, but that [s not true; you don't have to associate the browser with picture file extensions, or music extensions, you can select a different program (Netscape). The reason why you can view pictures through Intemet Explorer is that it's a Web browser, and Web browsers are built to view information on the Intemet, (that includes pictures, music clips, etc...). In fact, you don't have to use Intemet Explorer; you can use Netscape, Lynx, Mosaic, and other third party Web Browsers. In fact, I've even installed other Operating Systems (Mandrake Linux) on my SONY VAIO computer and it works perfectly.

I know how our opinions are Important to you, and therefore, I've written you mine. I also know that it is vital to have opinions on Information Technology from students (high school, and/or college), for it is the ''hot topic'', and we are the future, I'm going to major in Computer Information Technology; therefore, I'm familiar with this field. I'm also interested in law and politics, and want to take Political Science in College.

I hope we can all settle, and move on. Continued litigation is not the right answer. Good luck with the decision.

Sincerely,

Felix Yukilevich.

MTC–00030296

Jan 25 02 12:28p
O'Doherty
(G51)483–2691
p.1
Ned K O'Doherty
177 Galtier Place Shoreview
Minnesota- 55126
January 15, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

As a very satisfied user of Microsoft products and customer service, I would like to add my support for settling the Federal lawsuit after the public comment period ends later this month. I believe any further action would compromise the free market, as the idea of a break up or other extreme measure to rectify lack of competition in the industry was truly over the line.

Having seen the terms of the agreement, I support many of the gestures made in the settlement and see this deal as a fair compromise. The measures to provide an open architecture to competitors, not discriminate against computer makers utilizing non-Microsoft software programs and offer a uniform price list for licensing the Windows operating system to the top 20 computer manufacturers, all seem like good steps to guaranteeing free competition to all. As someone facing anti-competitive tactics in the pharmaceutical industry, the benefits of a uniform price structure have definitely resonated the most.

Now that a settlement has been reached and Microsoft is offering such a wide range of positive measures to give competitors more than their fair chance in the marketplace, I hope the Justice Department will accept this deal and move on to more pressing issues. Any more action would hurt businesses, consumers and the country. Thank you.

Sincerely,

MTC–00030297

01/25/02 14:16
FAX 212 450 1555
THE LUDWIG GROUP INC.
143–40 Roosevelt Avenue
Flushing, NY 11354–6145
January 24, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

There has been a recent settlement to the antitrust case brought against Microsoft. This agreement came as a result of round-the-clock negotiations, with both sides agreeing to settle this dispute. I want to give my support to this agreement. Microsoft has been chastised and has opened the company significantly to competition. It is important for us to put this matter in the past since it has not only been decided in a U.S. District Court, but by the parties as well. I do not believe further litigation will be beneficial to our economy or country.

As I understand it, Microsoft has agreed to a great many terms that extend well beyond

the issues raised in the initial suit. Microsoft has agreed to allow computers to ship non-Microsoft products to customers; Microsoft has agreed to help companies achieve a greater degree of reliability with regard to their networking software; Microsoft has agreed to design future versions of Microsoft with a mechanism to make it easier to promote non-Microsoft software. I urge you to g-ire your support to this agreement. Thank you.

Sincerely,
Pauline Schwager

MTC–00030298

1/25/2002 2:17 PM
FROM: Fax Caudill Consulting
TO:
1–202–307–1454
PAGE: 001 OF 001
January 17, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC. 20530–0001

Dear Mr. Ashcroft

Today I write to express my opinion regarding the Microsoft antitrust settlement. I believe that the settlement is fair and beneficial to everyone involved. It is therefore in the best interests of our country that this issue be resolved.

Through a court appointed mediator Microsoft has settled on the terms of this agreement, which goes beyond the original scope of the case. Microsoft has agreed to change procedures that were not originally an issue in this lawsuit. An example of this is Microsoft's agreement to disclose the internal interfaces of its Windows system to its competitors.

Clearly Microsoft is interested in resolving this issue. I believe that it is time we do just that.

Sincerely,
James Caudill

MTC–00030299

JAN–25–2002 12:24
PM
P. 01
6739 Murray Park Drive San Diego, CA 92120
January 24,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

From seeing how the IT sector has affected Silicon Valley and the bay area's economy, I urge you to end any further litigation in this Microsoft antitrust case. Microsoft did not get off easy. After extensive negotiations, they agreed to terms beyond what is expected in any antitrust case. Microsoft has agreed to document and disclose various interfaces that are internal to Windows'' operating system to the competition, Also,

Microsoft has agreed to use a uniform price list when licensing Windows out to the 20 largest vendors in the U.S. It's obvious to me that Microsoft wants to settle this case so they can go back to business. Shouldn't we get back to business and put people back to work and out of this Recession. Please,

I urge you, no more litigation.

Sincerely,
Steven Horowitz

MTC–00030300

01/25/2002 FRI 14:19
FAX 001/001
David Dindy
8 Baron Park Lane Apt. 27
Burlington, MA 01803
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

Last November the Department of Justice and Microsoft agreed to terms on a proposed settlement that will bring an end to the antitrust suit against Microsoft. I support this settlement.

If you look back, the economic downturn started the day that the Department of Justice filed the antitrust suit against Microsoft. The market has been spiraling downward ever since. This settlement sets forth certain obligations that Microsoft must adhere to, and those terms will encourage competition and spur economic growth. Microsoft has agreed to design future versions of Windows that will make it much easier for software and hardware developers to reconfigure the Windows operating system to include non-Microsoft software. Technology companies will be working hard to create a product that will work well in Windows, and that will catch the eye of consumers. This is just what is needed, and the industry will benefit.

I support this settlement, and hope it is approved as soon as possible.

Sincerely,
David Dindy

MTC–00030301

Jan 25 02 02:23p
CINDY BL??EUER 863–802 8722
p.1
4300 STEWARD ROAD
LAKELAND, FL 33815–3240
863–688—4042
863–802–8722 (FAX)
CJPALLET CO., INC.
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Ave, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I believe that it is time for the Microsoft. case to come to an end. For the past three years, the government has wasted its time and energy on a case concerning the problem with Microsoft's success. I believe this to be a mistake. However, I understand that the issue at hand now is whether the settlement is fair to the consumer. Thus, being a consumer myself, I would like to support Microsoft in seeing the end of this settlement.

Three years is a long time for any lawsuit especially since Microsoft has agreed to many terms beyond the scope of these current issues. Basically, Microsoft has agreed to promote the competition as well as to provide them with valuable interfaces that will enable compatible software. Because of this, I believe Microsoft to have sufficiently fulfilled their debt to the competition.

Microsoft is a great company and their success should not be punished any longer. After the finalization of this settlement, I am confident that it will be to the best interest of not only the consumer but also the software industry so that new products and technologies can be developed. Thank you for taking the time out to listen to the public voice.

Sincerely,
Cindy H. Blaeuer
2nd Vice President
Serving the Industry Since 1969!

MTC–00030302

Jane R. Maytin
20011 Cameron Mill Road
Parkton, MD 21120
Via Facsimile 1–202–307–1454
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Attention: Microsoft Settlement

Dear Mr. Ashcroft:

I am writing to voice my opinion regarding the settlement of the Microsoft case. I am glad to see that there is an end in sight. I just hope that the settlement is accepted and we can all get on with our lives. Microsoft has given a lot to our economy and they need to be allowed to focus on developing new products instead of fighting legal battles.

I work in the Development office at a private school in Maryland; we use Microsoft products to run our department and I personally use Microsoft products at home as well. Even though the settlement is harsher than they have wanted, Microsoft is agreeing to a lot just so they can move forward with business. They are sharing an unprecedented amount of technology information with their competitors and will also be changing their anticompetitive business practices. All of the terms of the settlement are more than fair and will allow our computer industry to boom again.

Please do your part in ending this lawsuit. I believe it is for the good of our entire country that you accept the proposed settlement.

Sincerely,
Jane R. Maytin

MTC–00030303

RIKER, DANZIG, SCHERER, HYLAND & PERRETTI LLP
50 West State St.
Trenton, NJ 08608–1102
(609) 396–2121
FAX (609) 396–4578
FAX COVER SHEET
Date: January 25, 2002
From: Mary Kathryn Roberts
User ID # 0298
Attorney #: 0298
Client/Matter #: 16995/2
Re: Microsoft Settlement
Pages sent (including cover): 3
RECIPIENT FIRM CC:
FAX NUMBER
Department of Justice
202–307–1454 or 202–616–9937
.Comments:

Please see attached statements from New Jersey legislators. Confidentiality Note:

The documents accompanying, this telecopy transmission contain information from the law firm of Riker, Danzig, Scherer, Hyland & Perrerd LLP, which is confidential and/or legally privileged. The information is intended only for the use of the individual or entity named in the transmittal sheets. If you ate not the intended recipient, you arc hereby nod fled that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this telecopy is strictly prohibited. If you have received this telecopy in error, please immediately notify us by telephone so that we can arrange for the return of the original documents to us at no cost to you.
3114591.01
Time Sent:Operator:
NEW JERSEY GENERAL ASSEMBLY
GUY R. GREGG
ASSEMGLYMAN, 24TH DISTRICT
MORRIS-SUSSEX-HUNTERDON COUNTIES
268 ROUTE 20??. BUILDING D
FLANDERS. NJ 07896
(973) 584–5422
FAX (973) 584–2977
E-mail. AsmGregg@??
COMMITTEES
CHAIRMAN
REGULATORY OVERSIGHT
MEMBER
COMMERCE, TOURISM.
GAMING, AND MILITARY
AND VETERANS AFFAIRS
January 25, 2002
Ms. Renata Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
RE: Microsoft Proposed Settlement Agreement
Dear Ms. Hesse

The Microsoft settlement is a nimble resolution that preserves competition, allows Microsoft and its rivals to freely continue to meet consumer demands, and helps define the direction of government's role in the high-tech industry. More than anything, certainty and resolution will help the economy and promote new investment in technology.

In my estimation, it will be very hard to justify rejecting a settlement that is good for consumers, the technology industry and the economy as a whole. Accordingly, I urge you to accept the proposed settlement agreement.

I thank you for your time.

Sincerely,
Guy R. Gregg
Assemblyman
District 24
GRG:kvp

January 24, 2002
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
Re: Comments on the Microsoft Proposed Settlement Agreement
Dear Ms. Hesse:

When word of a possible settlement in the Microsoft case broke, the markets surged. In spite of gloomy economic reports, the news was viewed by investors as a sign that our nation's critically important high-tech industry could move forward. The fact is that news of an impending settlement lifted the share price of technology companies across the spectrum, including Microsoft's rivals. AOL, Time Warner, Sun, Oracle, IBM—they all saw their stocks jump.

The economics of settlement were made clear by the markets. Public sentiment—from consumers to businesses to investors—favors settlement. This fair settlement prevents Microsoft from abusing the strength that it derives from its operating system, but still allows the company to continue to innovate in all areas of software development.

As elected officials from the New Jersey Legislature, we congratulate the Department of Justice for developing a strong but fair settlement and its efforts to put and end to this lawsuit.

Sincerely,
The Honorable Anthony Bucco
New Jersey Senate
Co-Republican Majority Leader
The Honorable Robert Singer
New Jersey Senate
Co-Republican Majority Leader
The Honorable Gerald Cardinale
New Jersey Senate
Co-Chair Senate Commerce Committee

MTC–00030304

Christine Williams
PO Box 1069
Clinton, WA 98236
January 22, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

I am writing to share my thoughts on the Microsoft Anti Trust case. l believe that the Clinton Administration's Justice Department should never have pursued a legal case against Microsoft in the first place, but I do think that the proposed settlement is in the best interests of everyone involved. From the moment this case began our economy has been negatively affected. It is imperative that Microsoft be free of legal entanglement so that the company can continue to provide innovative products to the marketplace and contribute to the recovery of our economy and the reversal of the recession.

Microsoft is one of the dynamos behind our leadership and superiority in the World Market today. Please don't allow the company's dynamism and innovation to be diminished any further by actions of the Justice Department. ''Dragging down'' Microsoft puts our county at greater peril.

Sincerely,
Christine Williams

MTC–00030305

64 76 ROCKAWAY AVE REALTY CORP.
1005 Park Lane E
Franklin Square, NY 11010
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

The settlement with Microsoft is in the best interests of the public and the economy. It is both fair and reasonable, and it will prevent future anticompetitive behavior. This case has dragged on for far to long and now is the time to end it. This settlement has placed many restrictions on Microsoft. For example, Microsoft has agreed to document and disclose for use by its competitors various interfaces that are internal to Windows'' operating system products—a first in an antitrust settlement. Also, Microsoft has agreed not to enter into agreements with any third party to promote any Windows technology exclusively. Plus, Microsoft has agreed to a ''Technical Committee'' that will monitor the company's compliance with the settlement. A quick return to business as usual should be the focus for all parties involved in this case, not a return to the courtroom. State and Federal budgets have already been spending millions of dollars on this case unnecessarily. Let's end this litigation as soon as possible.

Sincerely,
Fred Bothe

MTC–00030306

Joseph Kishman
3001 Market Street Suite #10
Philadelphia, PA 19104–2800
January 8, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington DC 20530–0001
Dear Mr. Ashcroft,

As a concerned citizen, I write you in support of the recent settlement between Microsoft and the Department of Justice. After three years of court battles, it seems ridiculous to waste our resources on scrutinizing a well-calculated and well-monitored agreement. The process was not only well monitored, but was carried on in the interest of the entire IT sector. Microsoft, as well as other IT companies, is ready to move forward and get back to business. Let us not be the ones to hold them back.

Not only did Microsoft agree to reconfigure licensing and marketing agreements, but also agreed to redesign future versions of Windows in order to help promote non-Microsoft software. If this isn't in the interest of the technology industry as a whole, I don't know what is. As we continue to delay this process, we continue to jeopardize our position in the global market. We need to move forward and get back to business so that we may help out our current economic situation.

I urge you to support the settlement in its current state, and help us to get our IT sector back to business. I thank you for your support.

Sincerely,
Joseph Kishman
Cc: Senator Rick Santorum

MTC–00030307

Leonard P. Ponte
14156 E. Hampden Place
Aurora, Colorado 80014
January 16, 2002
Attorney General John Ashcroft

950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Attorney General:

I am writing in Support of the Microsoft antitrust case settlement. I would like to see the litigation end. I am hopeful the Court will not hesitate to approve the settlement, agreement the parties recently hammered out.

It goes against my principles to settle a case just for the sake of getting out of the litigation. Especially when in a case like this the suit should not have been filed in the first place. However, there comes a time when a company must cut its losses and do what it takes to end the litigation insanity.

Microsoft has clearly gone above and beyond what should be required of them. They have agreed to not retaliate against third parties who distribute or promote software that competes with Windows. They have also agreed not to enter into contracts obligating third parties to exclusively sell Windows products. They have also agreed not to enforce their intellectual property rights. I don't think continuing the lawsuit will result in anything else of substance

The settlement agreement should be approved in its present form, and the parties: focus their efforts on more fruitful endeavors.

Sincerely,

MTC–00030308

Kansas Legislative Education And Research
Legislators Defining the Role of Government
January 25, 2002
BOARD OP DIRECTORS
President Rep Andrew Howell
Vice President Rep. Peggy Palmer
Secretary S??. Tim Huelskamp
Treasurer Rep. Peggy Long
Sen. Bob Lyon
Rep. Bill McCreary
Rep. Judy Morrison
Rep. Don Myers
Sen. Robert Tyson
Executive Director Bob L. Corkins
Ms. Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001

Dear Ms Hesse:

On behalf of KLEAR, Inc., an association of Kansas state legislators representing nearly a third of this state's current House and Senate office holders, I write today with their explicit authorization in strong support of the proposed Final Judgment to the Microsoft antitrust case offered by the U.S. Department of Justice and endorsed by nine state attorneys general. Regrettably, Kansas is not yet among the states agreeing to end their pursuit of this ill-conceived litigation. However, we will continue to press the bee-market rationale for an end to this counter-productive legal course. With the direct means at our disposal, we have already severely restricted the state resources that may be devoted to its prosecution.

The rationale for ending the litigation is squarely in line with our KLEAR philosophy. We stand for the Constitutional principles of limited government, individual liberty, free enterprise and traditional family values. From its initiation forward, the antitrust action against Microsoft has been an affront to these principles that hold real hope in achieving the greatest good for the greatest number of people.

In harmony with a glut of esteemed economists and legal scholars from around the country, we consider the justification for the lawsuit to be baseless. New competitors have emerged to challenge Microsoft's well-earned dominance. Consumer have benefited greatly from reduced prices and improved products. In fact, conspicuously absent at trial and in endless media accounts of the controversy is any evidence that consumers have been harmed. To the contrary, Kansans have lost hundreds of millions of dollars as a result of the antitrust litigation. Our own pension program for government employees in this state has seen its unfunded liability mushroom as a direct product of the legal attack on Microsoft. When we take into account such tangible negative effects, the fragile case theory, the inappropriate and counter-productive remedies imposed by Judge Jackson, and the threat to this country's core principles of liberty, our decision to support the proposed Final Judgment to this lawsuit is KLEAR-cut.

Bob L. Corkins
Executive Director
827 SW TOPEKA BLVD
TOPEKA, KS 66612
PHONE 785–233.8765
EAX: 928–244–3262
EMALL: k?? kless@webell.net

MTC–00030309

Carol Storm
15420 139th Avenue SE
Renton, WA 98058–7828
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania
Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I would like to take this opportunity to express my feelings about the antitrust settlement made between Microsoft and the Department of Justice. I feel the settlement reached is more than Microsoft should have agreed to in the first place. Not only has this damaged Microsoft, but it has also hurt the economy and the rest of the IT industry.

Microsoft has taken many steps to help put this issue to rest. They have agreed to document and disclose for use by its competitors various interfaces that are internal to Windows'' operating system products. In conjunction with this they have agreed to a uniform price list. This means that Microsoft will license its Windows operating system products to the 20 largest computer makers on identical terms and conditions, including price.

It is obvious that I feel this issue needs to be resolved. This agreement is a step in the right direction.

Sincerely,
Carol Storm

MTC–00030310

1341 Desoto
Ypsilanti, MI 48198
Fax
To: Renata Hesse
From: Joy Lauderman
Fax: 1–202–307–1454
Pages: 2 (total)
Phone: 734–764–1575
Date: 01/23/02
Re: Opposition to the Microsoft Settlement
Comments:

The included letter states my strong opposition to the proposed DoJ vs. Microsoft settlement.

1341 Desoto
Ypsilanti, MI 48198
January 23,2002
Renata Hesse
Trial Attorney
Suite 1200
Antitrust Division
Department of Justice
601 D Street NW
Washington, DC 20530

I am writing about the proposed settlement in the U.S. vs. Microsoft anti-trust case. After reviewing the proposal, it seems to me that the Department of Justice let Microsoft off easy. I find it highly concerning that most observers of the case consider this settlement to be a victory for Microsoft that will allow them to continue with business as usual. Since Microsoft was found guilty as a predatory monopoly and they have already violated a prior agreement with the DoJ, much stronger remedies are in order.

Any settlement that allows Microsoft to determine what non-Microsoft products may be invoked by Windows and subject that product to a reasonable technical requirement, determined by Microsoft, is terribly is flawed, In addition, the ability of Microsoft to limit the disclosure of API's or communications protocols if they may compromise the security of a particular installation or group of installations is overly broad. Finally, the release of data cannot only be to those that meet objective standards established by Microsoft for certifying the authenticity and viability of their business.

In particular, the viability of business clause completely omits educational, non-profit, open source and free software developers from being eligible for disclosure of API's or communications protocols as the nature of their endeavors are not necessarily to be viable businesses. This is clearly a strategic move on Microsoft's part as it allows them to squeeze the open source Linux community from being able to compete as efficiently in the server and desktop markets. Any remedy must include full public disclosure of all API's and communications protocols. The information disclosed must be determined by an independent third party that is given sweeping investigative and enforcement powers with public accountability, Anything less will not restore competition to the software industry or prevent future anticompetitive behavior from Microsoft.

Sincerely,
Joy Lauderman

MTC–00030311

Fax Cover Sheet
Date: Jan 25 2002
To: Dehastment of Justice
Company:

Fax: 1–202–307–14.54
From: william a ?? som
Company:
Tel: 650 968 5845
Number of pages including this one: 2
kinko's
20660 Homestead Road
Cupertino, CA 95014
Tel: (408) 777–1000
Fax: (408) 777–1030
Comments:
microsoft Settlement
Date: Jan 25, 2002.
To: Department Of Justice
From: William Peterson
Subject: Microsoft Settlement.

I'm very satisfied with the settlement between Microsoft and US Department of Justice. The following is the main reason. As a US citizen is my duty to try my best to provide any information that is good for our country.

I have read extensivly material and documents on this case and settlement including: Complaint(5/18/1998), Stipulation (11/06/2001) and Competitive Impact Statement (11/15/2001). Its a good thing you folks and Janet Reno weren't around at the turn of the last century. If you were I wouldn't be driving my ford.

The Department Of Justice gave Microsoft a very strong order, stronger than the compitition complainted about. I'm very happy that Microsoft agrees to this final settlement.

Sincerely
William G Peterson
LOS ALTOS, CA 94024

MTC–00030312

DATE
Renata Hesse
Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street, NW, Suite 1200
Washington. D C. 20530

Dear Ms. Hesse

Under the Tunney Act the Department of Justice is required, to provide a public comment period on the merits of the proposed settlement of the Microsoft Anti-Trust case. I gratefully accept this opportunity to participate m this public comment period.

Our new Attorney General, John Ashcroft and the Department of Justice were on target to actively pursue an equitable settlement with Microsoft. It is unfortunate that some states and several of Microsoft's competitors are insistent in their arguments that this case must continue to be prosecuted, in my view, this is proof that they are only focused on their own self-interest and not on the national economy or the growth of the technology industry.

It is unfortunate that companies like AOL and Oracle are apparently more interested in continuous legal wrangling instead of competing on the open market. Arguing that this case should continue ignores the major remedies found in this proposal. While I can only comment on those made public, it would seem to me that guaranteed flexibility for computer manufacturers, Microsoft's sharing of intellectual property and the establishment of a ''policing'' commission, all combine to create a very fair agreement.

I urge you to accept this settlement.

MTC–00030313

DISTRICT OFFICE:
191 WAUKEGAN ROAD, SUITE 204
NORTHFIELD IL 60093
847/441–0077
FAX: 847/441–9322
E-MAIL:SENKATHYPARKER@
WORKLONET.ATTNET
CHAIR: TRANSPORTATION
VICE CHAIRMAN: PUBLIC HEALTH AND
WELFARE
MEMBER: COMMERCE & INDUSTRY
CAPITOL OFFICE:
ROOMM118 STATE CAPITOL
SPRINGFIELD IL 62706
217/782–2119
FAX: 217/782–0650
ILLINOIS STATE SENATE
KATHLEEN K. PARKER
STATE SENATOR .
29TH DISTRICT
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D, Street NW
Suite 1200
Washington, DC 20530–0001

Dear Ms. Hesse:

It's great news for the country that a settlement has been reached between Microsoft and the Department of Justice and the nine Attorney Generals. The reaction from Americans was overwhelmingly in support of the settlement. It is so important that we try to stabilize the high tech industry at this time. And continuation of this lengthy lawsuit is not in the nations's best Interest as the country grapples with recession, business failure and stock market shocks.

I support your efforts to resolve this Issue with a meaningful and fair agreement.

Sincerely,
Kathleen K, Parker
Senator
29th District
KP:ckr

MTC–00030314

E. P. FRANKS. M. D.
Two EXECUTIVE PARK DRIVE
STUVVESANT PLAZA
ALBANY, NEW YORK 12203
TELEPHONE 518–438–1332
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing to express my opinion about the Microsoft ant/trust settlement agreement. I understand flint the Justice Department is accepting public comment on this issue, and I would like to state that I am in full support of the current agreement, because I believe it is a fair and reasonable solution to this complex case.

It took more than three years to reach this agreement, and I believe that it should remain in its present form. Microsoft has agreed to share its technology and information, allow its rivals to be more competitive in the market, and permit non-Microsoft programs to be installed in Windows. In my view, Microsoft has agreed to the changes that most significantly affect the American public.

For this reason, and because the company produces a reliable, high-quality product, I will continue to support Microsoft. I certainly hope that file government will maintain the integrity of the current agreement and allow the computer company to do what it does best—create and innovate.

Sincerely,
Edward P. Franks, MD FRCOphth

MTC–00030315

Washington State Senate
Democratic Caucus
322 J.A. Cherberg Building
PO Box 40482
Olympia, WA 98504–0482
(360) 786–7350
FAX: (360) 786–7020
TO PPHONE:
FROM:
PHONE:
DATE: TIME:
PAGES (EXCLUDING COVER):
COMMENTS:
Washington State Senate
Senator Sid Snyder
19th Legislative District
Majority Leader
Residence:
PO Box 531
Long Beach, WA 98631
(360) 642–2519
Olympia Office:
311 Legislative Building
PO Box 40419
Olympia, WA 98504–0419
(360) 786–7636
January 22, 2002
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
RE: Proposed Settlement of US v. Microsoft

Dear Ms. Hesse:

I support the Department of Justice and the nine state Attorneys General for their efforts to finally put an end to US v. Microsoft and agree to a settlement that is in the best interest of the nation and Washington State.

A driving force for the new economy, Microsoft has provided a number of innovative, quality software solutions for businesses and individual consumers over the years. Microsoft has also created thousands of jobs in Washington State. The company's employment growth has had a positive multiplier effect on our economy—one study estimates that every Microsoft job results in an additional 3.4 Washington jobs. Microsoft's presence in this state contributes to a high-tech sector that employed more than 130,000 Washingtonians in 2000 and generated $15.5 billion in state payroll in 1999.

The provisions of this settlement, worked out with one of the nation's top mediators, will allow Microsoft and its competitors to continue developing new products and services. This is undoubtedly good for the

high technology industry, the Washington state economy and the nation's economy as a whole.

Sincerely,
Sid Snyder
State Senator, 19th District
Committees: Agriculture & International Trade . Natural Resources, Parks & Shorelines . Rules . Ways & Means

MTC–00030316

P.O. Box 1079
Colfax, CA 95713
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The Microsoft ?? within for resolution among comp??. This settlement will provide computer makers and software developers with flexibility when configuring Windows to better promote non-Microsoft software programs that compete with programs included within windows, without the threat of a lawsuit. Microsoft will also use a uniform price list when licensing Windows out to the twenty largest computer makers in the nation, and will not retaliate against companies that use or promote software that competes with Microsoft's programs.

As a retired professor of Engineering & Technology in Sierra College, Rocklin, California, I constantly researched different software programs and found Microsoft's software programs superior among the competition.

The steps taken to settle this case are important because it shows Microsoft has nothing to hide regarding its business practices, and competitors will have an equal playing field.

Sincerely,
Kenneth J. Weger

MTC–00030317

1390 Braewood Drive
Algonquin, IL 60102–3238
January 25, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I want to take a little time to express my full support for the settlement concluded between Microsoft and the Department of Justice last November. I believe the settlement is good for consumers and our economy.

The terms of the agreement are fair and reasonable to both sides. Microsoft has agreed to many concessions in order to wrap this case up and move forward. For example, Microsoft has agreed not to retaliate against computer makers who ship software that competes with anything in its Windows operating system. Also, Microsoft will be monitored by a three-member Technical Committee to assure compliance with the settlement.

As a business owner, I fully understand the importance and value Microsoft provides to both businesses and consumers. This settlement will free them to continue to provide the innovation that has made our economy the engine for the entire world.

Sincerely,
Michael Reilly
cc: Representative J. Dennis Hastert

MTC–00030318

5701 Woodward Avenue
Downers Grove, IL 60516–1128
January 12, 2002
Attorney General John Ashcroft
U.S. Department of Justice
Washington, DC 20530–0001

Dear Attorney General Ashcroft:

I was recently amazed to find out that the three year long settlement between Microsoft and the Department of Justice, might be delayed even further. I cannot believe that there would be anything further to discuss. After a well thought out process, these meticulous terms are ready to be set in motion. Let us support the process, by letting this take place.

Not only has Microsoft agreed to redesign new versions of Windows to better accommodate non-Microsoft software, they have also agreed to rework licensing and marketing agreements as well. This definitely proves that Microsoft has been working for the benefit of the IT sector as a whole. By using this agreement as a guideline, the IT sector can get back into the mainstream, and help maintain our position in the global market.

I urge you to help us maintain our global status. Please help stop any action against this settlement. Thank you so much.

Sincerely,
Wayne Wisniewski

MTC–00030319

2181 Osprey Point Dr. W
Jacksonville, FL 32224
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing in order to express my relief over the settlement with Microsoft. I have waited three long years in order for this thing to finally be over and it seems as if the end is in sight. I hope that the federal settlement goes forward so that we can all put this thing behind us.

Microsoft has sacrificed much in order to reach an acceptable settlement with the Department of Justice and I hope that people will realize and respect that They have offered to forgo many of their intellectual property rights and license out software to their competitors. They will also give competitors some say in how computer manufactures can configure their product. This means that they stand to lose a substantial portion of their profits as well as aiding their competitors in contending against Microsoft's products.

Microsoft is willing to do this in order to end this case once and for all I hope that they will be allowed to do so and that this settlement will mean an end to any more action at the federal level.

Sincerely,
Eileen Kirby

MTC–00030320

Caroline Raphun
2109 Nancy Ann Drive
Raleigh, NC 27607
January 21, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax 202–616–9937
microsoft.atr@usdoc.gov

Dear Ms. Hesse:

As a parent and a taxpayer, I am impressed by what I have heard about the proposed settlement of the Microsoft case. This litigation has gone on too long and cost too much of the taxpayers'' money. Our state's attorney general has accepted the settlement, and that is a welcome step. I hope the federal court will now do the same.

Microsoft may well be guilty of illegal and improper behavior. It is difficult for the average person to make that judgment. But one can recognize the wisdom of settling a case that distracts an important industry from its work during a time when our nation's economy faces an uncertain future.

Sincerely,
Caroline Raphun

MTC–00030321

HOUSE OF REPRESENTATIVES
2 STATE HOUSE STATION
AUGUSTA, MAINE 04333–0002
(207) 287–1400
TTY: (207) 287–4469
Brian M. Duprey
PO Box 214
Harnpden, ME 04444
Telephone: (207) 862.57115
Fax: (207) 287–1449
E-Mail: repduprey@hotmail.com
January 18, 2002
Renata Hesse
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse.

I am a business owner and legislator who wish to strongly encourage you to accept the proposed settlement between United Stats vs. Microsoft Corporation.

Rather than focusing on improving technology, creating jobs and helping the economy and our nation to rebound, AOL, Oracle, Apple, Sun and others engaged the Justice Department in their effort to compete with Microsoft, Their true intention has clearly been to deny consumers their market choices and instead force them. true paying higher prices for lesser quality products. Competition is the key, not government intrusion.

Without competition, the high technology industry would be completely insignificant. Microsoft, Sun, AOL, Netscape, and other all drive each other to Iowa prices and better products, all the to benefit of consumers.

The time has come to settle this case. Our country needs to see responsible companies mad our government working together on issues of national concern.

Sincerely,
Brian M. Duprey

State Reprcsen??
District 114 Ha??pden, Newburgh and Dixmont
Printed on recycled paper

MTC–00030322

FRANCES T. SULLIVAN
Assemblywoman 117th District
THE ASSEMBLY
STATE OF NEW YORK
ALBANY ALBANY OFFICE
Room 437
Legislative Office Building
Albany, New York 12248
(518) 455–5841
DISTRICT OFFICE
200 N. Second Street
Fullon, New York 13069
(315) 598–5185
January 25, 2002
Renata Hesse, Trial Attorney
Antitrust Division
Department of Justice
601 D Street NY, Suite 1200
Washington, DC 20530
Re: U.S. v. Microsoft
Dear Ms. Hesse:

Throughout my tenure in the New York State Assembly I have been a strong advocate on behalf of small business, consumers, and decreased government regulation.

As an extension of this advocacy I write to support the proposed settlement between the U.S. Department of Justice and Microsoft. It appears that continued litigation would satisfy only technology competitors of Microsoft while the negotiated settlement will inure to the benefit of taxpayers, consumers, the industry and the state and national economy.

Since the most desirable outcome would be that which serves the best interest of the general public, I respectfully urge a favorable consideration of the pending settlement. Thank you.

Sincerely,
FRANCES T. SULLIVAN
Assemblywoman 117th A.D.

MTC–00030323

Joseph A, Sale
Government Consulting
301 South B??onough Street, #600
Tollaha??ee, Florida 32301
January 25, 2002
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D. Street NW, suite 1200
Washington, DC 20530–0001
Dear Ms. Hesse:

Recently, I was pleasantly surprised to learn that Microsoft had reached a settlement with nine states. I believe so for two key masons:

First, as a matter of principle, it is the right thing to do. This Ant/trust case has worn its welcome out and has gone on too long. Now is the right time to settle, given the state of the economy. Second, and most important, the terms of the agreement are fair and balanced to everyone. Microsoft agrees to share its intellectual property when necessary and will not penalize a company if it does not use Microsoft products. At the same time, Microsoft is allowed to move on and focus on its business without having to worry about this part of the Antitrust case.

This settlement benefits both sides, and I fully support it.

Thank you for your time.

Sincerely,
Joseph A. Sole

MTC–00030324

Design
Embroidery
Screenprinting
Promotional Products
924 Main Street ??
Lynchburg, ?? 2450 ??
434–846–5223 ??
800–524–4739 ??
Fax 434–847–7563
?? www.hipeak.com
January 25, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW Suite 1200
Washington. DC 20530
Dear Ms. Hesse:

As a business owner who relies heavily on computer technology to be competitive, I have Followed the antitrust suit against. Microsoft. While I appreciate the concerns expressed, I believe there is a danger in the government interfering too much with product development, and regulations that will inhibit innovation.

It is my understanding that Microsoft has tried to address these concerns in order to being the case to a conclusion and to allow the company to move forward with developing new products. It has been reported that Microsoft is agreeable to the proposed settlement. I hope the Department of Justice will agree as well, and allow Microsoft to settle and move on.

Respectfully yours,
Rodney Taylor
Vice-President
Proud Members of:
LYNCHBURG CHAMBER
LYNCH'S LANDING

MTC–00030325

Ms Renata Hesse, Trial Attorney
25 Jan. 2002
Suite 1200, Anti-Trust Division
Department of Justice
601D Street NW
Washington, DC 20530
Dear Ms. Hesse,

I would like to add my thoughts to the others you receive regarding the proposed Microsoft settlement. In a nutshell, I believe the present settlement is inadequate to rectify a situation that, even while it helps some, also harms many others, both businesses and customers.

I am a private, self-employed, long-time computer user, and do not work in the computer or software industries. This makes me a customer. Let me state at the outset that I see no objection to a company, and company personnel, making large profits from a successful business. My objections are purely with the unethical, coersive, and harmful means with which that success was attained. The observations below are drawn from my own experiences and from news and anecdotes from select other sources, So I don't pretend to have complete and detailed knowledge, but am comfortably certain of the following:

—Microsoft has used pervasively the tactic of 'bundling' its software with new computers, forcing thousands of customers buying a new computer to pay for a Microsoft Windows operation system when they didn't want it and intended to erase it.

—Microsoft used blackmail tactics to induce companies with which they did business to use MS software or lose that business.

—Microsoft covertly employed people to pose as unaffiliated with MS but who issued concerted streams of lies and disinformation intended to instill Fear, Uncertainty, and Doubt (commonly known on usenet as FUD) in actual and potential users of non-Microsoft software. The Edelman PR and the Barkto incidents of four years ago are specific examples. Other similar tactics include the MS-fabricated 'grass roots' campaign to dissipate the increasing objections to Microsoft's nefarious tactics.

—Most directly experienced is Microsoft's concerted sabotage of non-MS software that competes with MS software. Most competing software applications went to some pains to describe how to work with MS Windows, while Windows ignored these apps and lavished attention on MS apps. But this neglect was only the beginning: Microsoft invariably 'tweakes' its OS to break competing apps. This has been happening so consistently, for so long, and requires such specific action, that it is not realistic to think it is accidental.

It is true that Microsoft's aggressive marketing has helped swell the number of computer users, and its enforced 'upgrading' regime has increased both hardware and software sales. These have lowered general costs, though at the expense of increased per-customer 'upgrading' cost. But their unethical business tactics have stifled competition and impeded diversification, exacting the additional cost on consumers of decreased choice and lowered quality (reliability and security of Microsoft software is generally deplorable by professional standards).

Some years ago the Department of Justice took IBM to task for its perceived business transgressions, issuing two decrees by which IBM needed to abide. It seems to me that Microsoft is at least as guilty of ethical misbehavior as IBM was, and therefore should be subjected to equally stern measures. In particular, mirroring the second IBM decree, the operating system should be open enough that independent software vendors have the information they need to write software that can compete with that written by Microsoft. This information needs to be equally accessible, with equal timeliness, to the independent software producer as to Microsoft's own applications producing department.

A specific case of this is document formats, whose specifications should be generally available so that Microsoft-produced documents could be read and edited by non-MS programs. Given Microsoft's established

record of unethical coercive business tactics, it is difficult to see how one can realistically expect Microsoft NOT to apply those tactics if they are able and have the motivation. If the same management entity controls both the OS producing department and the apps producing department, then it has the ability, and if it profits from both departments, it has the motivation. This is why I expect that as long as Microsoft's operations are combined, producing both 05s and apps, independent software producers will suffer large handicaps and customers, both business and private, will remain deprived of the advantages of product diversification and true competition.

Cordially,
Dushan Mitrovich
3111 Jane Pt NE, #279
Albuquerque, NM 87111

MTC–00030326

FROM: Lynchburg Florist & Antiques
FAX NO. : 8043856898
Lynchburg Florist & Antiques, Inc.
3224 Old Forest Road
Lynchburg, Virginia 24501
434–385–6566
January 25,2002
Ms. Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I am writing to encourage the Department of Justice to agree to the proposed settlement in the Microsoft Antitrust case. As a small business owner, t have benefited from the ease of use of Microsoft's software; it saves me money and employee hours.

I was glad to learn that Microsoft has agreed not to retaliate against software developers who develop competin9 software. This seems to have been a big part of the antitrust lawsuit, and I hope agreeing to this will enable DOJ to settle and allow Microsoft to continue to develop new products.

Sincerely,
President,
Lynchburg Florist & Antiques

MTC–00030327

City of SUDN
111 ?? First Street
P.O. Box 39
??, Texas 79731
??-??-21??2
Fax 806–227–2146
??
January 25, 2002
Renata Hesse
Antitrust Division
Department Justice
601 D Street NW, Suite 1200
Washington. DC: 20530

Dear Ms. Hesse.

The U. S. District Court has an opportunity to end one of the most misguid??d and wasteful lawsuits in the history of the United States by dismissing the remaining lawsuits against Microsoft Corporation and accepting the proposed settlement. The cost of the lengthy litigation has now exceeded $30 million and is rapidly rising as ??ch day passes. If the settlement is rejected, any eventual financial judgment against Microsoft will be so diminished by legal and administrative fees that vary little will actually find its way to the consumer.

The proposed settlement puts an end to the wasteful use off taxpayer dollars and requires Microsoft to make substantial concessions to its competitors. I am writing to ask the Court to accept the settlement and let consumers make the final determination as to the quality and usefulness of the products they buy.

Sincerely,
Freddie Maxwell Mayor
FM/??

MTC–00030328

House of Delegates
Telefax Service
Fax (804) 786–6310
General Assembly Building
January 25, 2002
To: Ms. Renata Hesse
From: Del. Michele B. McQuigg
Fax No.:
Long Distance 202–616–9937
Tel. No.:
City:
State:—

This transmission contains 2 pages, which includes this cover sheet. If you have any problems with this transmission, please contact (804) 698–1558.

Comments:

If you have any questions, call 804–698–1151.

COMMONWEALTH OF VIRGINIA
HOUSE OF DELEGATES
RICHMOND
MICHELE B. MCQUIGG
22–41-R TAKCETTS MILL DRIVE
WOO??SRIDGE, VIRGINIA 221??2
FIFTY-FIRSY DISTRICT
COMMITTEE ASSIGNMENT
COURTS OF JUSTICE
GENFRAL LAWS
COUNYIES, CITIES AND TOWNS
LABOR AND COMMERCE
January 20, 2002
Ms. Reneta Hesse
Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street, NW Suite 12
Washington, DC 20530

Dear Ms. Hesse:

I am writing in support of the settlement of the Microsoft antitrust case. In a nation where we pride ourselves on free trade and development of services and ideas, Microsoft has proven itself. The agreement contains significant rules and regulations on how Microsoft develops and licenses its software, but it also allows Microsoft to keep innovating on behalf of consumers. I hope you will resist the efforts of Microsoft's competitors, who try to continue their efforts to dissolve this company.

We have many computer and Internet companies throughout Virginia, with a large concentration m Northern Virginia, the area I represent. The economy depends upon technology and Internet success—including Microsoft.

It is extremely important to allow this facet of trade to grow and produce without restriction. It is equally as important to allow it to grow free from fear of developing a product that is accepted universally by computer users.

I urge you to accept the settlement as just and fair. if you have any questions, please do not hesitate to contact me.

Sincerely,
Michele B. McQuigg

MTC–00030329

Diane Lyden
January 24,2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Attorney Hesse:

I have recently been made aware that you are accepting public comment in the case of U,S. v Microsoft. I would like to contribute letter in support of Microsoft.

This company has been at the forefront of technology and deserves to continue to be provided the opportunity to reach its company goals. Microsoft has provided Americans and the world with products and services at reasonable costs.

Although I can understand the concerns of the government and Microsoft's competitors, extreme restrictions and continued persecution on Microsoft's activities will only decrease the productivity of all computer companies and the American people. The settlement, as I understand it, gives a little to each party in this case without compromising the continual success of this industry.

Too much time has already been spent on this case. We should be concentrating our efforts on increasing national security, improving schools and healthcare, and offsetting the faltering economy. Government no longer has the luxury to be spending time and money on this issue. The United States needs to focus on the current problems facing the American people. Please approve this settlement as quickly as possible.

Diane Lyden
HC-62 Box 591 B
Center Harbor, New Hampshire
03226

MTC–00030330

John R. with
420 Palmer Ave
Aptos, CA 95003
FAX COVER SHEET
Fax 831–387–0552
SEND TO
Company name
From
Department of Justice
John R. Wirth
Attention
Date
Ms. R??n??ta B. Hesse
1–25–02
Office location Office location Washington, DC
Fax number
Phone number 202–307–1454
831–688–0897
URGENT URGENT URGENT URGENT

URGENT
Total pages, including cover. 1
COMMENTS

I am writing to ask that you accept the settlement proposed in the Microsoft case.

It is a total waste of my tax dollars to pursue this any further. Spending 35 million dollars is enough.

Thank you for your kind consideration.

MTC–00030331

Kinko's (tm) fax cover sheet
Kinko's Bailey's Crossroads .
Telephone: (703) 379–0909 .
Fax: (703) 998–2419
Date 25 Jan 2002
Number of pages 3 (including cover page)
to: Name Renata B. Hesse
from: Name David A. Wheeler
Company U.S. Dept. of Justice
Company (self)
Telephone Telephone 703–250–7047
Fax 1–202–616–9937

Comments

I am strongly opposed to the proposed find judgment in U.S. vs. Microsoft, there is no effective penalty & nothing to prevent similar future activities. These Comments (enclosed), which expand on this, are pursuant to the Tunney Act.

January 24, 2005

Dear Renata Hesse:

I am strongly opposed to the proposed final judgment in United States vs. Microsoft. Microsoft has been clearly convicted of illegal actions, and this is the penalty phase. Yet there is no effective penalty in the proposed final judgment, and in particular, nothing to prevent similar future activities. The proposed ''remedies'' are easily circumvented, indeed, they seem to be carefully crafted to ease circumvention! For example, APIs involving security need not be disclosed, so clearly Microsoft will simply re-label or modify many APIs to be security-relevant and thus circumvent the judgment. Microsoft has clearly harmed the computer industry and the consumer, robbing U.S. citizens of many innovative products, simply because so many organizations are now afraid to compete with Microsoft. Some have even been eliminated by Microsoft's illegal activities. A remedy must end these activities.

In addition to the current judgment, I believe that any remedy must ensure that there will be unfettered public access to all information necessary for interoperability. All interfaces, not just certain APIs, must be made public. Thus, in addition to the current judgment:

1. The specifications of Microsoft's present and future document file formats must be made completely public, so that documents created in Microsoft applications may be read and written by programs from other makers (this is in addition to the APIs already part of the settlement). Much of the world's most important information is trapped in these proprietary formats, making it very difficult for customers to switch to competitors even if competitors offer better functionality and lower prices.

2. There must be no exceptions for what interfaces must be publicly documented. For example, the exception for ''security'' issues must be removed. Indeed, security-related issues require the most public scrutiny.

3. Any Microsoft networking protocols must be published in full and approved by an independent network protocol body, and be re-implementable without royalty fee. This would prevent Microsoft from seizing de facto control of the Internet.

4. Since ''open source software'' is one of Microsoft's prime competitors, any judgment must ensure that open source software developers have equal access to such information, without interference in the form of royalty payments, nondisclosure agreements, and other schemes to prevent consumer choice.

5. Microsoft's claims of ''Intellectual Property Rights'' (IPR) must not be allowed to justify continued illegal activity. If such rights are used to continue illegal activity, then those rights must be forfeited.

Also, in addition to the current judgment, sales channels must be free to sell competing products. The proposed judgment tries to make this possible, but it does not go far enough. Thus, in addition to the proposed judgment:

6. Microsoft's product prices must be strictly based on volume (to prevent Microsoft from ''punishing'' vendors who sell competing products). There are some vague words about ''not punishing'' but their meaning and enforcement is not sufficiently clear.

7. Microsoft products must be extra-cost options in the purchase of new computers, so that users who do not wish to purchase Microsoft products are not forced to do so. If I choose to not use Microsoft's products, then Microsoft should not get a cut of my money. I want the freedom to not pay Microsoft.

8. Microsoft's agreements with resellers must be made and kept public, to prevent secret agreements from damaging the public. A capitalistic economic system only works when there is competition. When a company can gain and routinely exploit a monopoly to eliminate competition in other fields, the result is a loss of choice and quality for all. Without being reigned in, Microsoft might someday completely control essentially all communication media, a dangerous situation for any democracy. Microsoft has already tried to limit freedom of speech through its existing control (e.g., at one time Microsoft's Passport prevented their customers from publishing negative comments about Microsoft, and their database licenses prevented users from publishing benchmarks showing Microsoft product performance). Allowing a single company's products to so dominate an industry ''also presents a grave computer security risk—any flaw in their products opens the entire country to attack. Since there is currently little competition, there's little incentive for Microsoft to improve many of its products. As documented by computer security experts (such as those in ''Bugtraq''), Microsoft has a history of claiming to secure their products yet continuously releasing poorly-secured products.

Allowing Microsoft to continue flagrantly disregarding the law is dangerous, and in the long run may pose more danger to our country than the terrorists we are fighting now. Failing to impose a strong judgment may send a disturbing message—it suggests that we are no longer a country of laws, since nothing important will happen if those laws are repeatedly broken. Please, do not let this proposed judgment be a stain on this court. I urge you to require a real final judgment that actually inhibits future illegal activities.

David A. Wheeler
9904 Manet Rd.
Burke, VA
(703) 250–7047

MTC–00030332

12th Co??
Sea??
Mi??e
Senate District 26
Senator Karl W. Turner
3 State House Stature
Augusta, ME 04332–0003
(207) 287–1505
16 Town Landing Rd.
Cumberland Foreside. ME 04110
(207) 829–6427
Renata Hesse
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse

Please accept my support of the proposed settlement between United States vs. Microsoft Corporation.

Rather than beating Microsoft in the free market, AOL and Sun and others engaged the Justice Department to do it for them. Thor true intention has clearly been to deny consumers their market choirs and instead force them into paying higher prices for lesser quality products, Competition is the key, not government intrusion.

Without competition, the high technology industry would be completely insignificant. Microsoft, Sun. AOL, Netscape, and others all drive each other to lower prices and better products, all to the benefit of consumers.

The time has come to settle this case, Taking into consideration the poor condition of the economy, the last thing we need is additional inane litigation.

Sincerely
Karl Turner
State Sonator
?? . TTV (207) 287–1583 . Message Service 1–800–423–6900 . Web Sue:
http://www.state.??us/legit/s??te

MTC–00030333

Carp Storm
15420 139th Avenue SE
Renton, WA 98058–7828
January 25, 2002
Attorney General John Ashcroft US:
Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I would like to take this opportunity to express my feelings about the antitrust settlement made between Microsoft and the Department of Justice. I feel the settlement reached is more than Microsoft should have agreed to in the first place. Not only has this damaged Microsoft, but it has also hurt the economy and the rest of the IT industry.

Microsoft has taken many steps to help put this issue to rest. They have agreed to document and disclose for use by its competitors various interfaces that are internal to Windows'' operating system products, in conjunction with this they have agreed to a uniform price list. This means that Microsoft will license its Windows operating system products to the 20 largest computer makers on identical terms and conditions, including price.

It is obvious that I feel this issue needs to be resolved. This agreement is a step in the right direction.

Sincerely,

Carol Storm

MTC–00030334

FACSIMILE TRANSMITTAL SHEET
TO: Atty Hesse
FROM: D G?? COMPANY:
DATE: 1/2??
FAX NUMBER: 202 6169937
PAGES INCLUDING COVVER: 2
PHONE NUMBER: PHONE NUMBER: 9786866732
RE: da??
FAX NUMBER: 975 6817693
PLEASE RECYCLE
NOTES/COMMENTS:
Chemical Services Division
January 20, 2002
??safety-kleen.
Renata Hesse
Trial Attorney
Justice Department, Anti-trust Division
601 D Street NW, Suite 1200
Washington DC 20530

Dear Attorney Hesse,

I have been following the Microsoft lawsuit with an increasing level of concern over the past few years. Initially, it seemed that the action was heavy-handed to say the least. But, with every further disclosure of the role of the industry competition orchestrating many aspects of the litigation, it becomes clear that the United States citizenry will only be served justice if this case is ended.

There is apparently a settlement proposal now before Judge Kollar Kotelly, which will end the case and impose sanctions without creating too much new bureaucracy. This is a great time to turn this case around, and end the practice of using federal lawyers to advance private agendas. The economy needs the boost, and the citizens deserve better.

I respect the government attorneys who worked hard to hammer out this settlement, and hope their effort succeeds.

Respectfully,

Donald W Gallant

Safety-Kleen (NE), Inc.

221 Sutton Street . North Andover, Massachusetts 01845 . 978.683.1002 . Fax 978.687.3036

MTC–00030336

Microsoft Settlement
January 23, 2002

To Whom It May Concern:

AS a US citizen, I would like to express my views on the proposed Final Judgement in the United States vs. Microsoft Settlement. I have been in the software development field for 7 years I have felt for many years that Microsoft has monopolistic market positions and tendencies, and has continued these practices even through the current anti-trust investigations. I believe that these practices have hindered innovation and hurt consumers and businesses.

In general, I thing that the proposed Final Judgement is too soft on Microsoft and will not resolve the anti-trust issues at all. In particular:

*Section 3.A.2 of the proposed Final Judgement appears to prevent Microsoft from strong-arming OEMS that ship dual-boot machines, but offers no protection for OEMs shipping a single-boot machines that do not boot to Microsoft windows.

*Definition K of the proposed Final Judgement covers Microsoft's Java Virtual Machine, but does not affect Microsoft's NET strategy. NET, and the C# language specifically, appear to be designed to woo existing Java programmers with a minimum of new training, while C# is a documented standard, Microsoft's standard method of operation is to extend the standard with Microsoft-only features which eliminate any opportunity for inter-operability. If C# becomes as widely accepted as C++ or Java, I fully expect thee there will quickly be divergent ''Microsoft CS'' and ''Standard CS'' implementations.

*There appears to be no solution to the issue of Microsoft proprietary file formats in the proposed Final Judgement. This is huge hindrance, as more and more email attachments are being sent as Microsoft Word documents, etc. File formats were covered in the ''Applications Barrier to Entry'' section of the ''Findings of Fact''. These are just three of the issues that I was immediately drawn to in the proposed Final Judgement. I am also very concerned with Microsoft's continuing efforts to extend their stranglehold on US consumers and businesses including:

*New Microsoft XP licensing schemes which may raise costs for US consumers and businesses. As part of the XP licensing, consumers will not be allowed to 10ad multiple copies of XP on their own hardware. And licensing costs may increase for 59% of businesses (see article in Ci0 magazine, ''Software Licensing Debate'', http://www2.cio.com/research/surveyreport.cfm?idm50)

*Microsoft's forays into home entertainment (UltimateTV, XBox)

*Microsoft's new effort to be at the center of the Internet (.NET and Passport) Thank you for reviewing my opinions. I hope that any Final Judgement in she United States vs. Microsoft trial will be carefully considered.

Greg Shrack
15140 Jessie Drive
Colorado Springs, CO 80921
greg.shrack@usa.net

MTC–00030337

Catfish Software, Inc,
6070 Mission Gorge Road, Suite 2
San Diego, Ca 92120
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
Via Fax #202–616–9937

TO Whom It May Concern:

I understand that, as part of the Tunney Act proceedings, public comments on the case of US v Microsoft should be sent to the fax number above. Last month, the Senate Judiciary Committee called for hearings on the settlement being proposed in US v. Microsoft. At that time I sent in testimony which was introduced into the record. With this letter I am including a copy of that testimony, I would like for this to be included with the materials in support of the settlement. I am small hi-tech businessman and I firmly believe settling the case against Microsoft is in the best interest of our industry.

If you have any questions, please feel free to contact me.

Sincerely,

Jerry Hilburn

Founder—Catfish Software

619–858–1390

Testimony by
Jerry Hilburn, President and Founder]
Catfish Software, Inc.
San Diego, CA
Provided to the U.S. Senate Committee on the Judiciary
December 12, 2001

I am very pleased to provide a written statement for your hearing on ''The Microsoft Settlement: A Look to the Future. Thank you, Chairman Leahy and Members of the Committee, for the opportunity to deliver a small businessperson s perspective on the case before this distinguished group.

I would like to tell you my point of view on the Microsoft case. I am a small businessman in San Diego, California. Catfish Software, Inc! started operations in 1994 providing network services and custom database applications for small business. In 1998, Catfish Software launched an E-mail Application Services branch providing double opt-in mail list service and web-based customer support applications and today, Catfish Software provides support to 300+ companies reaching 2,000,000+ subscribers of its software services.

One of my firm's top competitors is Microsoft's bCentral. So you may ask why I speak in favor of the Microsoft settlement.

Businesses large and small have mortgaged their futures against the impact of the terrorist war. Some smaller businesses—techology and otherwise—have already found themselves strangled by a lack of consumer demand and by slowdowns in corporate and consumer spending. Most of us are finding it is time to shore up resources and protect our assets from the impact of the war. In this time of so much uncertainty, we need the promise of a brighter day and the knowledge that the government—from the federal level on down—is doing everything possible to invigorate our flagging economy.

Competition and consumer preference should decide the direction of the marketplace and meanwhile, the government should not rush to intervene in the New Economy. The last thing our economy needs at this time is the burden of remedies which do nothing but slow the pace of development and limit the choices of consumer.

The Justice Department handled this case admirably, and the settlement they agreed upon is sound. The settlement outlines how Microsoft can operate, but more importantly it provides some assurances to an industry that has been on unstable ground lately.

Microsoft's ability to design and produce new software in turn creates opportunities for small and medium-sized developers to write applications which operate on a Windows-based platform. As the old saying goes, a high tide floats all ships. Calls for break-up of the company did not help the already tenuous situation. And when Microsoft looked like it might be pulled under, the Nasdaq was hit as well as the stocks of many high-tech companies.

But when announcements of the settlement were made public around the beginning of November 2001, everyone got a nice little bump. Consumers and other technology entrepreneurs were hopeful that this case could be put to bed and that the tech sector could get back to business. This litigation that has been an albatross around all our necks for so long—and ending the string of lawsuits associated with it—will have a positive effect on the tech economy With a little luck, that will ripple out to America's economy as a whole.

With so many technologies poised to enter the marketplace, Microsoft and many others, including Catfish Software are looking for ways to enhance the computing experience. The Internet has become a center of most everyone's daily lives—from toddlers typing their first strokes with learning games to seniors learning how to send and receive e-rural. Untapped markets and unimagined ideas abound, but we must not harness the creativity or the ability of software firms to bring those products to bear in the marketplace.

The olive branch of settlement was extended, and it is a solution that is good for the economy and good for the tech industry. Allow us the opportunity to get back to work and earn money with our products and ideas once again.

This concludes my testimony. Once again, I thank the Committee and its distinguished Members for the opportunity to provide written testimony on tilts important issue.

MTC–00030338

FAX
Date: January 25, 2002
Pages: 3 (incl. cover)
FROM: George Haas
Fax: (831)439–9599
TO: Renata Hesse
Trial Attorney, Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax: (202)616–9937 or (202)307–1454
Subject: Microsoft Settlement Public Comment
Message: Attached are my further comments for your consideration.
January 25, 2002
Renata Hesse
Trial Attorney, Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax: (202)616–9937 or (202)307–1454
Re: Microsoft Settlement

Dear Ms. Hesse:

Microsoft has done, and continues to do, serious damage to consumers and competitors alike. I will list here the evidence I have witnessed personally.

Microsoft eliminated all competition in the spreadsheet industry, thus destroying Borland, a local company. Hundreds of jobs were lost in our city alone, costing hundreds of thousands of dollars lost in local revenue.

Microsoft blatantly gave away their Internet browser software, Explorer, virtually eliminating Netscape, a pioneer in the industry. Without remedy consumers will have no choice but to use Explorer. Then Microsoft will be free to charge whatever fees they please. They will be the only gateway to an enormous new marketplace. On-line consumers will be at their mercy.

Consumers already suffer, in a number of ways, just by using Microsoft software products. I have worked on both Microsoft and Macintosh operating systems, so I believe I am qualified and justified in comparing the two.

Microsoft Windows products have been notoriously unstable for years, They consistently crash computers for no apparent reason. They are tilled with ''bugs'' that often require specialized knowledge to repair. Users are strangely resigned to these problems since they feel they have no other choice in the business world. The new Windows OS was supposed to correct this problem, but hasn't I never have these types of problems with my Macintosh.

I have a friend who has been a computer hardware and software engineer for 25 years, He is a brilliant engineering consultant who has worked all over the world. He recently bought the new Windows OS. It took him three days of hard work to upgrade from his old system. He ended up buying an entirely new hardware system to run his old programs because the new Windows operating system was not compatible with most of his old software. He readily acknowledged that Microsoft does not care in the least about the grief and cost to its customers.

I recently upgraded my Macintosh system. It took my local dealer a couple of hours. It now runslikeacharm.

The average computer user has a choice. They can spend vast amounts of time mastering complex software and hardware technology Or, they can spend vast amounts of money, paying computer technicians to assist them in solving mundane computer problems that shouldn't exist in the first place. Or, they could buy a Macintosh, as long as Microsoft allows Apple to exist. In seventeen years I can count on one hand the number of times I've had to consult a technician in regards to my Macintosh. In two years I lost count of the number of times I needed a technician to solve software problems with Windows

The damage done to consumers is compounded by Microsoft's vulnerability to breaches of security of its on-line and email services. They are prone to hackers, viruses, and their own quality control problems.

It has been well documented that Microsoft has ignored pleas to improve security, and that they have had the capability, but chose not to implement it. Just another example of their arrogant disregard for the welfare of their customer.

The longer Microsoft is allowed to tighten their grip on the computer industry, the higher the cost will be to consumers. It will be much more than just the financial cost. There will be further losses in productivity, losses in innovation, and losses in consumer confidence, if the world comes to rely on an inheritently flawed system, with no hope of change.

My local congressman has chosen to abrogate his responsibility on this important issue. It is possible that he is ignorant of the dangers to his constituents, since Microsoft poses a serious threat to the Silicon Valley economy Or, perhaps Microsoft has ''persuaded'' our fine congressman that it would be in his best interest to look the other way. Whatever the case might be, I pray that you will seek justice for the consumer, and inflict the harshest penalties possible upon Microsoft.

Cordially,
George Haas
20 Fred Court
Scotts Valley, CA 95066
Fax: (831)439–9599
email: haas@got.net
cc: Congressman Mike Honda

MTC–00030339

ANNE PORTER JACKMAN
136 FOREST STREET
SOUTH HAMILTON, MA 01982
January 7, 2002
Renata Hesse
C/o The Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
By Fax, Hard Copy by Mail

Dear Attorney Hesse:

Please consider this letter as public comment in the case of U.S. v Microsoft. I have been following the case in the press and believe that it is time for the government to accept the settlement as is and stop the litigation.

It is very easy in times of peace to prosecute companies and civilians for reasons that may be more theoretical than pertinent. We arc no longer in peacetime. Now, while this country is at war, it is crucial that all of our energies be focused on prosecuting war criminals and providing national security. Not only is prosecuting Microsoft wasting the time of our justice department it is wasting taxpayer dollars.

Microsoft is a large company and as such has great responsibilities to consumers and other technology firms. The settlement should case some of the concerns of the government and Microsoft competitors without diminishing Microsoft's importance to the economy and the industry. The purpose of this litigation should not be to decrease the productivity of Microsoft because if so American citizens will suffer the consequences.

The United States needs to lead the world in technology, not lag behind because of misinterpreted antitrust laws.

Sincerely,
Anne Porter Jackman

MTC–00030340

Peter T. Flaherty
Citizens Against Unfair Taxation
736 Fords Landing Way

Alexandria, VA 22314
VIA FACSIMILE: 202–616–9937
January 24, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street, NW, Suite 1200
Washington, DC 20530
Re: Comment on the Microsoft Settlement

Dear Renata Hesse:

As provided for by the Tunney Act, I am writing to comment on the proposed settlement in the Microsoft case.

As someone who has spent a great deal of my adult life advocating policies that address the concerns of the American taxpayer, I view the use of taxpayer funds to pursue the break-up of Microsoft as little more than corporate welfare for Microsoft's competitors. There is no dispute as to why the government initiated this case—it was the result of a well-financed lobbying effort by Microsoft's competitors. What these companies could not achieve through competition, or even through direct legal action against Microsoft, they sought to do with taxpayer funds.

As many observers of this anti-trust case have already commented upon, it differed in a major way from the classic view of why monopolics harm the public, i.e., the monopolist uses their monopoly power to overcharge the public for the goods they supply. In this case, the public was benefitting enormously from Microsoft products and many of the prices of such products were dropping or—in some cases—were available free.

The bottom line was that taxpayers benefitting from Microsoft, as well as millions of individuals who directly or indirectly benefitted from Microsoft stock ownership, were forced to fund with their tax dollars a legal action that unquestionably benefitted the narrow economic interests of those who lobbied for the anti-trust action by the government. In short, this was a classic fleecing of the taxpayer.

I support the settlement for one reason—to close the door on this very expensive and shortsighted abuse of the anti-trust laws.

Sincerely,
Peter T. Flaherty

MTC–00030341

Christine Mvote
January 8, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
BY FAX

Dear Attorney Hesse:

I am writing to contribute to public comment in the case of U.S. vs Microsoft, I support the settlement that has been reached in this case, I believe it is time for the government to stop prosecuting Microsoft, We now know there are many groups who are trying to harm Americans. Microsoft is not one of these.

Millions of dollars have been spent arriving at the Microsoft decision. The settlement is appropriate and should not have further restrictions added to It. It is not necessary to continue spending money on this case, especially when there are so many people out of work and the threat of an even greater recession,

At this time the United States needs further technological advances not regulations that make such advances difficult or impossible. The economy also needs some help, Microsoft has contributed a tremendous amount to technology as well as the economy. Placing further restrictions on Microsoft will result in a decrease in the innovative products we've become accustomed to as well as an almost certain increase In cost.

Please settle this case as quickly as possible. Thank you for your time and your attention in this matter

Sincerely,
Christine Myote

MTC–00030342

Kenneth Boehm
Director
Farm Business Council
4933 N. 34th Street
Arlington, VA 22207
VIA FACSIMILE: 202–616–9937
January 24,2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street, NW, Suite 1200
Washington, DC 20530
Re: Public Comment on the Microsoft Settlement

Dear Renata Hesse:

Pursuant to the provisions of the Tunney Act, I am writing to comment on the proposed settlement in the Microsoft anti-trust case.

As an attorney and someone who has followed this case in the media from the onset, it's quite clear that the legal case was driven by Microsoft competitors seeking financial advantage, The detailed coverage of the case in Wired and other publications outlined a highly politicized effort by Microsoft's competitors which appears more motivated by a desire to break up Microsoft than to demonstrate any economic harm to the public.

In addition to a strong belief that using government to obtain what cannot be obtained in the free market is an abuse of government, I view my own experience with computers as evidence as to the hollowness of the cries of ''monopoly'' by the Microsoft competitors. For the last ten years I have exclusively used Apple computers and cannot think of anything Microsoft has done that remotely has harmed me economically in any way.

The settlement seems overly harsh to Microsoft insofar as it allows the very same competitors who lobbied for the lawsuit to abuse the terms of the settlement to frustrate any number of future Microsoft technical developments. The recent reaction of these competitors to the release of Windows XP indicates that they have no reluctance to use government to undercut their competition. Unfortunately, the settlement appears to provide a means for future harassment of Microsoft in the guise of holding Microsoft to the terms of the settlement.

Ultimately, the consumer benefits most from a legal environment that encourages and rewards technical advances. To the extent that Microsoft competitors have shown a predisposition to use government to delay or attack Microsoft's technical advances, the consumer is the loser to the degree the settlement facilitates such actions.

Despite my view that the anti-trust action and the proposed settlement are unfair to Microsoft, I reluctantly support the settlement to get the entire matter resolved. In the context of an economy in recession, it's hard to imagine a more indefensible policy than using government action to try to break up one of the most successful companies in the country.

The settlement appears to fully address many of the limited concerns about the ability of computer firms to remove or replace Microsoft middleware (browsers, instant messaging tools, et al.). Similarly it also appears to allow end users to very readily remove or replace such middleware.

The settlement also allows for an independent Technical Committee to makes sure the settlement is followed. This unprecedented step should answer any qualms as to enforcement although this untried approach may result in unfairly limiting Microsoft's ability to promote important innovations that work well with its existing software.

In the final analysis, our prosperity is dependent on innovation and property rights which reward innovation. The real test for the settlement will be whether it is abused by Microsoft competitors in an effort to tear down their competitor.

Sincerely,
Kenneth Boehm, Esq.

MTC–00030344

Kinko's(tm)
Kinko's Bailey's Crossroads .
Telephone: (703) 379–0909 .
Fax: (703) 998–2419
Date
Number of pages (including cover page)
to: Name
from:
Name
Company Company
Telephone Telephone
Fax
Comments
January 25, 2002

Dear Renata Hesse:

I am vigorously opposed to the proposed final judgment (penalty phase) in the case of United States vs Microsoft. The proposed ''remedies'' seem to be carefully written to ease circumvention of that judgment!

Microsoft has frightened many companies in the US computer industry so that they do not even compete with Microsoft. This effectively is a loss for the US citizen because many innovative products may no longer come to the marketplace. The final judgment does not seem to aid the US citizen or competitive companies at all.

The current judgment must be expanded! There must be easily available public access to all information necessary for

interoperability with Microsoft's products. All interfaces, not only certain APIs, must be made public. One of Microsoft's prime competitors is ''open source software''. Therefore, any judgment must ensure that developers of open source software have equal access to pertinent information—without interference—especially in the form of royalty payments and non-disclosure agreements. The current judgment must also be expanded so that competitive sales organizations are free to sell their competing products. Microsoft's product prices must be based strictly on volume. They must be unbundled additional-cost options, especially in the purchase of new computers, so that customers who do not wish to purchase Microsoft products are not forced to do so. Microsoft's agreements with resellers must be made public and kept public, to prevent secret agreements from damaging the public. I remember the government's anti-trust case against IBM a few decades ago—unbundling worked then, and it can work again now!

It is extremely dangerous to allow Microsoft to flagrantly disregard the law. I urge you to require a real final judgment that actually inhibits future illegal activities.

Thank you for your consideration.

Clyde G. Roby
5206 Jarrett Court
Centreville, VA 20120
(703) 968–7522

MTC–00030345

Fax Transmission
Senator Robert Duncan
P.O. Box 12068
Austin. TX 78711
(512) 463–0128
Fax: (512) 463–2424
To: Renata Hesse
Date: 1/25/02
From: Robert Duncan
Fax#: 2021307–1454
Pages, including this cover sheet:
Subject:
Comments:
COMMITTEES
NATURAL RESOURCES, VICE-CHAIAMAN
SUB-COMHITTEE ON AGRICULTLIRE
FINANCE
JUAISPRUDENCE
ROBERT DUNCAN
STATE SENNTOR
DISTRICCT 2B
January 22, 2002
FAX TRANSMISSION
Senator Robert Duncan
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street N,W., Suite 1200
Washington, DC 20530–0001
Re: Comments on the Microsoft Proposed Settlement Agreement
Dear Ms. Hesse:

The settlement agreement between the U.S. Government and Microsoft comes at a critical time when our economy and nation most need reconciliation. The settlement is fair requiring significant changes in the way Microsoft develops, licenses and markets its software. In turn, the settlement allows innovation and competition to move forward on all sides and removes a critical point of uncertainty for high-tech companies. More importantly, the provisions of the settlement will foster greater competition in the software industry and give consumers more choice in purchasing and upgrading their computers.

I support the Department of Justice and nine Attorneys General for their efforts to finally put an end to this case and agreeing to a settlement that is in our nation's best interest.

Yours very truly,
Senator Robert Duncan

MTC–00030346

STATE OF MAINE HOUSE OP: REPRESENTATIVES
HOUSE REPUBLICAN OFFICE
AUGUSTA, MAINE 04333–0002
Office: (207) 287–1440
Fax: (207)287–1449
B-Mail: disiBS@aol.com
WILLIAM J. SCHNEIDER
ASSISTANT REPUBLICAN FLOOR LFADER
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Sulte 1200
Washington, DC 20530
Dear Ms. Hesse,

I am writing this letter to urge the Justice Department to accept the proposed settlement negotiated with Microsoft Corp. and this costly lawsuit.

I feel it is in the best interest of the public and the government to accept the proposed settlement negotiated with Microsoft. Having read about and followed the issue and reviewed debates surrounding the proposal, I have come to the conclusion that it would be a beneficial arrangement for the general public in several ways.

It provides for the Introduction of functional and Integrated technology resources into the educational system. It offers the potential for widespread benefit, because. it includes money for training and support as well as hardware and software. These are more critical to the successful integration of technology into everyday life than are the latest versions of computers end associated programs.

At a time when the economy and our nation are recovering from disruption, I feel that settlement of this case is in the general public's best interest and I urge the Justice Department and all associated parties to settle this matter as soon as possible. Thank you for consideration of my comments.

Sincerely,
William J. Schneider
Assistant House Republican Leader

MTC–00030347

Hew Hampshire Homeowner/Main Street Alliance
30 Norway Hill
Hancock, New Hampshire 0344??
888–666–4782
VIA FAX (2O2) 616 9937
January 11, 2002
Renata Hesse
Trial Attorney
Antirust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Dear Ms. Hesse:

I am writing on behalf of NH Homeowners/Main Street Al lance to encourage you to approve the proposed settlement between the United States Department of Justice and Microsoft Corporation.

Our organization in a ??

Thank you for your ??

MTC–00030348

California State Senate
SENATOR
KEVIN MURRAY
TWENTY.SIXTH DISTRICT
January 24, 2002
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street, NW
Suite 1200
Washington DC 20530–0001
Re: Comments on the Microsoft Proposed Settlement Agreement
Dear Ms. Hesse:

It goes without saying that the settlement agreement between the U.S. Government and Microsoft comes at a critical time when our economy and nation most need reconciliation.

The proposed settlement requires significant changes in the way Microsoft develops, licenses and markets its software. This settlement is fair. It prevents Microsoft from abusing the strength that it derives from its operating system, but also allows the company to continue innovating in all areas of software development.

I congrat??e you on developing a strong but fair settlement.

Warm regards,
KEVIN MURRAY
Senator. 26th district

MTC–00030349

January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

I would like to take some time to express to you my feelings about the Microsoft antitrust suit. The government should have never initiated the suit to begin with, and I was relieved to see that both sides had come to terms on a settlement. The settlement between Microsoft and the Department of Justice is fair to all parties involved, and I would like to see this issue finally put to rest.

I am a big fan of the free enterprise system, and feel that less government involvement is business is better. Microsoft has been extremely beneficial to America, and there is no need to keep dragging them through court. They have donated millions of dollars to charities, simplified computing on a global level, and have been responsible for thousands upon thousands of jobs here in America and across the globe. Government interaction is not necessary, and the settlement actually tries to address that issue a little. An oversight committee has been set-up to watch over Microsoft and make sure they adhere to the terms of the settlement.

So, instead of having the Department of Justice and the federal government breathe down Microsoft's neck, the committee will make sure everything is going smoothly.

I support this settlement since it brings to an end the litigation against Microsoft at the federal level.

Sincerely,

Janice Adams

47–110 Lulani Place Kaneohe, HI 96744

MTC–00030350

William B. Zollars
3248 Comanche Rd.
Pittsburgh, PA 15241
Phone: (412)835–1408
Fax: (:412)835–4781
Email: billzol@compuserve.com
TO: JOHN ASHCROFT
LOCATION: US DEPT OF JUSTICE
DATE: 02–01–25
Number of pages including this header: 3
RE: MICROSOFT SETTLEMENT

Attached is my letter of 1/23 viewing my feelings about the Microsoft settlement. Please use it to represent my views in the matter.

WILLLAM B. ZOLLARS
3248 Comanche Road
Pittsburgh, PA 15241
January 23, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 205730

Dear Mr. Ashcroft:

I was really glad when the Department of Justice and Microsoft reached an agreement. Microsoft has been very generous ?? their willingness to donate over $100 million worth of computers in the public school system to foster computer literacy.

Microsoft did not get off easy. The settlement was arrived at after extensive negotiations with a court-appointed mediator. The Company agreed to terms that extend well beyond the products and procedures that were actually at issue in the suit, for the sake of wrapping up the suit. !n addition, Microsoft has agreed not to retaliate against computer makers who ship software that competes with anything in its Windows operating system.

Since Microsoft has done everything in their power to cooperate with the Government and get back to business, why does this case need to be dragged out costing the taxpayer more and Microsoft more resulting in computer user's paying more for software? I believe we need to move on. No more action should be taken at the Federal level.

Sincerely,

William B. Zollars

CC: Senator Rick Santorum

MTC–00030351

BLUE RIDGE ADVISORS
P. O, Box 815
Etowah, NC 28729
828–89I-7679
E-Mail pnd4@home.com
January 25, 2002
Mr. John Ashcroft
U.S. Attorney General
Washington, DC
FAX 202–307–1454

Dear Attorney General Ashcroft;

I would like to ask you for your help. The United States Government has finally reached a tentative settlement with the members of the Board of Directors of Microsoft Corporation. Please expedite the wrap-up of this case so that Microsoft can get back to the business of helping the United States be a World leader in high technology.

I am the Program Chairman of the 254 member Hendersonville, NC Area Computer Society. Our members all use Microsoft's high quality computer operating systems, including Windows 95, Windows 98, the Windows Millennium Edition and now many are moving up to Microsoft's new operating system, XP for Windows. This product is simply the best and has received rave reviews in all the computer magazines.

Please give my request your personal attention.

Best regards.

Pardon N. Dexter

MTC–00030352

Fax Cover Sheet
Date: JANUARY 25, 2002
To: RENATA B. HESSE
Company: ANTITRUST DIVISION U.S. DEPARTMENT OF JUSTICE
Fax: 202–307–1454 OR 202–616–9937
From: JOEL SCHENIDER
Company: EFFELTINE TECH SERVICES
Tel:952–842–0890
Number of pages including this one: 4
kinko's??
Edina
3535 Hazelton Rd
Edina, MN 55435
Phone: (952) 820–6000
Fax: (952) 820–6060
Comments:

THIS COMMENT IS ALSO BEING SUBMITTEO VIA EMAIL AND U.S. MAIL.

Joel Schneider
8941 Kell Avenue South
Bloomington, MN 55437
24th January 2002
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
501 D Street NW
Suite 1200
Washington, DC 20530–0001

To whom it may concern:

As a software developer with over 10 years of experience: I would like to comment on the United States v. Microsoft Corporation Revised Proposed Final Judgement (PFJ), published in the **Federal Register** on November 28, 2001.

My reading of the PFJ has lead me to an opinion that it will not adequately curtail Microsoft's exclusionary, anticompetitive, and predatory practices: and therefore does not serve the public interest. Tiffs comment describes a number of my concerns.

One concern I have about the PFJ is its expiration date. This supposed remedy is set to expire five years from the date it is entered by the Court, with a potential one-time extension of up to two gears. Considering the fact that Microsoft has already been able to successfully circumvent judgements for Sherman Act infractions dating back to 1994, it seems unwise to limit the PFJ to a maximum term of seven years.

Section VI.N, the definition for ''Non-Microsoft Middleware Product'', includes a requirement that ''at least one million copies were distributed in the United States within the previous calendar year.'' This is a ridiculous requirement, as it requires any Non-Microsoft Middleware Product to first struggle against and overcome Microsoft's monopoly power and the applications barrier to entry for at least, one year before becoming eligible for pro, protection as middleware under the PFJ. This numerical constraint should be eliminated.

Section III.C.1 g-rants Microsoft authority to restrict an 0EM from displaying icons, shortcuts, etc. Granting this authority to Microsoft limits the ability of OEMs to compete through customization of their products. This section also does not clearly address middleware for which there is no Microsoft equivalent. Microsoft's authority to restrict the ability of OEMs to customize their systems should be eliminated.

Likewise, section III.C.2 prohibits OEMs from altering the user interface. This infringes on the ability of OEMs to compete by modifying the user interface. Microsoft's authority to stop OEMs from modifying the user interface should be eliminated.

Section III.C.3 requires Non-Microsoft Middleware to display a user interface similar to the corresponding Microsoft Middleware Product. This limits the ability of middleware producers to compete through user interface innovation. Microsoft's authority to control the user interfaces offered by competing middleware should be eliminated.

Section III.C.4 requires that a non-Microsoft boot-loader be used when launching other Operating Systems. OEMs should not be restricted to using a non-Microsoft hoot-loader for this purpose, and should be free to use any boot-leader: including a Microsoft boot-loader.

Section III. C.5 requires that the OEM comply with technical specifications established by Microsoft when presenting an IAP offer in the initial boot. sequence. This limits the ability of IAPs to compete against Microsoft's LAP (MSN.com) and aids Microsoft in its efforts to extend its monopoly into the LAP business. Microsoft's authority to control competing LAP offers should be eliminated.

Section III.H.1 grants Microsoft authority to rest, riot users and OEMs from displaying icons, shortcuts, etc. Greeting this authority to Microsoft, limits the ability of users and OEMs to compete by customizing their systems. This section also does not clearly address middleware for which there is no Microsoft equivalent. Microsoft's authority to restrict the ability of users and 0EMs to customize their systems should be eliminated.

Section III.H.2 grants Microsoft control over the way in which Non-Microsoft Middleware Products are presented to the user. This grants favored status to Microsoft, Middleware Products and thereby impairs the ability of Non-Microsoft Middleware Products to compete. Microsoft's authority to control the way in which Non-Microsoft

Middleware Products are presented to the user should be eliminated.

Section III.H also grants Microsoft, the authority to impose technical requirements, such as the ability to host a particular ActiveX control, upon Non-Microsoft Middleware Products. However, Netscape 4.x, for instance, does not host ActiveX controls, in part due to the security risks the3, present. This authority should be eliminated.

Section III. J enables Microsoft to withold documentation for some of its APIs and communication protocols based on the pretense of protecting the security of specific installations. It also enables Microsoft to impose limitations on the audience to whom such API documentation is made available. However, there is a general consensus among computer security experts that the witholding of such documentation (a.k.a. security by obscurity) does not establish true computer security. Microsoft should not, he allowed to withold documentation for its APIs and communication protocols based on this pretense.

The PFJ also omits an important consideration. Much of the present and future competition to Microsoft comes from non-commercial Open Source and freeware software products such as Linux, Apache, Sendmail, Samba, and Wine. In January 2001, Microsoft president and CEO Steve Ballmer identified the Linux phenomenon as ''threat number one.'' Apache and Sendmail are established mainstays of the internet. Samba sad Wine enable non-Microsoft systems such as Linux to interoperate with (monopolistically entrenched) Microsoft systems. It is reasonable to expect that these and other Open Source and freeware software products are potential targets of Microsoft. Under the existing PPJ, Open Source and freeware software products receive very little consideration, as important portions of the PFJ apply only to companies that meek Microsoft's criteria as a business (see Section III.J.2). The PFJ should be revised to offer specific protection to Open Source and freeware software products.

The above briefly outlines several of my concerns regarding t4e PFJ. It is possible, even likely, that the PFJ contains additional significant flaws not mentioned here. I am of the opinion that the existing PFJ would completely fail to accomplish its stated purpose of providing ''a prompt, certain, and effective remedy for consumers by imposing injunctive relict to halt continuance and prevent recurrence of the violations of the Sherman Act by Microsoft.'' The PPJ is in need of extensive rework and should not be accepted in its present form.

In addition to this comment, I have endorsed an open letter to the DO J, written by Dan Kegel (of Los Angeles, California.) and others. The open letter contains an analysis of deficiencies in the proposed Microsoft. Settlement, along with suggestions for addressing those deficiencies. At the time of this writing, the open letter is visible on the internet at http://www.kegei.com/remedy/lerter.html.

I hope the United States Department of Justice will take these comments into consideration and withdraw its consent from the PFJ. Failing that, I hope these comments will help the Court to reach a conclusion that entry of this PFJ does not serve the public interest.

Sincerely,

Jo??l Schneider

MTC–00030353

52 Headquarters Road
Litchfield, CT 06759
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

We have followed the lawsuit against Microsoft for the past three years and feel that it is time this matter was brought to a close. The settlement Microsoft has agreed to is more than fair and will insure that other companies are able to compete and in turn the consumer will receive a better product.

The state, the IT industry, and the economy will all bounce back from this set back if the matter is resolved soon. Microsoft has agreed to many terms that are more than fair. They have consented to a uniform price list which means Microsoft will license its Windows operating system products to the twenty largest computer makers on identical terms and conditions. Also, Microsoft will design future versions of Windows, beginning with an interim release of Windows XP, to provide a mechanism to make it easy for computer makers, consumers and software developers to promote non-Microsoft software within Windows. Microsoft has taken all the necessary steps to conclude this matter, it is time now for the DOJ to do the same. We hope that this issue is soon put to rest Thank you.

Sincerely,

John & Janet Baker

MTC–00030354

Crystal Clear Solutions, Inc.
8313 West Hillsborough Ave, Suite 460
Tampa Fl 33615–3818
813–249–7754
* 813–243–1321 * 813–789–6640
Microsoft
Windows Web
Hoster Program
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania .&venue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

Throughout the course of this litigation against Microsoft, there has been discussion about how unfair Microsoft is, and how best to legally strip it of its success by breaking it up as a company.

Lost in this rhetoric is the effect that a Microsoft breakup would have on the hundreds of IT companies that depend upon the integrity and reliability of the Microsoft product line for their own business success, my own included.. Had this suit progressed through to its logical conclusion, and Microsoft been broken up as was anticipated, there would certainly have been serious repercussions throughout the IT industry. My business would have been one of the many forced into bankruptcy.

Fortunately'', such will not be the case. This settlement at least has the benefit of forestalling any such drastic outcome. The terms of the settlement provide for Microsoft to adopt a more flexible attitude and better policies regarding its OEMs and developers. Some of the terms appear to be harsh, but since both the Department of Justice and Microsoft have agreed to its terms, then I am hoping that this will end the litigation altogether. I am writing in support of the settlement's ultimate acceptance and hope that this entire suit can be put behind us.

Sincerely.

Christine Collins
President
FAX 813 243–1239
Website: www. Crystalear.net
Email: SiteMaster@Crystalclear.net

MTC–00030355

?? TOX 2002??
LANSING. MICHIGAN 48909.7536
LANHNG: (517) 373–7446
HIEL AND: (517) 671–8300-
TOO: (817) 3730311
FAX: (817) 377.2878
E-MAIL:?? http://
www.gop.sonste.state.mi.us/senator/nchuette/
BILL SCHUETTE FAX TRANSMTTTAL
COMMITTEES: CONHAN. ECOHOMIC DEVELOPWENT INTERNATIONAL THAOK AND ?? QUALTOAY AFFALAS OF CHARMANTECHNOL OGY AND ENERGY ??. GAMING AND CASINO OVERSGHT HEMBER, TOUCATON LEGHATIVE COUHCIL
TO:
FROM:
DATE:
NUMBER OF PAGES (including cover)
COMMENTS:

If this fax is not received in full; please call (517) 373–7946.

JSTH DISTRICT
PO. BOX 30036
LANSING. MICHIGAN 48909–7536
LANSING. (517) 373–7940
MIDLAND: (989) 831–9300
TDD. (517) 373–0543
PAX. (6171 373–268
E-MAIL: sonbschuette@senatee.state.mi.us
http://www.gop. senate.state.mi.us/senator/schuette/
BILL SCHUETTE January 24, 2002
COMMITTEES; CHA(RMAN, ECONOMIC DEVELOPMENT, INTERNATIONAL. TRADE AND SEGULATORY AFFAIRS CHAIRMAN, REAPPORTIONMENT JUDICIARY TFCHNOLOGY AND ENERGY
Ms. Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW—Suite 1200
Washington, DC 20530–0001

Dear Ms. Hesse:

I am writing to express my support for the proposed settlement between the State of Michigan and Microsoft in the Department of Justice Antitrust action against Microsoft. Thank you for your reviewing my comments.

The State of Michigan has decided to join with eight other states in agreeing to the terms of the Microsoft settlement which was

announced on November 2, 2001. I am writing to express my support for this settlement.

By agreeing to end this lawsuit, over three years of debate will be brought to an end. I feel the terms of this settlement are fair, which is evidenced by the hi-partisan group of Attorneys General who have endorsed it. Not only wi1l a quick settlement be good for the economy, it will also benefit consumers. Average Americans will benefit by having other software available on their personal computers. This will allow for greater competition, and help to generate new ideas for the next generation of'' software.

I appreciate the efforts of the Department of Justice in bringing this action to a quick resolution.

Again, thank you for considering my support.

Sincerely,
Bill Schuette
State Senator
WDS/rkh

MTC–00030356

Hennes/Haslett & ASSOCIATES
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Crisis Communications
12434 Cedar Road #6
Cleveland. Ohio 44106
216/229–6860
FAX 216/229–2666
www.henneshoslett.com
January 23, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft,

I have been paying close attention to the developments of the antitrust case between Microsoft and the Department of Justice, and I am now taking some time to write this letter and go on record as being a staunch supporter of the settlement.

Not only does Microsoft benefit from this agreement, but consumers, the competition, and the economy of the United States will also benefit. Even though Microsoft did not get off easy in the settlement, the terms are reasonable, and this country needs all of its companies performing to the best of their abilities. The settlement paves the way for this by mandating that Microsoft grant computer makers vast new rights to configure Windows so as to promote non-Microsoft software programs that compete with programs included within Windows. This will encourage smaller software firms to work hard and make a good product that consumers will like. In turn, competition will be spurred, and the economy will benefit.

The settlement that has been reached is more than fair, and it will benefit everyone involved.

Microsoft can worry less about court and more about innovation. I support this settlement, and urge you to approve it as soon as possible. Thank you.

Sincerely,
Bruce Hermes
Sr. Partner

MTC–00030357

Renata B. Hesse
Anti-trust Division
U.S. Dept. of Justice
60ID Street Northwest, Ste. 1200
Washington, DC 20530–0001

Dear Ms. Hesse:

I am writing to suggest that the Microsoft settlement be affirmed as soon as possible, The case, which has wasted tens of millions of taxpayer dollars, has poisoned our economy when it was already sick.

Investors need assurance that our nation's high-tech industry will thrive, free of the meddling and interference of government gone awry. Our economy being in recession has resulted in large losses of revenue for Illinois and other states. We who are responsible for state budgets need restored public confidence in America's high-tech leadership.

This settlement will serve to revive the very industry that drives the engine of the economy. That will benefit our nation and every one of its citizens.

Please move forward with haste.

Thank you.

Sincerely,

Mary Lou Cowlishaw State Representative 41(st) District

MLC/lr

DISTRICT OFFICE: 552 5. WASHINGTON ST., SUITE 119 . NAPERVILLE, IL 60540 . 630/355–4113 CAPITOL OFFICE: ROOM 2016 STRATTON BLOG., SPRINGFIELD, IL 62706 § 2171782–6507 AECVCLED PAPER SOYBEAN INKS

MTC–00030358

685 Ocean Blvd.West
Holden Beach, NC 28462
January25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

We are writing to give our support to the settlement between Microsoft and the US Department of Justice. This three year antitrust suit has been ongoing for far to long. However, we feel that this case should not have gone to court in the first place, since Microsoft did not break any laws. Windows is an excellent operating system, since it is user friendly for both my husband and I. We can assure you that this settlement is not a ''sweet-heart'' deal to please the government. The company will be making changes in their business practices that will prevent any future antitrust violations. For example, Microsoft has agreed to license its Windows OS products to the 20 largest computer makers on identical terms and conditions, including price.

Furthermore, Microsoft has agreed to be monitored for compliance to this settlement by a three person technical committee that will also aid in dispute resolution. We ask the government to stop attacking Microsoft once and for all.

Sincerely,
Kenneth & Carolyn Shick

MTC–00030360

The Chamber
Atascocita * Humble * Kingwood * Spring
January 25, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001

Dear Ms Hesse:

It is time to move on! The recent settlement offer by Microsoft Corporation appears to be a win-win situation. The U.S. Justice Department and the Federal Court can tam a very negative and potentially damaging lawsuit into an exciting and positive outcome for our nation's technology industry and consumers.

On behalf of our chambers twenty-eight board of directors and 1200 plus members, I writing to ask that you dismiss the remaining lawsuits and accept the terms of the most recent settlement offer.

Settling is the best solution to the lengthy and expensive lawsuit. Though terms of the agreement may not satisfy Microsoft's competitors, it will, m the end, benefit consumers most. I hope you agree with me that for the good of our nations' economy, business environment and consumer, a settlement is the best solution.

Mike Byers
President
Humble Area Chamber of Commerce
OUR HOMETOWN HAS IT! Shop Locally
110 WEST MAIN STREET * P.O. BOX 3337 . HUMBE, TX 77347.3337 PHONE: (281) 446–2128, FAX: (281) 446–748:3
www.humbleareachamber.org

MTC–00030361

GLORIA LONG
PO Box 2117
Lake Ozark, MO 65049
January 26, 2002
Renta Hesse
Trial Attorney—Antitrust Division
Department of Justice
601 D Street Northwest,
Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I am concerned over/he continuing legal action aginst Microsoft. It is time to stop utilizing our courts in an attempt to work out perceived problems that should be resolved in the marketplace.

I believe the recent agreement between the Department of Justice and Microsoft was fair and equitable and should form the basis for disposing of this entire matter.

Sincerely,
Gloria Long

MTC–00030362

KATHLEEN KILGORE
838 Rachael
Republic, Mo. 65738
January 26, 2002
Renta Hesse
Trial Attorney—Antitrust Division
Department of Justice

601 D Street Northwest,
Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

It appears that the legal problems concerning the Microsoft Corporation never end. I read with interest, some time ago, the main details of the settlement between Microsoft and the Department of Justice. This settlement sounded like a good basis for resolving this matter and allowing Microsoft to get on with their business of producing products that are needed by the American consumer.

Let's stop dragging this controversy through the courts and use the settlement that was worked out between Microsoft and the Justice Department as a basis for resolving this matter.

Very truly yours,
Kathleen Kilgore

MTC–00030363

Office on Children and Youth
Harrisonburg ?? Rockingham County
Ms. Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
January 25, 2002

Dear Ms. Hesse:

I have read a summary of the key provisions of the proposed Consent Decree for the Microsoft anti-trust case. It appears that the agreement is broad and that compliance is assured by the Technical Committee's monitoring responsibility.

This agreement appears to be a reasonable compromise that is in the best interest of everyone—especially consumers. I direct a small not-for-profit agency that relies upon work-study students and volunters; there is no money in the budget for a professional computer Specialist We use Microsoft software and find it user-friendly. [sincerely hope that this anti-trust suit will not result in government regulations that will hamper the efforts of software companies like Microsoft to provide integrated software and hardware.

Respectfully yours,

Director, Office on Children and Youth Harrisonburg. VA.

P,O. Box 1753 Harrisonburg, VA 22803 * Phone: (540) 568–2558 * Fax: (540) 568–2559 * E-mail: officconyouth@rica.net

MTC–00030364

Ms. Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I am writing in regard to the proposed Microsoft settlement. As a retired business executive with 40 years experience, over the course of my career I have observed the tremendous impact that computers have had on business. We are far more efficient and more productive due to the Innovations of companies like Microsoft. In my opinion, this innovation has been possible because government has not tried to regulate or interfere with them in the past.

I hope that you will agree to the settlement Microsoft has agreed to, and allow them to move on.

Let the marketplace drive the business.

Sincerely yours,
Buford L. Driskill, Jr.
President
Bilbo, LLC
1907 Link Road
Lynchburg, VA. 24503

MTC–00030365

Karen Hoffman
27633 SE—400th Way
Enumclaw, WA 98022
January: 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The reason for this letter is to request that you make a good effort to ensure the settlement reached in the Microsoft antitrust case becomes a reality.

Challengers and foes of Microsoft may pressure officials to delay tiffs settlement in favor of continued litigation in this case. The), are working under the premise that the courts should punish Microsoft. I do not believe the courts should be used in this way.

Furthermore the settlement that is being offered is a good agreement. The settlement will allow easier placement of non-Microsoft products on Microsoft operating systems; including easier removal of Microsoft components. Additionally the settlement will permit computer makers to place non-Microsoft operating systems on computers with fewer restrictions, even if they also use Microsoft systems. Moreover the settlement creates a technical review committee that includes a full time government monitor to ensure all elements of the settlement are enforced. It is clear that this settlement should be implemented and this settlement is good.

Sincerely,
latch Hoffman ''

MTC–00030366

January 25, 2002
I East Pulteney Street, Suite 20.3
Corning, New York 14830
phone: (607) 962–6408
fax: (607) 962.43522
e-mail: success@GOPcampaigas.com
website: www.GOPcampaigns.com
Ms. Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D. Street, NW, Suite I20O
Washington, DC 20530

Dear Atty. Hesse:

As a small business owner who has seen a two-fold increase in business this past year, I am supportive of the tentative settlement in United States versus Microsoft. My office uses Microsoft products and we have only good things to say about their products, services, and pricing.

On many levels it seems like the ''American Way'' is in jeopardy when we try to punish people or companies for being successful. The markets have decided that Microsoft products and services are superior to their competition and litigation should not hold them back from continuing to bring quality products to the public, especially in the present economic situation.

The anti-trust laws were meant to protect consumers and were not meant to be a means to control a competitive industry. The Microsoft competitors are looking for overzealous government intervention instead of searching for innovative products and services of their own. The last thing we as consumers and business people need are lobbyists and lawyers setting technology and industry policy.

Now that over $30,000,000 of our tax dollars have been spent to help companies battle their competition, it is time for us to support this tentative settlement. It addresses the proper items and does not interfere with industry competition. The battle belongs in the market-place not in the courts.

Thank you for your time and consideration.

Sincerely
Timothy R. Kolpien,
Managing Consultant, Kolpien & Associates LLC

MTC–00030367

RAYMOND CONSULTING, LLC
Ms. Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I understand your office is accepting public comment about the Microsoft case. In my Opinion. If Microsoft had not set the standard for compatibility and integration, users would have had a far more difficult (and expensive) time getting software that works together at an affordable price. I hope the proposed settlement with Microsoft will be agreed to, and that government will refrain from trying to regulate the technology business.

Yours truly,
Walker R. Cash, Jr
Raymond Consulting. LLC

MTC–00030368

52 Headquarters Road
Litchfield, CT 06759
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

We have followed the lawsuit against Microsoft for the past three years and feel that it is time this matter was brought to a close. The settlement Microsoft has agreed to is more than fair and will insure that other companies are able to compete and in turn the consumer will receive a better product.

The state, the IT industry, and the economy will all bounce back from this set back if the matter is resolved soon. Microsoft has agreed to many terms that are more than fair. They have consented to a uniform p??

Microsoft will license its Windows operating system products to the twenty largest computer makers on identical terms and conditions. Also. Microsoft will design future versions of Windows: beginning with an interim release of Windows XP. to provide a mechanism to make it easy for computer makers, consumers and software developers to promote non-Microsoft software within Windows.

Microsoft has taken all the necessary steps to conclude this ??. It is time now for the DOJ to do the same. We hope that this issue is soon put to rest Thank you

Sincerely,

MTC–00030369

Fax Cover Sheet Kinko's
Date: January 25, 2002
To: Renata Hesse
Company: Department of Justice
Fax: (202) 616–9937
From: Christ??
Company:
Tel: (805) 482–1781
Number of pages including this one:
393 Ameill Rd
Camarillo,, CA 93010
Tel: (805) 482–3364
Fax: (805) 482–2815
Comments:
From:
805 Paseo Camarillo, #520
Camarillo, CA 93010
January 24, 2002
To Renata Hesse, Trial Attorney
Antitrust Division,
Department of Justice,
601 D Street NW
Suite 1200,
Washington, DC 20530
Re: Microsoft Antitrust Settlement

Dear Mrs. Hesse,

I am writing to express my concern over the proposed settlement terms of the current antitrust case against Microsoft. The terms are inadequate as a remedy for the antitrust violations for which Microsoft has been found guilty, and may in fact strengthen Microsoft's grip on the software industry.

To be effective, the settlement must promote interoperability between Microsoft software and that of other makers. At a minimum, the following provisions are required: 1. The specifications of all Microsoft document formats must be made public, so that documents created in Microsoft applications can be read by software from other makers, and vice versa. This is in addition to the publication of the Windows API, which is already included in the proposed settlement.

2. The specification of all Microsoft network protocols must also be made public, so that network software/hardware from other makers can interoperate with that from Microsoft. These measures will sharply reduce Microsoft's control over the largest barriers to entry to the software marketplace, without damaging Microsoft's ability to produce innovative software. A lever playing field in the software industry is at the heart of the national interest, and the effects of this settlement on the software industry—and on businesses in general—will be felt for many years to come. Therefore, I stress that a correct remedy to this issue is far more important than a speedy conclusion to this case, and respectfully urge the court to add provisions similar to those outlined above to the final settlement.

Respectfully,
Christopher Raser
Web Developer

MTC–00030370

Dick Rasmussen
6314 Autumn Moss Court
Charlotte, NC 28277
January 8,2002
Ranata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax 202–616–9937
microsoft.atr@usdoc.gov

Dear Ms. Hesse:

It is inconceivable to me that, in the face of the damage that has been done to our nation's economy in the wake of the September 11 attacks, some state governments are still intent on pursuing the Microsoft antitrust case.

Now is not the time to further weaken the information technology innovations that led to the greatest period of economic progress in our history. Now is the time to bring this costly and case to an end.

Now is not the time to force the technology industry to spend another year in the courtroom. Now is the time to get to rebuilding our economic prosperity It is heartening that North Carolina has agreed to the settlement. I sincerely hope the judge will do the same.

Sincerely,
Dick Rasmussen

MTC–00030371

Donahue, Christopher
From: Donahue, Christopher
Sent: Friday, January 25, 2002 4:32 PM
To: 'microsoft.atr@usdoj.gov'
Subject: Microsoft Settlement
To Whom This May Concern:

I believe that the terms of the settlement are tough on Microsoft and may hurt it's revenues. This company has been an innovator in the technology field and has played a key part in the technology revolution.

The settlements are fair and reasonable to all parties, and meet—or go beyond—the ruling by the Court of Appeals, and represent the best opportunity for Microsoft, the industry and the economy to move forward.

Thanks for your time in this matter,
Christopher J. Donahue
Pfizer Global. Research and Development
Discovery Technologies
Assay Development
2800 Plymouth Road
Ann Arbor, Michigan 48105
734–622–1473 phone
734–622–3244 fax
christopher.donahue@pfizer.com

MTC–00030372

January 14, 2002
Ms. Renata Hesse
Antitrust Division
Department of Justice
60i D Street NW, Suite 1200
Washington. DC 20530

Dear Ms. Hesse:

I wish to offer my comments about the proposed Microsoft settlement. First, I like the provision that Microsoft would not retaliate against software or hardware developers who make products that compete with Windows.

Second, I also think that the provision that sets up a technical committee to assure compliance is good.

These are just two reasons why this settlement ought to be workable.

Sincerely yours,

MTC–00030373

ALAN G. SCHAAF
5925 WILLIAMSPORT DRIVE
FLOWERY BRANCH, GEORGIA 30542
770 965–0445
770 965–0492 FAX
678 656–1024 Cell Phone
aschaaf@bellsouth.net
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

For the past three years, the Microsoft antitrust case has dragged on in the federal courts. The lawsuit has already had a detrimental effect on the economy by introducing additional uncertainty m an already turbulent climate. Isn't it time to put an end to this disrupting influence?

Microsoft and the Justice Department have agreed upon a number of terms that both sides of this suit support.

While this case has lingered in the federal courts, America has suffered. No good can come of additional federal action. I urge you to give your support to the settlement. It is time to move on!

Sincerely,
Alan Schaaf

MTC–00030374

Holme Roberts & Owen LLP
Attorneys at Law
111 .East Broadway
Suite 1100
Salt Lake City, UT 84111
Td (801)521–5800
Fax (801)521–9639
FACSIMILE COVER SHEET
FROM FACSIMILE NUMBER: (801)521–9639
Date: January 25, 2002
Time:
To: U.S. District Court, District of Columbia
Attention: Honorable Colleen Kollar-Kotally
Facsimile No.: 202–307–1454
Verification No.:
Client No.:
From: Jay D. Gurmankin
Message: Re: Microsoft Settlement
Number of Pages Following this Cover Sheet: 2
If you need a confirmation or any of the pages sent again, please call our offices at the following number: (801)521–5800. If you do not call within I5 minutes, we will assume you have received the pages satisfactorily.

SECRETARY: Anette Cunningham EXT: 3274
Offices in: Denver Salt Lake City Boulder Colorado Springs London
#112638 v1
Holme Roberts & Owen LLP
Jay L. Gurmankin gurnory@hro.com
Attorneys at Law
111 ??st Broadway S?? 1100
Salt take City, Utah 841??-5233
Tel (501) 521–5800
Fax (101) 521–9639
www.hro.com
Salt take City
Den??r
Bou??er
Cole ??do Springs
Lon??n
January 24, 2002
SENT VIA:
E-MAIL TO:
Microsofi.atr@usdoj.gov
VIA FACSIMILE COPY TO: (202) 307–1454 or (202) 616–9937
1sT CLASS MAIL TO:
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

I write to comment on the proposed settlement in the Microsoft v. DOJ case. I have practiced in the antitrust area for approximately 30 years. Although I am not fully aware of all the facts and circumstances of this particular case, and although I believe that break-up of Microsoft would be too stringent of a remedy, I do not believe the current proposal to settle the case is appropriate.

The district court judge made significant findings concerning antitrust violations committed by Microsoft. Although the Court of Appeals may have determined that the break-up remedy may have been inappropriate, that Court did not reverse the district court's findings on the antitrust violations. Therefore, it is neither prudent nor appropriate for the DOJ of a new administration to propose or support a settlement that does not reflect what our judiciary, after a full and fair airing of the arguments of all sides, might impose.
#112664 v1
Holme Roberts & Owen LLP
Renata B. Hesse
January 24, 2002
Page 2

I believe the most appropriate course of action would be for the court, on remand, to conduct a proceeding to determine an appropriate remedy. At such a hearing, all parties, including the attorneys general of the interested states, to present their positions concerning the appropriate remedy.

Respectfully,

Jay Gurmankin

cc: The Honorable Mark Shurtleff, Utah Attorney General
#112664 v1

MTC–00030375

Comment from the Small Business Survival Committee on the Proposed Settlement in United States v. Microsoft
January 25, 2002
Darrell MeKigney
President &
Raymond J. Keating
Chief Economist
Small Business Survival Committee
Small Business Survival Committee 1920 L Street, NW, Suite 200
Washington, DC 20036
Phone: 202–785–0238
Fax: 202–822–8118
E-mail: darrell@sbsc.com
E-mail: rkeat614@aol.com

The Small Business Survival Committee (SBSC) believes that the proposed settlement between Microsoft Corp., the federal government and nine U.S. states in the case of United States v. Microsoft Corp. generally serves the ''public interest'' and the nation's economic well being. In its settlement, Microsoft has agreed to a variety of restrictions on its business practices for at least five years. Microsoft also would be subject to (and have to pay for) a full-time, onsite monitoring panel of three computer experts, who would have complete access to Microsoft's software code, systems, books, records, personnel, etc.

Considering that the antitrust case against Microsoft had absolutely no basis in economic reality, and that the government brought its case at the behest of competitors—not consumers-who could not keep up in the marketplace, we view any findings against Microsoft, and related restrictions placed on the firm, as unwarranted. However, given the costs, looming uncertainties, the current economic climate, and penchant for bad law and convoluted economics to dominate in the antitrust realm, Microsoft certainly made the correct business decision in reaching this settlement. Investor's Business Daily hit the nail on the head when it recently (January 22) editorialized:

''Late Thursday, Microsoft reported its earnings for the fourth quarter. They included a hefty charge of $660 million, or 8 cents a share, for expenses linked to antitrust lawsuits and ongoing legal action by some states.

''Think about it: that's two-thirds of a billion dollars. It could fund a lot of research, give a lot of raises to workers, even fund more Microsoft charity around the country.''

So, the costs of this case for the company, the taxpayers and the economy in general have been formidable.

And make no mistake, these costs are felt by many small businesses. Small enterprises certainly can be affected by the costs of this antitrust case (and others) in their roles as consumers of Microsoft products, and as suppliers to Microsoft. In addition, entrepreneurship and business can be impacted by the message sent by government in a case such as this, i.e., that if a business works and competes hard to succeed and gain market share, the government may move against it through regulation and litigation. That is not a positive economic message for government to be broadcasting into the marketplace.

Microsoft, the many businesses which serve as its suppliers and consumers, and the software industry have been placed at risk due to the government's long antitrust inquisition against Microsoft, and real costs have been incurred. The government's antitrust case against Microsoft has boosted costs, increased uncertainty in the high-tech community, and thereby, hurt the entire U.S. economy.

Looking ahead, it is quite disturbing that government officials—including regulators, lawyers, and judges—have the ability to impose their own anachronistic views of how markets should work on the rest of us, including the high-tech industries of today and tomorrow. Antitrust regulation remains a dangerous wild card in the marketplace. Depending how the latest political breezes happen to be blowing, our nation's most successful companies are in a position to be punished for their success via antitrust actions.

Antitrust law is regularly presented as a bulwark of competition and free markets. In reality, however, antitrust law, for the most part, is distinctly anti-market and anti-competition because it allows government bureaucrats or judges to overrule decisions made by consumers in the marketplace. In the end, government antitrust actions in this case have amounted to nothing more than an effort to protect some of Microsoft's current rivals from the rigors of competition, and/or an effort to expand the reach and control of government.

It needs to be understood that in the free market, businesses compete against current and future competitors. The rapid pace of innovation in the computer industry makes this abundantly clear. Therefore, many antitrust actions exhibit an inability on the part of regulators, government lawyers and some judges to understand the dynamic nature of the marketplace. Markets are not static. The classroom lesson about ''perfect competition'' does not exist in the real world. Instead, the economy involves a rough-and-tumble competitive process whereby entrepreneurs and businesses create new products and services, innovations, and efficiencies, often generating temporary monopolies that are then obliterated by competitors. Prices and profits act as signals in the marketplace to other businesses and entrepreneurs. An activist antitrust regime, as was exhibited over the past several years in the Microsoft case, disrupts this beneficial economic process.

The fact that antitrust law looms unchanged—to be erratically used as a club by government—will continue to east a shadow over the U.S. economy, particularly dynamic high-tech industries in which temporary monopolies are the clear rule.

Ideally, the Microsoft case should have been dropped altogether, and looking ahead, dramatic antitrust reform needs to be undertaken to reflect economic reality.

Short of such action though, a settlement in this case, which obviously steps far back from a proposed break up of Microsoft, makes sense. Hopefully, since much of the government's case has been thrown out or overturned, perhaps this Microsoft settlement will serve as a warning that antitrust restraint on the part of the government far better serves consumers, entrepreneurship and innovation, than does antitrust activism.

Darrell McKigney is the president of the Small Business Survival Committee. Raymond J. Keating serves as chief economist for the Small Business Survival Committee (SBSC). SBSC is a nonpartisan, nonprofit small business advocacy group headquartered in Washington, DC

MTC–00030376

Attention: Renata Hesse
Date: 1/25/2002
Company: U.S. Department of Justice
Number of Pages:
Fax Number: 1–202–307–1454
Voice Number:
From: Tom Moertel
Company: Moertel Co.
Fax Number: 412–341–6618
Voice Number:
Subject: Microsoft Settlement
Comments:

Please admit the following letter as my comments under the Tunney Act regarding the proposed Microsoft Settlement.
205 Dell Avenue
Pittsburgh, PA 15216
January 23, 2002
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001

Dear officials of the Department of Justice:

As a small-business owner and software professional with more than a decade's experience creating software for Windows, Macintosh, Unix, and Linux operating systems, I am writing pursuant to the Tunney Act to comment on the revised proposed Final Judgment (PFJ) in United States v. Microsoft.

I am deeply troubled that the PFJ, when scrutinized from a technical viewpoint, fails to satisfy any of the requirements for a remedies decree as set forth by the Court of Appeals ruling (section V.D., p. 99). The PFJ does not unfetter the market from Microsoft's anticompetitive conduct, terminate Microsoft's illegal monopoly, deny Microsoft the fruits of its statutory violation, or ensure that there remain no practices likely to result in monopolization in the future. Rather, the PFJ allows many of Microsoft's anticompetitive practices to continue—effectively legitimizing these illegal practices—and provides license for Microsoft further to abuse and extend its monopoly.

Rather than enumerate my specific concerns here, I will refer you to the findings of Dan Kegel's analysis? which summarizes the technical failings of the PFJ. I agree with Mr. Kegel that the PFJ fails to take into account Windows-compatible competing operating systems, contains misleading and overly narrow definitions and provisions, fails to prohibit anticompetitive license terms currently used by Microsoft, fails to prohibit intentional incompatibilities historically used by Microsoft to protect and extend its monopoly, and fails to prohibit anticompetitive practices towards OEMS.

I also agree with Mr. Kegel's conclusion that the PFJ allows and even encourages anticompetitive practices to continue, would delay the emergence of competing Windows-compatible operating systems, and is therefore counter to the public interest. Further, I am appalled that, despite the best intentions of the Department of Justice, the PFJ permits so many of Microsoft's illegal practices to continue unfettered that it effectively legitimizes these practices and threatens to make Microsoft's abuses into a government-sanctioned benefit of its monopoly.

Therefore, I must urge the Department of Justice to withdraw its consent to the existing PFJ and begin work on a new proposal that provides meaningful and effective remedies for Microsoft's illegal business practices. To do otherwise would likely result in a monumental miscarriage of justice and, ultimately, irreparable harm to the competitive environment that is vital to our nation's promising technology industry and the economy it supports. Again, I must urge you to withdraw your consent for this fundamentally flawed proposal.

Sincerely,
Thomas G. Moertel

MTC–00030377

Matthew Seymour
123 Wright Brothers Drive
Salt Lake City, UT 84116
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

Three years ago, Microsoft was found to be in violation of antitrust laws. The corporation was duly brought to trial in the Federal courts, and it was not until June of last year that a settlement even began to be negotiated. After six months of around-the-clock negotiation, Microsoft and the Department of Justice were finally able to reach a settlement, and finalization has been pending ever since, However, nine of the plaintiff states in the case are currently seeking to undermine the settlement and bring further litigation against the Microsoft Corporation. I do not believe this is either necessary or wise. The proposed settlement would not only prevent further antitrust violations and thereby negate the claims that Microsoft's opponents have against the corporation, it would also allow business within the technology industry to return to normal.

The settlement restricts various actions on the part of Microsoft and also requires them to make changes in the Windows operating system. For example, future versions of Windows will be reformatted in order to support non-Microsoft software. Additionally, Microsoft has agreed to refrain from entering into any contract that would require a third patty to promote or sell Microsoft products either exclusively or at a fixed percentage. Microsoft has been extremely compliant in reaching this agreement, and the Justice Department has been fair to Microsoft in return. Microsoft will be allowed to remain intact, instead of being divided in thirds as was initially proposed. Microsoft has, in turn, agreed to terms under the settlement that: extend to technologies and processes that were not determined to be unlawful by the Court of Appeals. It is time for the nine states that have thus far refused to settle to cease their compliant(s) and to allow justice to be served. I urge you, Sir, to support the settlement.

MTC–00030378

Post-it?? Fax Note 7671
Date
# of pages??/
To Jom?? Ashcroft
From JAMES Sen??
Co./Dept. DOJ Co.
Phone # Phone #
Fax# 1–202–616 .9937
Fax# 201–291–7929
1–202–307–1454
464 Beverly Road
Ridgewood, NJ 07450–3308
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
January 25, 2002

Dear Mr. Ashcroft:

My family is writing to express our support for the settlement reached between Microsoft and the Federal Government. Microsoft went beyond the products and procedures that were actually at issue in the suit, for the sake of wrapping up the suit.

Microsoft has agreed to grant computer makers broad new rights to configure Windows so as to promote non-Microsoft software programs that compete with programs included within Windows, not to enter into any agreements obligating any third party to distribute or promote any Windows technology exclusively or in a fixed percentage, and not to retaliate against computer makers who ship software that competes with anything in its Windows operating system.

This is a very generous settlement that addresses the government's concerns and Microsoft's competitors' concerns. Its time to let Microsoft get back to work, please approve this settlement

Sincerely,
James S. Serpico
Cheryl L. Serpico
Alexander J. Serpico

MTC–00030379

AMITAVA GHOSE, Ph.D., P.E.
2715 Darnby Drive,
Oakland, CA 94611
(510) 531–7570
January 25, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington., DC 20530

Dear Mr. Ashcroft,

I urge you to settle the lengthy antitrust lawsuit that the government has brought against Microsoft after this comment period. The concessions Microsoft is willing to make to end the case are more than fair, and the situation should be put to rest.

Whining competitors who are jealous of Microsoft's market dominance are driving many of the concessions Microsoft is making. Many of those companies engage in similar business practices, but are being hypocritical simply because Microsoft has performed

better. One of Microsoft's concessions is to disclose certain Windows codes to other companies in the marketplace, yet those companies have not agreed to do the same thing in relation to their products. Microsoft is being more than reasonable in trying to resolve the litigation.

It is high time that this lengthy legal process ceases to handicap Microsoft's ability to bring cutting edge innovations to both Corporate America and the private consumer, at the dazzling rates that it has been able to do in the past. Microsoft's concessions will not only further ensure market competition, but will in fact benefit their rivals more than themselves. The government should not ask any more of Microsoft than that.

I strongly urge you to finalize the settlement.

Sincerely,

MTC–00030380

P.O. Box 9706
Phone: (505) 842–0644
E-mail: aoci@nm.net
Albuquerque, NM 87119.9706
Fax: (505) 842–0734
Web site, http://www.aci.nm.org
January 25, 2002
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
Re: Comments on the Microsoft Proposed Settlement Agreement

Dear Ms. Hesse:

Microsoft is a company that has long provided good products to consumers and businesses, and it provides opportunities for other software companies as well to develop programs for the Windows platform. The provisions of the settlement, worked out with one of the nation's top mediators, will be good for consumers, businesses, the tech sector and the economy as a whole. I fully support the Department of Justice and the nine Attorneys General, including New Mexico Attorney General Patricia Madrid, for their efforts to finally put an end to this case and agree to a settlement that is in our nation's best interest.

ACI is the statewide business advocate and the New Mexico affiliate of the U.S. Chamber of Commerce and the National Association of Manufacturers.

Sincerely,
John A. Carey
President & CEO
??The Statewide Business Advocate??

MTC–00030381

P.O. Box 9706
Phone: (505) 842–0644
E-mail: aoci@nm.net
Albuquerque, NM 87119.9706
Fax: (505) 842–0734
Web site, http://www.aci.nm.org
January 25, 2002
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
Re: Comments on the Microsoft Proposed Settlement Agreement

Dear Ms. Hesse:

Microsoft is a company that has long provided good products to consumers and businesses, and it provides opportunities for other software companies as well to develop programs for the Windows platform. The provisions of the settlement, worked out with one of the nation's top mediators, will be good for consumers, businesses, the tech sector and the economy as a whole.

I fully support the Department of Justice and the nine Attorneys General, including New Mexico Attorney General Patricia Madrid, for their efforts to finally put an end to this case and agree to a settlement that is in our nation's best interest.

ACI is the statewide business advocate and the New Mexico affiliate of the U.S. Chamber of Commerce and the National Association of Manufacturers.

Sincerely,
John A. Carey
President & CEO
??The Statewide Business Advocate??

MTC–00030382

BILL FLETCHER
S??
January 22. 2002
Renata Hesse, Trial Attorney
Antitrust Division
Department of Justice
6m D Street NW, S?? 1200
Washington, DC 20530
Fax 202–616–9937

Dear Ms Hesse:

I am the parent of three children, have run my own business for must of the past two decades, and am in my third four-year term on the Wake County Board of Education. So I come to my conclusions from a variety of viewpoints.

I believe Microsoft has put their offer on the table in their effort to bring to closure the action initiated by the Clinton Justice Department.

1. For the public schools, Microsoft's settlement offer contains desperately needed hardware, software and training. There is significant inequality in ?? schools in terms of technology. Some characterize the emerging ''digital divide'' and a change from the ''haves and have nots'' to the ''knows and the know nots'' The Microsoft proposal puts essential technology in the hands of our d??erving students immediately. And none too soon

2. For my business Microsoft continues to provide high value, cost effective products and services, even with significant resources d?? away by frivolous lawsuits.

3. For my family, prices of quality hardware and software continue to decline so that we ?? been able to provide appropriate educational tools for our college hound children. From the beginning, the federal government's pursuit of Microsoft has been politically inspired and ?? unwise. The case was ?? and oven subsidized in the beginning by Microsoft's competitors. They sought to win in the courts what they could not win in the market. The government should never have initiated this proceeding.

Now the courts have an opportunity to end this madness. Three years and 530 million of the taxpayers'' money is enough. At a time when terrorists threaten America and we are facing an economic slowdown, our nation, the information technology industry and Microsoft should not be forced to waste more time and money on this case.

It is time to move ahead Please ?? the Mrcrosoft offer and let's refocus our government's resources on more important issues.

Sincerely,
Bill Fletcher

MTC–00030383

Ms. Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I write to say that I am pleased to see that the Department of Justice is close to settling the Microsoft case. I don't know many details about the charges in the case, but I do know that Microsoft has produced software that has proven extremely valuable in my work, In my view, Microsoft is the reason most software is now created 1o be compatible on most computers. For computer users who are not ''techies''. this has been invaluable.

It is time to settle and move on, so Microsoft can proceed with the kind of product development and innovation that has been so valuable in business, and therefore, in our economy. I hope the Department of Justice will agree.

Sincerely,
Elizaboth R. Cash
Director of the Annual Fund
Lynchburg College
Lynchburg, VA 24501

MTC–00030384

Management ??'' at Lyn??hburg
2511 Memorial Avenue, Suite 202
Lynchburg, VA 20501
(804) 528–1611
FAX (804) 528–1611
careers@mrlynchburg.com
January 25, 2002
Ms. Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
Got D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

As a recruiter with more than 20 years in the business, I have observed the impact Microsoft products have had on business and industry, and in particular on small business. In the early days of computers, only very highly paid ''computer gurus'' could use the technology of the day. Recruiting and hiring these people was an expensive proposition, so much so that most small businesses had to do without.

Because of the innovation and ''Dear-friendly'' products of Microsoft, small businesses today can hire someone right out of high school to use software, which enables them to compete with much larger companies. Because we have access to the latest software and hardware at affordable prices, we have been able to develop a

reputation in the marketplace and are frequently called on by many of the Fortune 100 companies to conduct National and International searches for them. Without the access to the affordable technology we use this would not be possible.

One reason Microsoft and other computer and software makers have been so successful, in my opinion, is because they have been allowed to operate in a free marketplace, unencumbered by unnecessary government restrictions. Their success has in turn has allowed us to he successful. I suggest to you that a timely settlement of the antitrust lawsuit is in the best interests of everyone, especially business.

Sincerely,
David Blue
Manager

MTC–00030385

Delivering Internet Results
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft, understand the government decided to settle its three-year-long antitrust lawsuit with Microsoft Corp. This is very good news, because settlement is in the best interests of the State of Michigan, the IT industry, and the economy.

Microsoft did not get off easy, but the settlement is fair and reasonable, and it will definitely benefit consumers and preclude future anticompetitive behavior. The recession has had a devastating effect on state on state budgets and the federal budget, and it is important that the technology industry be allowed to concentrate on business now.

One of the main accomplishments of the settlement is Microsoft's agreement not to retaliate against computer makers who ship software that competes with Microsoft in its Windows operating system. Microsoft's competitors should be very pleased with this clause. Additionally, Microsoft agreed to share its software code for various interfaces that are internal to Windows with its competitors. This should make its competitors ecstatic. It is my hope that this can all be worked out and that the settlement can take effect as soon as possible.

Thank you.
Sincerely,
e-Business Analyst
Internet Operations Center Inc

MTC–00030386

Renata B. Hesse
Antitrust Division
U,S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–000
Via Facsimilie: 1–202–307–1454

To Whom it May Concern:

I am writing you today to express my grave concern about the proposed settlement to the Microsoft anti-trust case, I hope you'll consider my comments under the Tunney Act, I am the Chief Technology Officer of a company that develops internet content and software applications for a variety of mid- to large-sized businesses. I have ten years'' experience as a computer programmer, systems engineer, and technologist.

After thoroughly reading the terms of the proposed settlement, I object to it on two equally important but distinct grounds,

First, the settlement fails to adequately punish Microsoft for its anticompetitive and illegal behavior, in order to be in the public interest. any settlement must substantially deny Microsoft the benefit of its illegal acts. The settlement further harms the public interest in this regard by failing to serve as a sufficient deterrent to future monopolies, Only an immensely large fine, of sufficient magnitude to madate immediate changes in the company's business practices, could achieve these goals.

I furge you to consider the opinions of former Supreme Court Justice Robert Bark on this matter, as he expressed in a recent interview: http://www.linuxplanet,com/linuxpianet/opinions/4020/3 My second objection to the settlement is that it is riddled with errors and other failings in terms and definitions, any one of which could allow Microsoft to evade all but the most convenient of the settlement's provisions, Specifically, any settlement terms requiring Microsoft to disclose APIs and other documentation to its competitors and the general public must specifically define the effect that disclosure must achieve. For example, the remedies that address Microsoft's anti-competitive use of file formats must specifically state that the company's competitors and customers must be able to use the documentation to build fools that are completely and effectively compatible with Microsoft's tools.

In an effort to make the terms legally abstract enough to remain relevant to future products and technologies, they have been rendered largely useless. These fallings, and others documented in the comments you've received under the Tunney Act, must be resolved before this or any settlement could be considered in the public interest.

Thank you for considering my comments.
Yours,
Matthew J, Rechs
Chief Technology Officer
The Content Project

MTC–00030388

CERTIFIED PUBLIC ACCOUNTANT
1300 SOUTH UNIVERSITY DRIVE, SUITE 308
FORT WORTH, TEXAS 761O7–5735
(817) 338–1115
Metro (817) 429–7422
Fax (817) 338–1163
e-mail wbrown@sgw-cpas.com
Member of Texas Society of Certified Public Accountants
January 25,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am a practicing CPA and have been using Microsoft products for many years. I currently use Internet Explorer, Microsoft Excel, Microsoft Word and Microsoft Outlook. These axe all superior products. Never have I felt disadvantaged in not being able to use competing products since I could switch at any time if I wanted to. As far as Windows is concerned it is a superior operating system. I have never met anyone who felt handicapped in not being able to use another operating system.

Everyday as I read about the settlement process regarding the Microsoft anti-trust case, I become more annoyed with our federal legal system. After three years of litigation, I fail to see what can be scrutinized any longer. Microsoft has made numerous concessions in an attempt to resolve this case.

Under this settlement Microsoft will disclose the protocols and design interfaces of Windows. This will enable developers to design software that is increasingly compatible with the Windows system. In addition to this users will be able to delete Windows programs that they do not want on their system with greater ease.

The settlement can finally bring an end to this case that has drained resources for more than three years now. I support the settlement, and hope it is enacted soon.

Sincerely,
Willis F. Brown, CPA

MTC–00030389

Sanborn
42 Isabella Road
Elverson, PA 19520
January 25,2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to express my support of the recent settlement in the antitrust case between Microsoft and the US Department of Justice. I think the lawsuit was unjustified in the first place, considering how much Microsoft has done for our country by way of creating jobs, generating income, and making technological breakthroughs. I realize that the competition is way behind, but this is the reality of a capitalist society and a free market. The most innovative will always succeed.

I feel that the lawsuit was initiated because Microsoft would not and did not play ball with the Democratic Party and specifically the Clinton's who wanted donations from Microsoft. The terms of the settlement are harsh and make Microsoft give away many secrets. For one, Microsoft is being forced to disclose interfaces that are internal to Windows operating system products. This seems to me to be in violation of their intellectual property rights.

Nevertheless, I think it is in the best interests of the American public to have the case finalized. Our economy and the IT sector in particular needs Microsoft focusing on business, not politics. I urge your office to take a stance against the nine states in opposition and do what is right for the American public.

Thank you.
A. Sanborn
B. cc: Senator Rick Santorum

MTC–00030390

WASHINGTON LEGAL FOUNDATION

2009 MASSACHUSETTS AVENUE, NW
WASHINGTON, DC 20036
(202) $88–0302
FAX: (202) 588–0386
FACSIMILE COVER SHEET
To: DOJ Antitrust Div.
ATTN: Renata B. Hesse
From: Paul D. Kamenar
Fax: 202–307–1454
Copy Sent (Date & Time): Jan. 25, 2002
Transmission consists of pages, including this cover page
COMMENTS:

ATTACHED ARE COMMENTS OF THE WASHINGTON LEGAL FOUNDATION ON THE PROPOSED JUDGMENT IN US v. MICROSOFT

CALL IF ANY QUESTIONS OR PROBLEMS. I CAN EMAIL YOU A COPY AS WELL.

PLEASE EMAIL ME THE DOJ EMAIL ADDRESS. MY EMAIL IS: pkamenar@wlf.org

Thank you.

MTC–00030391

Attorneys at Law
111 East Broadway
Suite 1100
Salt Lake City, UT 84111
Tel (801)521–5800
Fax (801)521–9639
FACSIMILE COVER SHEET
FROM FACSIMILE NUMBER: (801)521–9639
Date: January 25, 2002
Time:
To: U.S. District Court, District of Columbia
Attention: Honorable Colleen Kollar-Kotally
Facsimile No.: 202–307–1454
Verification No.:
Client No.:
From: Thomas J. Rossa
Message: Re: Microsoft Settlement
Number of Pages Following this Cover Sheet: 2

If you need a confirmation or any of the pages sent again, please call our offices at the following number: (801)521–5800. If you do not call within 15 minutes, we will assume you have received the pages satisfactorily.

SECRETARY: Anette Cunningham EXT: 3274
Offices in: Denver Salt Lake City Boulder Colorado Springs London
Thomas J. Rossa ??@??.com
Attorneys at Law
111 East Broadway Suite ??100
Salt ?? City, Utah 8411?? 5233
Tel (801) 521–5800
Fax (801) 521–9639
www.??ro.com
Salt Lake City Denve??
Boul??
Color??do Springs
London
January 25, 2002
SENT VIA:
E-MAIL TO: Microsoft.atr@usdoj.gov
VIA FACSIMILE COPY TO: (202) 307–1454 or (202) 616–9937
1ST CLASS MAIL TO:
The Honorable Colleen Kollar-Kotally
U.S. District Court, District of Columbia
c/o Renata B. Hesse Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement

Dear Judge Kollar-Kotally:

As a practicing attorney in the intellectual property area for nearly 30 years, I write to object to the proposed settlement in the Microsoft v. DOJ case. While comment from the public or the bar is typically inappropriate, in this case the involvement of press suggests that it would seem highly appropriate that comments be supplied in reference to the proposed arrangement. My purpose in writing is not to comment on the correctness of the decision but the application of the proper remedy. I must assume that the district court correctly determined and the Court of Appeals correctly reviewed the determination that Microsoft violated the antitrust laws of the United States. The U.S. Supreme Court has determined not to hear an appeal of the Court of Appeals decision, therefore, Microsoft's legal remedies to challenge the trial court's findings are at an end. What remains is the Court of Appeals'' remand to the district court to determine how Microsoft should be punished for its violations.

I understand that with a change in the administration, the DOJ's desire to continue with the litigation has somewhat waned and that a settlement has been proposed that DOJ finds acceptable. In my experience and understanding, however, the determination that a monopoly exists and findings of antitrust violations require the imposition of remedies that follow certain logical principles. Specifically the remedy or disposition should lead to a termination of the monopolistic activities. In addition there should be some structure to level the playing field and allow those who have been disadvantaged to reenter the market place. Indeed, logic supports tilting that playing field toward the excluded for a time to dissipate the advantage unfairly and illegally obtained by the monopolizer.. Of course there should be some penalty for past conduct and something to prevent or deter future violations. I am at a loss to explain how the proposed settlement satisfies the requirements of these principles and how it complies with the standards set forth in the Court of Appeals'' decision.

Anytime a company's dominance in the marketplace and behavior reaches the levels of a monopoly as has been determined in this case, affirmative action must be taken to bring the marketplace into balance. The proposed settlement does not do so, and I suggest the court take evidence from others not party to the proceedings to develop proper and appropriate remedies. While there are experts who are better positioned to opine on the details, it seems entirely logical for sufficient portions of the programs including the source code to be made available so that others are able to access and develop compatible systems. There is some similar precedent for such because in the early 70's the Bell system was forced to allow others to access the Bell system through interface circuitry. Thus Bell's monopoly over the PBX systems ended. While Microsoft is not a utility, it dominates the industry to the point that it is tantamount to a utility. In turn, remedies that are somewhat regulatory would be logical if not compelling. Indeed, some continuing court supervision after the remedy has been fashioned would seem to be as important as court supervision of bussing to effect integration.

Respectfully,
Thomas J. Rossa
cc: The Honorable Mark Shurtleff, Utah Attorney General

MTC–00030392

Patrick Neborg
101 Horseshoe Lane
North Wales, PA 19454–4272
January 22, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0002

Dear Mr. Ashcroft:

I would like to see the Microsoft case brought to a conclusion. It is in the best interest of all involved that this case be settled.

The concessions made by Microsoft will achieve the goal of restoring fair competition. Microsoft will take steps to ensure computer manufacturers and consumers may more easily install its competitors'' software programs. Microsoft has also agreed to not retaliate against those who promote the competition's products. These types of changes in Microsoft's business practices will help ensure there are no future antitrust violations.

Like most members of the technology industry, I would like to see Microsoft concentrate its resources on developing new products, rather than on litigation. Drawing out the case any further will benefit no one.

Sincerely,
Patrick Neborg
cc: Senator Rick Santorum

MTC–00030393

Anqelo J. Bello
1437 79th Street
Brooklyn, New York 11228
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I would like to express my opinion on the recent settlement in the Microsoft antitrust case. This case needs to be ended and the current settlement is a good solution. There should be no question that this settlement serves the public interest, Microsoft is giving up so much in this case and it is only fair to leave them alone now.

I am a computer technician and I install computers for my employer as well as for friends, family and other personal business associates. We don't solely rely on Microsoft's products, but rather use a combination of software products. We have complete freedom to choose to use other products and have obviously done so with no problems. Additionally, when using the MS windows platform, never once was I, nor anyone I know, prohibited from installing or using other products. As a successful company, when providing a product, why would you want to include a competitors'' product within your own? That's not to say

that you are stopping from adding or installing others''. I don't see that Microsoft has acted unfairly, they are merely a hugely successful company who made smart business decisions to try and maintain that success. They are now being punished because less successful companies wanted a part of it and didn't have the means to step up to Microsoft without bringing the courts and lawyers into the process.

As it stands, the settlement already is more than fair. This issue needs to be ended and maintaining the settlement is the right thing to do. It indeed serves the public interest and it indeed addresses the issues brought up by Microsoft's competitors. Please allow this settlement to be the end of this drawn-out lawsuit. Our economy can't stand any further delay in this issue.

Sincerely,
Angelo J. Bello

MTC–00030394

Carl C. Carlsen
Captain (Ret.)
425–334–1454
2903—116th Ave NE
Lake Stevens, WA 90258–9161
cearlsent@compuserve.com
ha?? radio call—KD7BFN
January 25, 2002
Attorney General John Ashcroft
U,S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, D.C, 20530

Bear Mr. Ashcroft:

I would like to start off by saying that I am not a strong supporter of Microsoft. I don't really have any stong ties to them, but I don't agree with the antitrust suit against them. The settlement that was made between Microsoft and the Department of Justice is more than fair, and it is time this matter was over with. Millions of state and federal dollars have been wasted on this suit. The Untied Slates is based upon a free enterprise system; while we may not always agree with the tactics employed by big business, our interference in business undermines the very foundation this nation has been built upon.

Microsoft has agreed to terms that will enable other companies to compete. They have to license the internal codes of Windows to the top twenty companies so they can produce software that is compatible with Windows. Because of the competition that will arise from this settlement a wider variety of products will emerge. So now, not only will the consumer have a better product, but the prices will be more reasonable. Also, Microsoft will be forced to produce a better product in order to stay competitive.

I would like to reiterate that I am not writing this letter because the issue is personal to me. I am not a huge stockholder and I know no one who works for Microsoft. I do know what is right though, and ending this ridiculous suit against Microsoft is the right thing to do. Thank-you.

Sincerely,
Carl Carlsen

MTC–00030395

January 12, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am an architect with his own firm. I am well versed in business and business practices which is why I am thoroughly annoyed with the lawsuit brought against Microsoft. The whole process was one of professional jealousy than any monopolistic business practices.

The antitrust laws were set up to protect the consumer; Bill Gates did nothing but help the consumer. He standardized computer software; he made computer software more understandable; he made computer software more affordable. Software has gone down in price, not up. Does anybody remember how difficult computers were before Microsoft? And for this the company is being persecuted. This is wrong.

Furthermore, from what I understand of the agreement, Microsoft has done a great deal to assuage the demands of the Department of Justice. Microsoft has agreed to help companies achieve a greater degree of reliability with regard to their networking software; Microsoft has agreed to document for use by its competitors various interfaces that are internal to Windows'' operating system; and has even agreed to a technical committee to monitor future adherence. I would not do as much.

Microsoft, through Bill Gates, has made this country's technological revolution. Microsoft and the Department of Justice have made peace. Let's honor it and go forward.

Sincerely,
Herb Zelikoff

MTC–00030396

January 25, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Fax: 202–616–9937

Dear Ms. Hesse:

As a member of the North Carolina Academy of Trial Lawyers, I believe that the government needs to end the Microsoft antitrust case. The case has already cost hard working American taxpayers over $30 million, and that figure is rising every day.

A settlement has been reached that is suitable to both parties. Under the agreement, the government has unprecedented oversight of Microsoft's operations and controls to prevent anti-competitive business practices. Consumers will have greater choice in the selection of their computer operating system than ever before.

In the free enterprise system, consumers dictate the success of a given firm or product. They control the system by voting with their pocketbook. I am certain that throughout American history, there have been many examples of companies egregiously violating antitrust laws. In this instance, however, I do not see the harm to consumers that is required in order to prosecute the Microsoft case further.

Settling the case not only helps the economy a great deal, but it frees up needed funds for the Justice Department to pursue more pressing concerns. I sincerely hope that we can end this antitrust saga soon. wall Street and Main Street are waiting.

I hope that Judge Kollar Kotelly approves the settlement.

Regards,
Tony Gurley
10037 Sycamore Rd.
Raleigh, NC 27613

MTC–00030397

January 25, 2001
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms, Hesse:

I am writing this letter, as a consumer of high-tech products, to register my support for the recently negotiated settlement of the Microsoft lawsuit. It is clear that the best interest of all is for a quick resolution of this long and expensive lawsuit.

Even though some will say the terms of the settlement are not tough enough, I think it is far preferable to find a workable solution rather than mete out crippling sanctions against Microsoft that will do nothing more than dull America's cutting-edge technological superiority.

Antitrust laws were meant to protect consumers, yet at no time during this case has anyone shown that Microsoft has done harm to a consumer. I say it is time to put and end to this competitor-driven pursuit and let technological innovators, such as Microsoft continue to fight it out in the marketplace-not the courtroom.

Sincerely,
Darlene Causey
Executive Director

MTC–00030398

CERTIFIED PUBLIC ACCOUNTANT
1300 SOUTH UNIVERSITY DRIVE, SUITE 308
FORT WORTH, TEXAS 76107–5735
Member of
Texar Society of
Certified Public Accountants
(817) 338–1113
Mctro (811) 479–7422
Fax (817) 338–1163
e-mail wbrown@sgw-cpas.com
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am a practicing CPA and have been using Microsoft products for many years. I currently use Internet Explorer, Microsoft Excel, Microsoft Word and Microsoft Outlook. These ate all superior products. Never have I felt disadvantaged in not being able to use competing products since I could switch at any time if I wanted to. As far as Windows is concerned it is a superior operating system. I have never met anyone who felt handicapped in not being able to use another operating system.

Everyday as I read about the settlement process regarding the Microsoft anti-trust

case. I become more annoyed with our federal legal system. After three years of litigation, I fail to see what can be scrutinized any longer, Microsoft has made numerous concessions in an attempt to resolve this case.

Under this settlement Microsoft will disclose the protocols and design interfaces of Windows. This will enable developers to design software that that increasingly compatible with the Windows system. In addition to this users will be able to delete Windows programs that they do not want on their system with greater ease.

The settlement can finally bring an end to this case that has drained resources for more than three years now. I support the settlement, and hope it is enacted soon.

Sincerely,

Willis F. Brown, CPA

MTC–00030399

January25, 2002
Renata Hesse
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Madam:

I am writing this letter to express my support for the recently negotiated settlement of the Microsoft case For the past several months, I have watched as the Department of Justice and several state Attorneys General have relentlessly pursued a frivolous antitrust lawsuit against Microsoft. As a user of Microsoft products, I think it is time to bring this issue to a conclusion. The treat of government regulation has caused tremendous harm to the industry, consumers and the entire economy. At a time when the economy is heading into difficult times, the last thing the technology industry needs is more litigation and government regulation.

Further litigation will not improve quality or increase innovation. On the contrary, attempts to place limits or] any part of the tech sector—not just Microsoft—will Inhibit innovation, increase costs, and place America's technology at a disadvantage in the global market.

I think it is time to settle this matter and let the industry, and Microsoft, continue to develop affordable, innovative products.

Sincerely,

Diana Queen Koether
Manager
Hamilton Chamber of Commerce

MTC–00030400

January 24, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington DC 20530
RE: Microsoft

Dear Ms. Hesse:

As each day we see more of our industries faltering in the aftermath of September 11, 2001, I am writing to encourage the Justice Department to free companies in the high-tech industry to compete with one another in the marketplace without crippling them with unnecessary sanctions. Please lend your support to the negotiated settlement of the Microsoft lawsuit as it is clearly in the best interest of the national economy to quickly resolve this lawsuit and avoid further slowdown in one of our most important industries.

The terms of the settlement are strong enough. Consumers such as Sanders & Sanders Associates, Inc. have not been harmed by Microsoft, but rather, helped by this strong, innovative company.

Sincerely,

Janet R. Sanders
Vice President
Sanders & Sanders A??
5252 Westchester. Suite 170
Houston, Texas ??
713 522–9734 Fax
713 522 9733

MTC–00030401

Tax Plus of Oklahoma
Renata Hesse
Antitrust Division
Department of Justice
601 D. Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

The U.S. Department of Justice and nine state attorneys general decided to settle the Microsoft antitrust case. A recent survey done by Americans for Technology Leadership, a broad-based coalition of technology professionals, found that 70 percent of American consumers agreed with that decision.

Yet, the pursuit of Microsoft continues.

It seems that a handful of Microsoft's competitors have prevailed upon the remaining nine state attorneys general to reject any settlement—be it reasonable or not—and continue to chip away at Microsoft.

Of the 1001 individuals contacted in poll, 82 percent said that Microsoft's competitors should compete by creating new products rather than lobbying for the government to stop Microsoft's new products.

We lead the world in technological innovation thanks in large part to Microsoft. Let's not lose that advantage because we-re afraid to let one corporation get too far ahead in the market place. I say, settle this case quickly and let's get back to what made this nation great—competition.

Sincerely,

Rhonda Schrum
President

MTC–00030402

SJS CADD, Inc.
4072 US HIGHWAY 62
CALVERT CITY. KY 42029
phone: (270)395–1851
fax: (270)395–1708
www.sjscadd.com
25-Jan-02
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

I write this letter to express my opinion regarding the antitrust suit against Microsoft. I support the settlement and the conclusion of the federal involvement in the suit. Continued litigation would have resulted the eventual destruction of Microsoft, thus causing detrimental effects on the progress of technology and the economy in the country. It is necessary that further litigation is prevented, and this settlement is implemented.

The settlement will help taxpayers and consumers save on taxes and costs of technology. It directs Microsoft to provide information regarding the various interfaces of its Windows operating system. Microsoft has also agreed not retaliate against computer makers that may ship software that would compete with Windows.

I urge you to realize the necessity for the conclusion of this case. It has been a suit that has created a state of ambiguity within the technology field. It is imperative that you stop all federal action and confirm the settlement.

Sincerely,

Shane Cosby
Partner

MTC–00030403

ROWLETT
CHAMBER OF COMMERCE
January 25, 2002
Ms. Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
Re: Microsoft Proposed Settlement Agreement

Dear Ms, Hesse:

It is time to end the pursuit of Microsoft. It is time to accept the terms of the recently negotiated settlement.

A vast majority of American consumers feel they have benefited from Microsoft products and feel Microsoft has contributed to the economic growth of the United States. I consider myself one of those American consumers.

The settlement worked out with the nation's top mediators will be good for everyone, consumers, businesses, the technology industry and the economy.

On behalf of the Rowlett Chamber Commerce being part of the Texas Association of Businesses and Chambers of Commerce and a spokesperson for the Rowlett business community I urge there be an end to the Microsoft case'', agree to a settlement that is in our nation's best interest.

Sincerely,

Mary Alice Ethridge
President/Executive Director
3910 Main Street . P.O. Box 610 . Rowlett, Texas 75030–0610
972/475–3200 . Fax 972/463–1699
e-mail: rowlett__chamber@rowlettchamber.com .
http://www.rowlettchamber.com

MTC–00030404

CHICAGO TECHNICS, Inc.
January 17, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft,

The antitrust suit against Microsoft has not had an adverse affect upon my technology-

based company as of yet, but if this suit were to continue, it would surely affect it. In a worst-case scenario, if Microsoft were broken up, I could go out of business, even though I am not employed by Microsoft. There are probably thousands of businesses like mine that would face the same problem. The settlement that was reached between Microsoft and Department of Justice promises to prevent any adverse effects if litigation is stopped.

Under the settlement, Microsoft has agreed not to retaliate against any computer makers if they ship software that would compete with its Windows operating system. Microsoft has also agreed to make all future versions of Windows to be compatible with non-Microsoft products. The settlement also establishes a three-person ''Technical Committee'' that will monitor Microsoft's compliance to it.

I also do not want to see Microsoft forced to open the code for Windows?? to the world. I would not want to be forced to buy my software from India, Germany, Japan or China. If you think that opening the source code to Windows?? will help Microsoft's competitors, what do you think it will do to those same competitors when they have to compete with companies in other countries. To continue litigation is to squander all the time and money spent formulating this settlement. The government must not waste such scarce resources amid recession. I urge you confirm this settlement and allow the industry to move ahead.

Sincerely,
John G Miller
President
Microsoft CERTIFIED Partner
?? Harbor Point Concourse,
155 North Harbor Drive,
Chicago, IL 60601 ??
(312) 938–0026??

MTC–00030405

Patricia Meluin
1011 Great ??and Read
Narth ??nd??ver, Massachusetts 01845
(978) 683–4396
January 24, 2002
Renata House
Trial Attorney
Antitrust Division
Department of Justice
601D Street NW, Suite 1200
Washington, DC 20530

Dear Attorney Hesse:

Please accept my comments for consideration during the public comment period in the Microsoft anti-trust case. I support the settlement agreement that has been reached in this case, and urge the court to accept it as written as soon as possible. This case has dragged on too long with little discernible public benefit, and ought to be concluded once and for all.

The other players in the high tech industry would be better served to have their research and marketing divisions work as hard as their lawyers and lobbyists. This case has never been about protecting the consumer from anti-trust abuses, as much as it has been about picking sides in the marketplace. We would all be better off if the case is settled, and everyone can get back to business.

It is a shame that so much taxpayers'' money has been wasted chasing one company in a competitive field; it would only make matters worse if we were left with government bureaucrats micromanaging the industry. Please don't allow the terms of the settlement to be expanded. They go far enough as it its.

Respectfully,
Patricia Melvin

MTC–00030406

Mega-Data
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft,

RE: Microsoft Settlement

I have been most disturbed by the Federal government's continued proceedings against Microsoft Corporation. In my opinion, the entire suit brought by the Federal government and several states was extremely ill-founded, and strikes a negative blow at the very heart of the free enterprise system through which this country has prospered

I bought my first ''personal'' computer in 1978. It was an Ohio Scientific brand, and it contained 3 separate CPUs and 3 separate operating systems. One of the operating systems was CP/M, which was the front-runner at that time. The second operating system was DOS (by Microsoft). I no longer remember the name of the third operating system, as it never became widely Used. There was no ''standard'' in PC operating systems at that time, but it was presumed at that time that CP/M would become the prevailing operating system.

Obviously, that did not happen. Microsoft's DOS and later its Windows operating system because the prevailing product in the market. There are many reasons for this, including:

1. Superior feature content which was readily accepted by users

2. Wide selection of compatible application software, due to a programmer-friendly development interface

3. Availability of information to enable developers to write applications to run on this operating system

4. Affiliate and partnership programs with developers, software and hardware vendors In short, Microsoft came to the forefront of the industry by offering ''a better mousetrap'' than the competition. The Federal government itself has affirmed this fact by making Microsoft products its own desktop standards. (Our company had the privilege of delivering training on Microsoft products to all of the regional offices of the General Services Administration several years ago.) Mega-Data Services, Inc, . 13667 Edith Road, Loxahatchee, Florida 33470–4911 Tel (561) 798–3940 . Fax (561) 798–3525 . e-mail: info @mega-data.com

Microsoft has contributed immensely to the prosperity of this country. And there are thousands of small businesses like ours that would probably not even exist today if we had not had the benefit of Microsoft's partner programs.

It is an extremely dangerous precedent to allow a competitor in the open market to bring suit when it fails to ''win'' in the market place. Forcing a company to share its proprietary and confidential research and development information in order to allow its competitors to better compete squelches the free market initiative to invest in R&D. It also has a decidedly malodorous aura of Socialism.

In my opinion, this continued legal action is motivated as much by the anticipated revenues of the legal firms involved as by the competitors'' wishes to gain marketplace by any means possible - an obvious instance of the ''deep pockets'' syndrome. Even though the settlement goes further than original complaints in the suit, Microsoft has chosen to settle so that it and the market can move forward The settlement requires Microsoft to disclose information regarding how it develops it software. Microsoft has also agreed not retaliate against computer-makers that may ship software that would compete with its Windows operating system. Just these two remedies by themselves will have an enormous impact on Microsoft, but there are even more stipulations than that, as you are well aware.

Although I firmly believe that Microsoft should not even be subject to these settlement requirements because I believe it won the prevailing market position by offering superior products, it would be beneficial to the entire industry and to this country to confirm the current settlement agreement and move on to other issues. Therefore, we are urging you to confirm the current :Settlement agreement as soon as possible and let the IT industry be free to develop products in an unfettered free enterprise environment.

Yours truly,
Patricia McDermott-Wells President
Tel (561) 798–3940 .
Fax (581) 798–3525 .
e-mall: info@mega-data.com

MTC–00030407

551 Blue Spruce Road
Alpine, UT 84004
January 22, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft: I am thoroughly disgusted with the outright refusal of half of the plaintiff states in the Microsoft antitrust case to accept the settlement. It has not only had a negative impact on the economy and impeded the progress of the technology industry, but it has also cost the parties involved a great deal of time and money. I cannot imagine how Utah plans to finance additional litigation against Microsoft. Not only that, but it appears that the only reason flint these nine states are pursuing litigation against Microsoft is because the plaintiff states in the big tobacco suit were able to make such a profit off of their lawsuit.

The settlement, is, I believe, a little too heavy-handed with Microsoft. Microsoft has done its best to wrap up the case as speedily as possible, and I believe that is in the best interest of all parties involved to settle. The terms agreed upon are sufficient to prevent further antitrust violations. For example,

Microsoft has agreed not to enter into any contracts that would require a third party either to sell or distribute Microsoft products at a fixed percentage. The agreement also allows for a leveling of the playing field in the technology market. Microsoft's competitors, for instance, will be allowed to introduce their software into Windows, and Microsoft: has agreed to reformat the Windows operating system to this end.

I do not believe it is necessary for Microsoft to be held further accountable in the antitrust suit. No additional action needs to be pursued on the federal level. This has gone on for long enough, and, frankly, I think it's starting to do more harm than good. I urge you to support the settlement.

cc: Repres entative Chris Cannon

Sincerely,

Nathan Larsen

MTC–00030408

William Hunnicutt
7904 Briarwood Lane
Urbandale, IA 50322
515–7274854
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
January 25, 2002
Re: Microsoft Settlement

Dear Ms. Hesse:

Microsoft's competitors are guilty of tying up the courts with litigation based on unsubstantiated, personal vendettas. I am even more appalled, however, that there are State Attorneys General pushing the case, seemingly more eager to make a name for themselves than adhere to the rule of law. As a consumer, I see no benefit in the continuation of protracted litigation based upon the spurious public interest proffered by the remaining States. Indeed, not only have millions of tax dollars been wasted, this frivolous litigation has taken money out of our economy as investors hold their breath, watchful of government involvement in business.

The Department of Justice has settled the case, as have a handful of State Attorneys General. The stolid AGs remaining should follow their lead. A suitable settlement is on the table and there is nothing left to gain. I appeal to you to use your power to put an end to this prejudicial litigation so that the country, the economy, trod the Court can focus on the more substantive issues that face our nation today.

Sincerely,

William Hunnicutt

MTC–00030409

25 January, 2002
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
Suite 1200
601 D Street NW
Washington, DC 20530–0001

To whom it may concern:

Pursuant to the Tunney Act, I am writing to express my opposition to the Proposed Settlement in the: United States vs. Microsoft antitrust case. The Proposed Settlement places much-needed restrictions on Microsoft's licensing practices by preventing Microsoft from retaliating against OEMs who ship Personal Computers that include both a Windows Operating System Product and a non-Microsoft Operating System. However, the Settlement completely ignores a critically important class of licenses: End-User License Agreements (EULAs).

Microsoft uses EULAs as a lever against competing Operating Systems with the ability to run Microsoft Windows programs. For example, the Microsoft Windows Media Encoder 7.1 Software Development Kit (SDK) EULA states in part:

...You may install and use the SOFTWARE on a single computer to design, develop, and test your software application products that utilize Microsoft Windows Media technology (your ''Application'') for any version or edition of Microsof5 Windows 98, Microsoft Windows NT 4.0, Microsoft Windows 2000 operating system or any Microsoft operating system that is a successor to any of those operating systems (the ''OS Platforms'')...

Thus even if a competing Operating System has the technical ability to run Microsoft software, the user is prevented from doing so by the EULA because it is not a ''sanctioned'' Microsoft Operating System. Microsoft doesn't stop there, however. The same EULA prevents the software from even being distributed with an Open Source system:

...you shall not: distribute the REDISTRIBUTABLE COMPONENT in conjunction with any Publicly Available Software. ''Publicly Available Software'' means each of (i) any software that contains, or is derived in any manner (in whole or in part) from, any software that is distributed as free software, open source software (e.g. Linux) or similar licensing or distribution models; and (ii) any software that requires as a condition of use, modification and/or distribution of such software that other software distributed with such software (aa) be disclosed or distributed in source code form; (bb) be licensed for %he purpose of making derivative works; or (cc) be redistributable at no charge. Publicly Available Software includes, without limitation, software licensed or distributed under any of the: following licenses or distribution models, or licenses or distribution models similar to any of the following: GNU's General Public License (GPL) or Lesser/Library GPL (LGPL); The Artistic License (e.g., PERL); the Mozilla Public License; the Netscape Public License; the Sun Community Source License (SCSL); and the Sun Industry Standards License (SISL)...

Thus, through their EULAs Microsoft is able to effectively retard or even halt development of competing Open Source systems which might otherwise be competitors. However, they are still not satisfied with such restrictions. Microsoft goes further by placing limits on the end user's right to Free Speech. For example, the EULA included with Microsoft FrontPage 2002 (an application for creating web pages) states in part:

...You may not use the software in connection with any site that; disparages Microsoft, MSN, MSNBC, Expedia, or their products or services...

Thus, Microsoft is not content to simply squelch competition, they insist on squelching Free Speech as well.

The Proposed Settlement is a good start, but until it limits the restrictions Microsoft is permitted to place in their EULAs. the Settlement will be insufficient to curb their anticompetitive behavior.

Regards,

Tristan Fillmore

Redwood City, CA

MTC–00030410

Thomas D. Hogen
30074 Village Park Drive
Chapel Hill, NC 27517
(919) 967–5574
FAX (919) 967–1668
Email Thogen1535@aol.com
January 25, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I want to use this opportunity to convey my thoughts on the settlement between Microsoft and the Department of Justice. I believe the settlement is a good development for the economy and will end this unwarranted litigation. The settlement is strong and requires many concessions from Microsoft. And these concessions are backed by very strong enforcement measures. These measures include the creation of a Technical Committee to monitor Microsoft's actions. Also, any third party that believes Microsoft is not meeting their obligations can file a complaint with the Technical Committee, the Department of Justice, or any of the State plaintiffs that are party to the agreement.

Both sides in this dispute will benefit from this settlement. Microsoft can focus their attention on developing new technology that will make businesses more efficient. And the government will be able to focus on more urgent matters, such as stimulating the struggling economy and prosecuting our country's enemies.

Microsoft has been helpful to me in their supply of quality products.

Sincerely,

Thomas Hogen

MTC–00030411

DARRYL C. TOWNS
Assemblyman 54th District
Kings County
?? DISTRICT OFFICE:
264 Jamaica Avenue
Brooklyn. New York 11207
(718) 235–5627
FAX (718) 235–5966
?? ALBANY OFFICE:
Room 435
Legislative Office Building
Albany, New York 12248
(518) 455–5821
FAX (518) 455–5591
THE ASSEMBLY STATE OF NEW YORK
ALBANY
January 23, 2002
CHAIR
Legislative Commission on Science and

Technology
CHAIR
Sub-Committee on Mass Transit
COMMITTEES
Banks
Children & Families
Health
Mental Health
Oversight, Analysis & Investigation
Transportation
Veterans Affairs
MEMBER
Black, Puerto Rican & Hispanic Legislative Caucus
Puerto Rican/Hispanic Task Force
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
RE: Comments on the Microsoft Proposed Settlement Agreement

Dear Ms. Hesse:

It goes without saying that the settlement agreement between the U.S. Government and Microsoft comes at a critical time when our economy and nation most need reconciliation. Microsoft is a company that has long provided good products to consumer and businesses, and it provides opportunities for other software companies as well to develop programs for the Windows platform. The provisions of the settlement, worked out with one of the nation's top mediators, will be good for consumers, businesses, the tech sector and the economy as a whole.

I fully support the Department of Justice and the nine Attorneys General for their efforts to finally put an end to this case and agree to a settlement that is in our nation's best interest. I congratulate you on developing a strong but fair settlement.

Sincerely,
Darryl C. Towns
Member of Assembly

MTC–00030412

January 25, 2002
Ms. Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I appreciate the chance to offer my comments on the Microsoft settlement. It is important to note that the settlement gives computer users a great deal of flexibility. To be able to remove or reinstate products like an Internet browser, tools for instant messaging and email is remarkable. This will make it much simpler for users to switch and compare with other products available in the marketplace. The technology industry, the economy and consumers are all better off with the speedy settlement of this case.

Sincerely yours,
Elizabeth G. Ludden

MTC–00030413

Louise Fontaine Ware
3222 Grove Avenue
Richmond, VA. 23221
January 25, 2002
Ms. Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
Washington, DC 20530
Re: Microsoft antitrust suit

Dear Ms. Hesse:

Please accept my comments regarding the proposed settlement in the Microsoft antitrust suit. It is my understanding that the settlement imposes a broad series of restrictions and affirmative obligations on Microsoft, I have read that these restrictions and obligations extend to products and technologies that were not at issue in the lawsuit as welt as aspects of Microsoft's business and product development that were not found to be unlawful by the Court of Appeals.

Microsoft appears to be making more that a good-faith effort in order to conclude this case, I hope that the Department of Justice will agree with the proposed consent decree and allow this settlement

Sincerely,
Louise F. Ware

MTC–00030415

Herb Boome
506B Spring Lake Road
Ocala, FL 34472
January 25, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

After three long years of expensive court battles, Microsoft and the government have settled an antitrust suit that will permanently change the face of the computer industry. I think this will boost our economy, because it will free this innovative company to focus on what it does best. The agreement they came up with was the result of extensive negotiations with a court-appointed mediator. The company agreed to terms that extend well beyond the procedures and products that were actually at issue in the suit. For the sake of expediency—and a first in an antitrust settlement—Microsoft has even agreed to document and disclose, for use by its competitors, various interfaces that are internal to Windows'' operating system products.

The Federal Government has many more important issues to tackle. It should allow the provisions of this settlement to fall into place.

This agreement notwithstanding, I do not see any reason for the government to sue Microsoft in the courts ever again.

Sincerely,
Herb Boome

MTC–00030416

Randy Hoffman 27633 SE 400th Way
Enumclaw, WA 98022
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The reason for this letter is to request that you make a good effort to ensure the settlement reached in the Microsoft antitrust case becomes a really.

Challengers and foes of Microsoft may pressure officials to delay this settlement in favor of continued litigation in this case. They arc working under the premise that the courts should punish Microsoft. I do not believe the courts should be used in this way.

Furthermore the settlement that is being offered is a good agreement. The settlement will allow easier placement of non-Microsoft products on Microsoft operating systems; including easier removal of Microsoft components. Additionally the settlement will permit computer makers to place non-Microsoft operating systems on computers with fewer restrictions, even if they also use Microsoft systems. Moreover the settlement creates a technical review committee that includes a full time government monitor to ensure all elements of the settlement are enforced. It is clear that this settlement should be implemented and this settlement is good.

Sincerely,
Randy Hoffman

MTC–00030417

MANAGED BENEFIT
S E R V I C E S I N C
263 Summer Street
Boston, MA 02210
Tel: 617,946–B700
Fax: 617–946–8744
Diane P. Davis President
January 24, 2001

I am writre8 to have my thoughts on the proposed settlement between Microsoft and the United Sates Department of Justice entered into the record in accordance with the Tunny Act's requirement of public comment on such settlements.

I think the settlement plan is a good one, and one that reaches the necessary balance between antitrust enforcement and the need for as competitive a software market as the U.S, economy can have. Consumers benefit from a competitive market in ways that the kind of regulations previously argued in this case would nullify. Whereas a free and competitive market will drive down prices and hasten the pace of innovation, a heavily regulated market, or a software market including a carved-up Microsoft would slow the pace of innovation and allow companies to sit on their hands and let prices gradually rise.

Consumers deserve the best high tech market available to them. and the best high tech market is the one that innovates. The innovations of the last decade were primarily responsible for the creation of jobs, investment and wealth at rates never before witnessed in any economy anywhere, The success of the ''New'' Economy in the 1990s was not a boomlet, m my view, but a harbinger of things to come in the future, if the government will allow consumers and entrepreneurs to successfully guide the market toward higher levels of competition and innovation.

I hope my thoughts cart be entered into the record and also hope the court ?? fit to approve the seulement proposal. It is the heal way for the economy to start to put this recession behind it and begin to build for the future.

Sincerely,
Diane P. Davis

MTC–00030419

January 25, 2002
Renata Hesse, Trial Attorney VIA FACSIMILE
Antitrust Division,
Department of Justice
(202) 616–9937
601 D Street NW, Ste. 1200
Washington, DC 20530
Dear Ms. Hesse:

Each time I think about those Enron employees whose 401k retirement accounts have been obliterated to nothing, my heart goes out. In this day and age, all of us are counting on corporate stocks to provide for our years after we finish working. That is why I hope the courts will resolve this Microsoft case by approving of the settlement.

Hundreds of thousands of Americans are now going to work longer than they, originally planned because of the recent stock market crash. I believe the uncertainty this case against Microsoft causes in the market is very threatening to those of us who are using the market to finance our retirement. This case has too much significance with too many people to get caught up in insignificant issue. It is time to settle.

Sincerely,
Chris Ernst

MTC–00030420

P.O. Box 7322
Arlington, VA 22207–0322
(703) 598–4293—ofc
(413) 723–5038—fax
To: Renata B. Hesse
Prom: G. Andrew Duthie
Antitrust Division
U.S. Department of Justice
Fax: (202) 307–1454
Pages: 3
(202) 616–9937
Phone:
Date: 1/25/2002
Re: US v. Microsoft Settlement
cc:
Comments:
Attached is a letter from my company in support of the proposed settlement of the Microsoft antitrust lawsuit.
Graymad Enterprises, Inc.
P.O. Box 7322
Arlington, VA 22207–0322
January 25,2002
Renata B. Hesse
Antitrust Division,
U.S. Department of Justice
601D. Street NW. Suite1200
Washington, DC 20530–0001
To Whom It May Concern:

I am writing to express my support for the proposed settlement of the Department of Justice's antitrust suit against Microsoft Corporation, and my dismay at the actions of Microsoft's competitors in trying to derail this settlement. As a software developer, author, conference presenter, and small business owner, I have been working with Microsoft products for more than 5 years professionally, and for many more years in my personal life. I have also from time to time attempted to use products from Microsoft's competitors, including the Linux operating system, Sun Microsystems'' Solaris operating system (for the Intel platform), and database software from Oracle. In every case, I have found these products to be manifestly inferior to those I have used from Microsoft.

What's more, despite the ongoing assertions on the part of Microsoft's detractors and competitors that their purported monopoly has crushed innovation and harmed consumers, I find that Microsoft's operating system products have improved more during the period during which they were found to have a monopoly than at any period prior. Microsoft's Windows XP operating system is more stable, more secure, easier to install, and compatible with more devices than any Microsoft operating system I have worked with prior, and is far superior to any other operating system I have used, regardless of vendor. All of this is to say that I do not believe that it is Microsoft's alleged monopoly that has held back its competitors. Rather, it is these competitors'' inability (or unwillingness) to provide products and services that rival Microsoft's offerings in either value or quality.

Case in point of this is the Navigator browser, offered by Netscape Communications, now a division of AOL-Time-Warner, which recently filed suit against Microsoft in what appears to be an effort to derail the antitrust settlement through negative publicity. But Netscape did not lose the 'browser wars'' because of anti-competitive conduct on Microsoft's part It lost because it failed to produce a superior, or even equal, product. I say this as one who has developed Web applications for both Internet and intranet use, and who has had to code around flaws in Navigators support for accepted Web standards, and flaws in the implementation of the JavaScript language for browser interactivity (which was introduced by Netscape). Since version 4.0, Microsoft's Internet Explorer browser has been superior to Navigator in performance, standards compliance, and features, and has consistently been reviewed as superior in trade magazines. This is why Netscape lost, not because of Microsoft's actions, which were certainly not unusual in a competitive market.

I am also disturbed by the continuing trend of supposedly independent entities, such as ProComp, and most recently, the American Antitrust Institute, attempting to influence the outcome of the antitrust case and the settlement, without fully disclosing that they are, in fact, wholly or partly funded by Microsoft's competitors. For example, from the ProComp Web site (http://www.procompetition.org/procomplindex.html):

Among the companies and trade associations supporting ProComp are: American Society of Travel Agents, Computer and Communications Industry Association, Corel, Netscape Communications Corporation, Oracle Corporation, Preview Travel, Software Information Industry Association, Sun Microsystems, Inc., The Air Transport Association, the SABRE Group, Sybase, and worldweb.net. A number of other companies and organization are also working with or supporting ProComp but do not choose to be publicly identified at this time. Corel, Netscape, Sun Microsystems, and Oracle Corp. are all direct technology competitors to Microsoft, while the American Society of Travel Agents and the SABRE group (which operates the Travelocity.com travel Web site) are competitors to Microsoft's Expedia travel Web site. That these competitors are weighing in via a supposedly independent third party should be viewed with some skepticism, in my opinion. The American Antitrust Institute, meanwhile, is funded by, among others, Oracle Corp.:

Funding for the AAI comes from corporations such as Oracle, as well as from trade associations. foundations, and law firms.

Source: http://www.antitrustinstitute.org/recent/82.cfm

The voices of these advocacy groups, funded by Microsoft's harshest competitors, should not be allowed to drown out the voices of satisfied consumers across America, who have made their satisfaction clear by voting for Microsoft again and again with their wallets, despite the longtime availability of such alternatives as Linux and FreeBSD (both free operating systems whose adherents claim they are technically superior to Windows), and the products of Apple Computer, including their newest iMac computer, which recently was given the cover of Time magazine, if a company that is able to get its products on the cover of a national magazine cannot win in the marketplace, it is not due to lack of consumer awareness. Rather, it is due to not offering consumers what they want. Apple, true to form, has priced its new machine higher than comparable Windows-based machines, counting on the ''leading-edge'' style of their machines to increase their popularity. Whether this is a smart strategy or not remains to be seen, but it is a decision that should be made in the marketplace, not in the courts, and not due to political lobbying by Microsoft's competitors.

I and other small businessmen like me, am able to contribute significantly to the health and ongoing growth of the American economy in large measure because of the many productive tools provided by Microsoft. The antitrust trial, and other legal maneuverings by Microsoft's competitors, however, can only impose unnecessary costs on businesses and consumers alike. I strongly urge you to complete the proposed settlement with Microsoft, and end the antitrust action against them with all haste. Doing so will benefit consumers and competitors alike be removing a significant drag on the information technology industry.

Respectfully,
G. Andrew Duthie
President, Graymad Enterprises, Inc.

MTC–00030421

Rich Jasper
7305 Soundview Drive, Unit #702
Gig Harbor, WA 98335
January 25, 2002
Attorney General John Ashcroft

US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I believe the antitrust settlement case between Microsoft and the U.S. government is fair and reasonable, and I agree with the terms.

Microsoft has agreed to remove technical and contractual barriers to computer makers or consumers shipping or installing competing operating systems, applications, and other software. In fact, Microsoft has gone well beyond the products and procedures covered in the actual suit itself. Clearly, they are being cooperative and doing what they can to resolve this matter.

In this context, continuing with litigation would not merely be damaging to the economy and the consumer, but also unfair. The settlement that has been developed was done so in good faith by both parties and now is the time to eliminate the cloud hanging over this situation and let Microsoft get on with their business.

I believe the settlement is in the best interest of the people, industry, and economy of our state of Washington. Let's get this behind us and move on with our lives.

Sincerely,
Rich Jasper

MTC–00030422

R.D. 4, Brown's Run Road
Wheeling, WV 26003
January 23, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Ave, NW
Washington, DC 20530–0001
RE: Microsoft Settlement

Dear Attorney General Ashcroft:

We have had Microsoft Windows on both of our computers, as well as, our previous computers, and use the internet extensively; however, we have never used the Microsoft Internet Explorer product that was ''maliciously'' bundled with the Windows Program. We preferred to use our local internet service provider and Netscape.

We are writing to you today to express our opinion in regards to the antitrust case being settled with Microsoft. We feel that this has drawn on long enough, and we would be truly relieved to see this issue settled. We sincerely hope that there will be no further action against Microsoft, as settling with this company would be in the best interest of our economy, which certainly needs all the help it can get at this time.

We are happy with this settlement and believe it is fair. Thank you for your time and effort in reaching an agreement with Microsoft. Also, thank you for the great job you are doing for our country, during this time of crisis.

Sincerely,
Charles Monfradi
Dolores Monfradi

MTC–00030423

M. David Stirling
P.O. Box 1000
Walnut Grove, CA 95690
January 25, 2002
To: U.S. Department of Justice
From: M. David Stirling
Subject: Microsoft Settlement

This letter is submitted pursuant to the Tunney Act public comment provision.

I served as Chief Deputy Attorney General of the California Attorney General's Office between January 1991 and December, 1998. The Chief Deputy is the chief operating officer of the California Department of Justice and more than 4,500 employees. Within the Legal Divisions of the Attorney General's office, 1, as Chief Deputy, provided overall general supervision and direction to the approximate 1,000 deputy attorneys general (lawyers), including the deputies in the Anti-trust Section and the Consumer Law Section of the Public Rights Division. From this experience, I am knowledgeable regarding the law of anti-trust and the law of unfair competition/business practices.

During my eight years as Chief Deputy, one of my primary concerns within the office was the consumer-activist, anti-business attitude of deputies in these sections, as well as their case filing motivations and litigation practices. Generally speaking, instead of working mine with amenable businesses to gain compliance with the laws, the attitude was to file suit immediately, and, using the vast resources of the state, leverage the defendant business into an eventual settlement at a higher dollar amount than perhaps the legal violation justified. While I attempted to reign in the use of this approach, my efforts were only partially successful due to its entrenched nature and the protections of civil service

My ''second-in-command'' position in the largest state attorney general's office in the country also gave me the opportunity to work with and observe elected state attorneys general, including how they regard their powerful roles, including how they prioritize the use of the legal resources of their offices. And while their general philosophy as reflected by their political party affiliation is a factor, in large, high-visibility cases, at least three other considerations play a more direct role in their litigation decisions. Indeed, in the case of the U.S. Justice Department's settlement of its anti-trust case with Microsoft, the decision by nine state attorneys general, including California's, to go forward with the anti-trust/unfair competition litigation against Microsoft is influenced by one or more of these other considerations. It is the position of this writer that none of these considerations constitute legitimate legal justification for their separately proceeding with the litigation.

First Consideration: Some of these nine elected state attorneys general are up for re-election in November, 2002. For those, there is much political visibility to be had, and spin to be made of a scrappy state attorney general not taking the easy road of settlement, but fighting the giant software company alone in court on behalf of higher state's residents. And if these nine state attorneys general prior to the November elections are able to settle their cases against Microsoft (mostly likely not having anything to do with the particular merits of their cases) for amounts larger Than what the Justice Department settlement provided, then the political mileage they will garner for carrying on the fight will be played to the hilt.

Second Consideration: Some of the nine state attorneys general have based in their states high technology companies that are not only competitors of Microsoft, but were the chief complainants against Microsoft in the Justice Department's anti-trust litigation. None of those competitors are satisfied with the federal Microsoft settlement, and each is pushing for their attorney general to go forward with the litigation against Microsoft. It could also be assumed that these companies have been, or have indicated their intention at a future time to be, political financial supporters of their state attorney general.

Third Consideration: Despite Judge Jackson's judicial finding that consumers were not harmed by Microsoft's marketing practices, the consumer-activists among the nine state attorneys general are driven by Microsoft's potential as an even bigger ''cash cow'' than the tobacco industry. In the mid-'90s, one state attorney general hired a local plaintiffs'' lawyer on a contingency fee arrangement to sue the tobacco companies. The notion of the states hiring contingency-fee lawyers to simultaneously wage legal warfare against the giant tobacco industry, without incurring the legal expenses or risks of litigation, quickly lead to a nationwide alliance between the states'' elected attorneys general and well-connected plaintiffs'' lawyers. In December, 1998, this powerful alliance settled its multiple lawsuits against the tobacco industry for $246 billion over 25 years. For the 200 to 300 contingency-fee lawyers who teamed with the state attorneys general, the Hudson Institute's Michael Horowitz estimates they will share $500 million each and every year—probably in perpetuity. This powerful alliance between state attorneys general and their favorite members of the plaintiffs'' bar still exists. It has been estimated that there are as many as 100 separate lawsuits against Microsoft filed by these lawyers in multiple jurisdictions around the country (for maximum leverage). These suits are not nearly as valuable, nor are there chances of establishing liability against Microsoft as great, under the Justice Department's settlement with Microsoft as they would be if these nine attorneys general are allowed to try to establish in court a greater degree of liability against Microsoft. Finally, those state attorneys general who have reputations as consumer-friendly and anti-business have reason to keep their state's plaintiffs'' bar happy. The plaintiffs'' bar is a major political funding source for those attorneys general. Consider how much of the enormous attorneys fees they received and will continue to receive from the tobacco settlement went to their favorite state attorneys general as political contributions.

All of the foregoing considerations undermine the nine state attorneys generals'' given reasons for being allowed to litigate against Microsoft beyond the Justice Department-Microsoft settlement. As in California, when a ''consumer-friendly, anti-business'' attorney general gives the green light to activist attorneys in the Anti-trust and Consumer Law sections of his office, the question of the legal validity of his case and whether it is so compelling as to warrant continued litigation beyond the Justice

Department-Microsoft settlement becomes lost in the political agendas of the numerous players involved.

Thank you for your consideration.

M. David Stirling

MTC–00030424

FAX
TO Department of Justice
Fax: 1–202–307–1454 or 1–202–618–9937
FROM Daniel Jones
SUBJECT Proposed Microsoft settlement
DATE 25 January, 2002
PAGES 1 (including this header)

I would like to express my opposition to the proposed antitrust settlement with Microsoft. I work in the information technology area, and can see clearly the ways that Microsoft takes unfair advantage of it monopoly position. This behavior continues even as the proposed settlement is being considered.

The narrow terms of the proposed settlement may hinder some of Microsoft's practices. Personally I think even that doubtful, but for the sake of argument [illegible]. However the outlines of equally effective substitute strategies can already be seen.

For instance, using its operating system monopoly as leverage. Microsoft used bundling of software to destroy potential competitors. That might be hindered by the proposed settlement. (Though even that is doubtful given the ease with which cosmetic changes in version numbering or file naming might be used to circumvent restrictions.) Even so Microsoft is already employing a highly different strategy [illegible] to systematically subvert industry standards that might allow competitors a niche in which to develop. For instance, Microsoft has ''extended'' euphemism for [illegible] subverting) the Javascript language used for many websites. It has then bundled tools for developing websites that incorporate these extensions in such ways that only the Microsoft Internet Explorer can properly access them This sort of Trojan Horse strategy is not addressed at all by the proposed settlement.

In my opinion there are very few ways to address the undesirable effect of the Microsoft monopoly. One would be to require that Microsoft publish ALL operating system APIs down to the least significant [illegible] call. Such publication would have to be done sufficiently far in advance that any developers could incorporate them. They could also have to be fully public, not simply available to a select group of major developers. Very harsh penalties would have to be in place for violations. Even so, this approach would remain open to manipulation.

The other approach is the one originally decided upon by the courts. Microsoft should be broken into two or more completely separate companies.

Whatever the ideal solution. It is clear that the proposed judgement is almost completely toothless. It appears to be a political fig leaf to allow the Justice Department to walk away from its legal responsibilities. Hopefully the courts will have more integrity.

Daniel Jones

MTC–00030425

SWS Integration, LLC
IT Integration, Management and Technical Support
January 23, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

I am writing to offer my support for the recent settlement between Microsoft and the Department of Justice. As a small business owner of a technology company, this has been a very important topic for me. Even though the anticipated Impact upon my company would have primarily been limited to higher prices for Microsoft products, It Is far better to have this lawsuit and all the bad publicity that it generated behind us.

I am not acquainted with all of the details of the settlement, but what I have heard is certainly good in that It will cause Microsoft to handle Its relations with computer makers and others to be improved with greater flexibility. This Is good for consumers as well as for IT customers that Microsoft serves, including small businesses like ours that depend on new Industry innovations. The provision that forces Microsoft to share more of its source code with software developers concerns me, but since Microsoft has agreed to that provision as well I see no reason to think that the company will not be able to adequately control the integrity of its own product.

I am supportive of the agreement, in that It is better to have this lawsuit resolved. I am hoping that no further action will be necessary, in that consumer confidence in the computer industry needs time to rebuild.

Sincerely,
Tina Filla
CTO
1840 130th Ave, NE, Suite One,
Bellevue, WA 98005
Tel: 425–881–3332
Fax: 425–869–6114

MTC–00030426

Thomas C. Morton
20 Harleston Green
Hilton Head Island, 5C 29928
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The purpose of this letter is to express my support of the Microsoft settlement. After three years of litigation, I feel it is time that this issue is finalized. I strongly dispute the merits of this case, yet I believe the settlement of this case is in the publics'' best interest. I urge the Justice Department to enact the settlement with haste.

Further Microsoft has given up much under the terms of the settlement in the hopes of finding a resolution. Microsoft has agreed to relax relations with software developers so that developers will now be able to enter into multiple contracts with competing employers. Developers will also have access to the Windows design interfaces. This will allow developers to create software that is increasingly compatible with Windows.

Obviously Microsoft has done their part to resolve this dispute. I would hope that the Justice Department recognizes the importance of enacting this settlement.

Sincerely,
Thomas C. Morton
cc: Senator Strom Thurmond

MTC–00030427

Attorney General of New Mexico
P.O. DRAWER 1508
SANTA FE, NM 87504
(505) 827–6000
FRONT OFFICE FACSIMILE
(505) 827–5826
PATRICIA A. MADRID
Attorney General
STUART M. BLUESTONE
Deputy Attorney General
TO: Renata Hesse: Anti-Trust Division
DATE: 01/25/2002
FAX: (202) 307–1454
FROM: Attorney General Patricia A. Madrid
PHONE: (50.5) 827–6000
TOTAL NUMBER OF PAGES INCLUDING THIS PAGE: 2
MESSAGE:
PO Drawer 1508
Santa Fe, New Mexico 87504–1508
505/827–6000
505/$27–5S26 Fax
PATRICIA A. MADRID
Attorney General
January 25, 2002
Attorney General of New Mexico
STUART M. BLUESTONE
Deputy Attorney General
Renata Hesse
Antitrust Division
US Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001
Re: Proposed Settlement with Microsoft

Dear Ms. Hesse:

As Attorney Genera of New Mexico, I determined shortly after the decision by the U.S. Court of Appeals for the District of Columbia that the Microsoft antitrust lawsuit should not be litigated any further and was ripe for a speedy resolution. I believed that the litigating stales'' continued pursuit of a structural remedy was no longer appropriate. Accordingly, in July 2001, I was the first to enter into a separate settlement agreement with Microsoft for the State of New Mexico. It was my hope that this decision to settle would open the way for the remaining litigating states to pursue their own acceptable settlement terms.

I am glad to see that hope finally realized. I have been of the firm belief that k was time to settle this case and to move forward. I believe the current settlement pending between Microsoft and the Department of Justice and nine of the remaining litigating states imposes appropriate conduct sanctions, while not unduly inhibiting Microsoft's ability to innovate and market its products. I believe that the best interests of consumers, the computer industry, and the national economy will be served by bringing this lawsuit to this agreed-to conclusion.

Sincerely
PATRICIA A. MADRID

ATTORNEY GENERAL
PO Drawer 1508
Santa Fe. New Mexico 87504–1508
505/827–6000
Fax 505/827–5826

MTC–00030428

11501 Steele Creek Drive
Ch??rl??ne, NC 29273
facsimile transmittal
To: Attorney General John Ashcroft:
Fax: 1–202–307–1454
From: Ronald E. Hostetler
Date: 01/25/02
Re: Microsoft Settlement
Pages: 2
CC: Strom Thurmond
FAX: 202 224–1300
972 Eagle Drive
Rock Hill, SC 29732–9007
January 22, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

For more than three years now, the unfortunate Microsoft lawsuit has occupied the attention of the entire software industry. The resulting uncertainty about the future of the technology sector has discouraged hightech investment and damaged the economy. Fortunately, your department and Microsoft have recently agreed on a settlement.

Under its terms, Microsoft must now disclose important proprietary information regarding its Windows product to competitors. Microsoft must also function under the permanent scrutiny of a three-person technical committee. These two parts of the settlement should be enough to show that Microsoft is willing to do whatever it takes in order for the federal government to get out of the Microsoft's private business dealings.

Those who wish to see the lawsuit continue past the stipulated period of public comment are more concerned with how to take more of Microsoft's money than they are for the public interest in the case. Ending the suit now is imperative to the future of Microsoft and for the good of the IT industry. We urge you to do all you can in seeing the currently proposed settlement formalized as soon as possible.

Sincerely,
Ronald & Carol Hostetler
cc: Senator Strom Thurmond

MTC–00030429

Ray and Barbara Merritt
37082 S.
Rock Crest Drive,
SaddleBrooke Resort,
Tucson, Arizona 85739
<>(S20) 818–0130
<>Fox (520) 818–0129
<>E-Mail ExKodaker@AOL.COM<>
Bate: January 25, 2002
To: U.S. Attorney General John Ashcroft
Fax #: 1 202 307–1454 or 1 202 616–9937
Total # of pages including cover sheet: 2
From: Raymond & Barbara Merritt
Subject: Microsoft settlement.
Raymond & Barbara Merritt
37082, S. Rock Crest Drive
SaddleBrooke Resort
Tucson, AZ 85739–1176
January 16, 2002
Attorney General John Ashcroft
U.S. Justice Department
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

This is a short note with tall intention. After almost four years of litigation, negotiation, controversy and self-serving political posturing, would you and the Administration please see you're way clear to settling the Microsoft case?

This case is ripe for settlement. The main parties have reached an agreement. The court supports it. The settlement addresses the salient complaints and concerns of ALL the parties. There is no justifiable reason to prolong this process.

The proposed settlement will essentially require Microsoft to refrain from any future trust-like activities. The company will be required to reconfigure its Windows systems so as to readily accommodate other company's software. It will have retool its product licensing practices to the benefit of the major computer manufacturers. It will in a nutshell have to open itself up to competition. These concessions and others more than justify the government's blessing and support of the settlement.

For the sake of our economy and the future of the IT industry a settlement is appropriate and needed now.

Sincerely,
Raymond Merritt
Barbara Merritt

MTC–00030433

GOD FIRST MENTALITY INCORPORATED
P.O. BOX 444
ALBION, MI 49224
Phone (517) 629–5227
Fax (517) 629–5227*51
Microsoft Corporation
One Microsoft Way
Redmond, WA 98052–6399
ATTN: William Neukom

On December 2, 1998, I faxed you a letter. It refers to the micro-processing of privacy invasion. This involves a tort system. It is a wrongful act, not including a breach of contract or trust, that results in injury to another person, property, reputation, or the like, and for which the injured party in entitled to compensation. The dishonest computer hackers need to be prosecuted. Privacy invasion is a violation of the U.S. constitution. I believe its'' in Microsofts'' best interest to compensate for damages suffered. Microsoft can participate in acknowledging the relentless pursuit of injury to our central nervous systems. I will be informing the Inspector General at the U.S. Justice Department.

I have been online for nearly 1900 consecutive days, around the clock.

Environmental Defense Fund in Washington DC has offered to support me.

My case is about how word processors are converting electrical pulses into sound that is compressed and decompressed into digital code. It refers to software that has not been processed into voice recognition. Microsoft has not acknowledged this either. These interfaces have me a centralized PC within a Public Switched Telephone Network. I need these signals or pulses converted into modulation transmitted above the threshold. This will help me regain my privacy. Considering all the devastation, I will settle for a 1 billion dollar settlement. I will consider any, out court, counter offer. Please, have someone contact me by mail, phone call or fax at your earliest convenience.

YOURS IN CHRIST
gfm inc.

MTC–00030441

Thomas D. Hogen
30074 Village Park Drive
Chapel Hill, NC 27517
(919) 967–5574
FAX (919) 967–1668
Email Thogen1535@aol.com
January 25, 2002
Attorney General John Ashcroft US
Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I want to use this opportunity to convey my thoughts on the settlement between Microsoft and the Department of Justice. I believe the settlement is a good development for the economy and will end this unwarranted litigation.

The settlement is strong and requires many concessions from Microsoft. And these concessions are backed by very strong enforcement measures. These measures include the creation of a Technical Committee to monitor Microsoft's actions. Also, any third party that believes Microsoft is not meeting their obligations can file a complaint with the Technical Committee, the Department of Justice, or any of the State plaintiffs that are party to the agreement.

Both sides in this dispute will benefit from this settlement. Microsoft can focus their attention on developing new technology that will make businesses more efficient. And the government will be able to focus on more urgent matters, such as stimulating the struggling economy and prosecuting our country's enemies.

Microsoft has been helpful to me in their supply of quality products.

Sincerely,
Thomas Hogen

MTC–00030442

DEPT. OF JUSTiCE
MS. RENATA B HESSE
STOP SPENdinG OUR TAX MONEY ANd ENd
THE MiCROSOFT FiGHT.
GET ON WiTH MATTERS Which CONGERN SEPT ??!
F.E. WEHNER
8510 WiMBoRNE WAY
LooiSViLLE KY 40222

MTC–00030443

FAX
Date: Friday, January 25, 2002
Time: 7:55:00 PM
To: U.S.Attorney General John Ashcroft
From: Ronald J. Markham
Fax: 307–1454
Fax: 860,349,3816

Voice: Voice: 860,349,3816
Comments:
The Honorable Attorney General John Ashcroft
27 Dunn Hill Road
Durham, CT 06422
Washington DC
Jan. 25, 2002
Dear Attorney General,
re: Microsoft Settlement

Please count me in the opposed column to the pending suit against the Microsoft Corporation. Night after night I see on television or read in the newspapers adds for cars and trucks, appliances, and other products hawking giveaways if you will just buy this or that product. I see no difference in the marketing of many other corporations than the marketing of Microsoft. Is not the idea of building a better mousetrap or marketing a better mousetrap the ''American Way''? I am an ordinary citizen with no axe to grind, but I find it very distasteful to waste tax dollars on such a silly exercise. Microsoft has improved our way of life in so many ways by pursuing this legal action leaves me saddened and frustrated. Please Attorney General Ashcroft, stop this waste of manpower arid tax dollars and redirect the governments legal efforts to meaningful pursuits.

Very truly yours,
Ronald J. Markham

MTC–00030444

Brent Smith
12025 Gold Pointe Lane
Gold River, CA 95670
January 21, 2002
Attorney General John Ashcroft
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Sir:

Given this open comment period, I am writing to give you my thoughts on the Microsoft settlement. I have been following this case for some time and am familiar with the issues involved. This compromise between the DOJ and Microsoft is long past due and accepting it now is a necessary action to help revitalize our computer industry.

I am self-employed and use Microsoft software to help run my business. Their company is responsible for building up our existing computer industry. They've provided consumers with superior products but now are being punished for that.

In a move toward the future, Microsoft is limiting its own competitiveness so that the lawsuit might end. They are sharing an unprecedented amount of their intellectual property with their competitors arid have agreed to tone down their often-aggressive marketing practices. This settlement is more than fair to Microsoft's rivals and is clearly in the public interest. Please make the necessary decision to end this lawsuit as so on as possible. Our struggling economy can afford no less.

Sincerely,
Brent Smith

MTC–00030445

m & ?? Construction, Inc.
DRYWALL CONTRACTOR
320 E. WASHINGTON STREET
YORKVILLE, ILLINOIS 60560
(630) 553–0508
January 25, 2002
Renata B. Hesse
US Dept of Justice
Fax # 1–202–307–1454

To whom it may concern:

I am writing to express my views on the Microsoft antitrust case. If you are pursuing this case in the consumers best interest, please stop! The wonderful economist, Ludwig von Mises, wrote that the greatest democracy ever invented is the free market system. Everyone is constantly voting, with every dollar they spend, for what they want and what they, can do without Consumers have full power and authority to deal with supposed evil monopolists like Bill Gates.

They do this by either freely spending their dollars on his products, or deciding to do without (even boycott) Microsoft products, The most appropriate use of the US Dept of Justices'' time would be to fight terrorism and leave the American consumers to deal with legitimate businessmen in the most effective way possible; the free market system.

Sincerely,
Mike McCurdy (President)

MTC–00030447

COVER SHEET
TO:
FAX NO:
FROM: B. Kehayes
DATE:
FAX NO: 252–482–8521
COMMENTS:
NO. OF SHEETS INCLUDING COVER:
P.O. Box 733
Edenton, NC 27932
January 24, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, N. W
Washington, D C 20530

Dear Mr. Ashcroft:

I writing to urge you to support the recent settlement created between the government and Microsoft. This prolonged period of court battles has sapped energy that could be better put into moving ahead in our economy.

This agreement allows manufacturers to compete on a more even footing while not penalizing Microsoft too greatly for their part in the vast technological revolution that has made life better for all Americans.

America has been a country of innovation and we need companies that can afford to and will spend money and time to bring new products to market. Microsoft has done this in the past and is eager to continue doing so if they are not unduly constrained. Our economy is sadly strained; our young people are out of work. Please do what you can to settle this issue and let us all get back to pulling ahead.

Thank you.
Sincerely,
Barbara Kehayes

MTC–00030448

Department of Justice
Subject: Microsoft Settlement

I believe it is time for the DOJ to terminate the proceedings against Microsoft. There never should have been a lawsuit. There has never been a shred of evidence that Microsoft has harmed the consumers. If anything Microsoft has been a tremendous force for uniting and standardizing the PC industry. No other company has stepped forward to do this. Microsoft has virtually no competition because no one else had the vision, foresight and nerve to invest and drive to develop an operating system that would make the PC the vital, universal tool that it is today. The companies that cannot compete have stooped to lawsuits through the government as the only way they can damage an industry leader. It only looks like sour grapes to me.

The US government should be giving Microsoft at-a-boys for being the driving force behind the most useful tool of the present generation and maybe of the 20th century. It is past time to stop harassing Microsoft. so they can get back to being the world leader in developing easy to use operating systems and other software which will keep the US in the forefront of this industry.

Sincerely,
Bob Maupin
PO Box 1030
Frankston, TX 75763

MTC–00030449

1103 East 1500 Road
Lawrence, KS 66046
January 23, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

This is to give my approval to the agreement between the Department of Justice and Microsoft. I think the whole lawsuit has ruined the country. Microsoft was one of the major engines of our economy, producing not only a quality product, but providing thousands of jobs. This lawsuit was more the result of sour grapes on the part of Microsoft's rivals than any unethical business practices.

Microsoft has more than tried to meet the demands of the Department of Justice. Microsoft has agreed to help companies better achieve a greater degree of reliability with regard to their networking software; Microsoft has agreed to grant computer makers broad new rights to configure Windows to promote non-Microsoft software programs that compete with programs included within Windows.

This is more than fair. Give your support to Microsoft.

Sincerely,
Nancy Hardman

MTC–00030451

FAX
ATTN. AG John Ashcroft
Fax Number 1–202–307–1454
Phone Number
FROM Keith D. Wheeler
Fax Number 480–759–6841
Phone Number 480–759–8823
SUBJECT
Number of Pages 2
Date 1/25/02
MESSAGE
KEITH D. WHEELER

2549 E, Mountain Sky Ave
Phoenix, AZ 85048
Fax 480–759–6841
Home Phone 480–759–8823
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft: ,

I am writing to say that the lawsuit against Microsoft has gone on now for entirely too long. I am a proponet of a free market economy and this lawsuit seems to do everything to undermine the underlying reason to be innovative. How can our government go after a company that has created jobs, generated wealth, and made technolgical breakthroughs? The case was flawed from the beginning.

The terms of the settlement show this in that they do little to protect consumer rights. The settlement forces Microsoft to disclose interfaces internal to the Windows operating system products and also prohibits them from entering into agreements that obligate third parties from exclusively distributing Microsoft products. These concessions reflect the intense lobbying efforts of competitors.

I believe it is in the publics best interests to have this case sealed. Our economy cannot afford further litigation and that is why I am appalled at the nine states holding out. Please implement the settlement as soon as possible and suppress any state opposition. Thank you.

Sincerely,

Keith D. Wheeler

cc: Representative Jeff Flake

MTC–00030452

18 Janock Road
Milford, MA 01757
January 19, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

As a concerned citizen, I write you to discuss the recent developments of the Microsoft settlement. After three years of negotiations, it is time to support this agreement and get our technology industry back to business. I urge you to help support this agreement and help to assure that no more actions be taken against it.

Microsoft has agreed to make many alterations including changes in licensing and marketing. Along with this, Microsoft has agreed to not enter into any agreements obligating any third party to distribute or promote any Windows technology exclusively. Also, all of these concessions will be monitored to make sure that Microsoft is following procedure. The many concessions that Microsoft has made are bold statements toward a unified IT sector. Microsoft is obviously working hard to let our technology industry work together. By doing this, we can secure our place in this highly competitive global market.

Let's work together to support our technology industry and get everyone back to business. I thank you for your support.

Sincerely,

Mary Bruno

MTC–00030453

Fax Transmission
From: Steven Waldman
44 Stridesham Ct
Baltimore MD 21209
tel (410) 336–1408
swaldman@mchange.com
To: Renata B. Hesse
Antitrust Division
US Department of Justice
fax (202) 307–1454 or (202) 616–9937
Re: Microsoft Settlement
Length: 8 Pages Including This Page
Notes:

The attached Tunney Act comments have been submitted by fax (26-January-2002), as an e-mailed PDF document (26-January-2002), and by a commercial overnight carrier (delivery a.m., 28-January-2002). I apologize for the multiple modes of submission, but it is important that these comments be verifiably received by the morning of January 28. I would be very grateful if the Department could provide an acknowledgement of on-deadline receipt of these comments, perhaps by e-mail. Many thanks for your attention and assistance.

Steven Waldman
44 Stridesham Ct
Baltimore, MD 21209
(410) 336–1408
swaldman@mchange.com
January 26, 2002
US Department of Justice
Antitrust Division
601 D Street NW
Suite 1200
Washington DC 20530
Attn: Renata Hesse
Re: Comments regarding Proposed Final Judgement United States v. Microsoft Corporation Civil Action No. 98–1232

Thank you for the opportunity to comment upon the US v. Microsoft Proposed Final Judgement, published in the **Federal Register** on November 28, 2001.

The Proposed Final Judgement as written is not in the public interest. I urge the Department to pursue remedies substantially different from those proposed, whether via further negotiations with Microsoft, or through adversarial proceedings. If the settlement is presented to the District Court without substantial modification, I would urge Judge Kollar-Kotelly make a determination under the Tunney Act that the Proposed Final Judgement would not serve the public interest.

The Proposed Final Judgement Would Do Positive Harm

It may seem odd to suggest that an antitrust remedy could be positively harmful. After all, regardless of the remedy, a convicted monopolist cannot leave an antitrust proceeding with more rights than it had when it arrived, and usually leaves with fewer. However, a poor remedy can indeed leave the public in a situation worse than the status quo ante. The current Proposed Final Judgement does so, in two ways. First, the PFJ describes, permits, and envisions specific future conduct on the part of Microsoft that would itself be anticompetitive. By providing implicit government endorsement for this conduct, the PFJ would make it difficult for the Department, the States, or private third parties to bring proceedings against Microsoft to curb it at a later date. Second, the PFJ contains enforcement provisions whose primary practical effect would be to delay and reduce the likelihood of further action should the company continue to behave unlawfully.

In other words, while the Proposed Final Judgement does place Microsoft under some new constraints, it places the DOJ and other potential litigants under even greater constraint. The net effect would be a diminishment rather than an increase in deterrence of Microsoft's anticompetitive behavior.

PEJ Explicitly Permits Continued Anticompetitive Practices

The purpose of the Proposed Final Judgement is to remedy Microsoft's unlawful conduct, specifically its unlawful maintenance of a monopoly in Intel-compatible PC operating systems. The reasoning behind the Court of Appeals upholding of the monopoly maintenance claim centered on the idea that there is an ''applications barrier to entry'' to operating systems markets, but that this barrier to entry could plausibly be chipped away at by a class of applications referred to as ''middleware''. The Court held that Microsoft engaged in various practices to ''protect[] Microsoft's monopoly from the competition that middleware might otherwise present'', in violation of Section 2 of the Sherman Act. It is these practices that must be remedied. In particular, the Court held that by virtue of restrictive contracts with computer manufacturers (''OEMs''), internet providers (''IAPs''), software companies (''ISVs'') and by other means, Microsoft impeded the widespread distribution of middleware that might have threatened its monopoly.

Section III.C.3 of the Proposed Final Judgement forces Microsoft to allow OEMs to automatically launch non-Microsoft middleware at the end of a PCs boot sequence, but only ''if a Microsoft Middleware Product that provides similar functionality would otherwise be launched automatically at that time''. By this caveat, the PFJ endorses a restriction in an OEM licensing agreement that would otherwise constitute a violation of Section 2 of the Sherman Act under the Court of Appeals'' reasoning. The caveat is anticompetitive on two counts. First, it permits Microsoft to ''choose its battles'': Microsoft need only face challenges from automatically launched middleware where the company feels its own offerings have an advantage. Should a competitor create an innovative middleware product that would threaten Microsoft's applications barrier to entry, Microsoft can prevent its distribution as a default running service indefinitely, by simply not fielding an offering of its own or by quietly integrating but not trademarking its offering (see the definition of a ''Microsoft Middleware Product'', PFJ, Section Vl.K.2.b.iii).

Secondly, the caveat necessarily permits competing middleware only if OEMs include Microsoft's offering as well, since by definition (again, PFJ, Section VI.K.2) a Microsoft Middleware Product is a part of a

Windows Operating System Product. The Appeals Court noted several reasons why OEMs are reluctant to include two products of the similar functionality in a default installation, including customer confusion; increased support and testing costs; and that it is a ''questionable use of the scarce and valuable space on a PCs hard drive.'' (the Appeals Court quoting the District Court's Findings of Fact) These considerations are cited by the Court in holding unlawful and exclusionary OEM contracts that forced a choice of including Microsoft middleware alone or Microsoft middleware plus a similar competitor. Additionally, even when competitive middleware is preinstalled alongside Microsoft's offering, ''network effects'' would put any one of several non-ubiquitous occasionally installed competitors at a serious disadvantage with respect to offering by Microsoft, even if inferior, that is guaranteed to be present on all installations. Should Microsoft force an ''ours or both'' decision with respect to competing middleware as a condition of OEM Windows licensing, it would most certainly be anticompetitive. However, it would also be explicitly sanctioned by the Proposed Final Judgement, and therefore difficult for the government or a third party to oppose. [1]

To the degree that Section III.C might have any effect in allowing OEMs to integrate third party middleware with a Microsoft OS, Section III.H.3 largely eviscerates the hazard to the monopolist by foreseeing a mechanism by which the company's operating systems could ask end-users to confirm an alteration or undoing of OEM additions to the OS fourteen days after the consumer first turns on a PC. For example, under this section, an operating system would be permitted to present a dialog box stating, ''Windows has detected that this configuration has been modified from Microsoft-recommended defaults. This may lead to incompatibilities or system faults. [Correct Now?] [Cancel]'' Clicking ''Correct Now?'' would replace OEM-installed non-Microsoft middleware with Microsoft's offering. If faced with the question, a court might determine that such a presentation (which Microsoft's competitors would be unable to make) would constitute unlawful monopoly maintenance by Microsoft. But it would be difficult for the government or for a private litigator to make that case in the face of a Final Judgement that clearly endorses the conduct.

The problems thus far mentioned are not unique. The Proposed Final Judgement is riddled with ''loopholes'' that not only make it a weak remedy, but that foresee and allow specific behavior by Microsoft that in the absence the Final Judgement would be actionable. By complicating potential future public or private antitrust enforcement against Microsoft, the Proposed Final Judgement would encourage misconduct and do positive harm to competition in the software industry.

PFJ Specifically Discriminates Against ''Open Source'' Competition

Over the past several years, a novel approach to software development known as ''open source'' has risen to prominence. Under the ''open source'' development model, many widely dispersed individuals, businesses, and other entities collaborate in the production of complex software products, contributing to what over time has become a rich commons of collectively authored software. ''Open source'' software is made available free of charge, under licenses that permit widespread redistribution and modification by users, sometimes with the restriction that any derived works must be made available to the public under the same terms. The business model that supports the continued development of open source software remains to be fully understood. The licensing terms of open source software prevent the exploitation by authors of any limited monopoly that would enable them to profitably ''sell'' software as traditional software vendors, such as Microsoft, have done. Nevertheless, a wide variety of actors including individual hobbyists, multinational companies, public and private universities, governments, and nongovernmental organizations have found sufficient incentive to invest substantial amounts of time and money into the production of open source software.

In the face of Microsoft's successful and unlawful monopoly maintenance, very few traditional software vendors still stand as competitors in the company's core market of Intel-compatible PC operating systems. Behemoths like IBM and scrappy upstarts like Be, Inc. have battled to gain a fingerhold, but failed to make any headway at all, and their products (IBM's OS/2, Be's BeOS) have all but faded from the computing landscape. The only non-Microsoft operating system that has managed to grow its share dramatically despite Microsoft's well-established pattern of anticompetitive behavior is the open source operating system Linux. Other open source projects that have competed effectively with Microsoft include Samba (which provides Windows interoperable file and print services to computer networks) and Apache (the most popular web server on the Internet).

It appears that the open source development model is somewhat resistant to the sort of anticompetitive behavior that has been effective for Microsoft in the past. One might even argue that the explosion of open source soil. ware over the past few years is a response by businesses, developers, and users to an artificially straitened ''traditional'' software landscape, and is perhaps attributable at least in part to Microsoft's anticompetitive behavior. As traditional vendors have receded from whole categories of software under the self-fulfilling truism that competing with Microsoft is akin to suicide, many entities have for one reason or another decided that the cost of contributing a small portion to the development of alternatives is less than the direct costs (continual licensing fees) and indirect costs (the failings of software not adequately tailored to their needs; uncertainty and future costs created by vendor lock-in) associated with relying on Microsoft products.

Regardless of the whys, open source software now stands as one of the few sources of effective competition against Microsoft. Indeed, while many of the battles that prompted the Justice Department's action against Microsoft are now past and prologue (e.g. the ''browser wars'' between Netscape and Microsoft), the struggles between open source Linux and Windows in the server space and between open source Apache and Microsoft's IIS remains, among many others, remain active and fierce. [2] Any remedy to Microsoft's anticompetitive behavior that diminishes the likelihood that open source projects can effectively interoperate with and compete against Microsoft's offerings would harm competition in the software industry. Unfortunately, the Proposed Final Judgement in several places explicitly permits Microsoft to discriminate against open source competitors.

Importantly for open source developers, Sections III.D and III.E of the Proposed Final Judgement would obligate Microsoft to disclose APIs, communication protocols, and documentation that might be required to interoperate with a Windows Operating System product. However, the caveats of Sections III.I and III.J restrict these earlier sections, and would allow Microsoft to essentially exclude open source competitors from access to or the use of this information. For the disclosure requirements of Sections III.D and III.E to have any effect, competitors must be able to use the information disclosed to develop and distribute competing and/or interoperating products. However, Section III.I foresees a regime under which the disclosed information must be licensed, as it continues to be the proprietary, intellectual property of Microsoft. Section III.I guarantees ''reasonable and non-discriminatory terms'' for such licensing, based on the payment of ''royalties or other payment of monetary consideration''. However, ''reasonable and non-discriminatory'' commercial terms inherently discriminate against open source software, which by virtue of its licensing must be freely distributable and modifiable.

Under ordinary circumstances, a company certainly should have the right to offer use of its proprietary technology only under commercial license, and this would legitimately prevent those who might wish to distribute open source applications based on that technology from doing so. But in the case of a company that has a monopoly over a substantial portion of the computing world and that has maintained that monopoly through unlawful anticompetitive conduct, allowing it to require competitors to pay even ''reasonable'' licensing fees in order to interoperate with its monopoly product provides the monopolist with unjustifiable reward for its misbehavior, in Microsoft's case, permitting such licensing is particularly insidious, because even if it were to provide licensing of its putative IP on absurdly generous terms, for example if it were to levy a royalty of 1¢ per thousand copies, it would immediately exclude what in the present real world are currently its most tenacious competitors from any possibility of interoperating with its software. By permitting ''reasonable and non-discriminatory'' commercial licensing of technologies the use of which is required in order to compete against and interoperate with Microsoft technologies, the Proposed Final Judgement condones and foresees a

practice that would exclude and discriminate against important open source competitors.

Section III.J restricts the scope of the PFJ disclosure requirements where security technologies (''anti-piracy, antivirus, software licensing, digital rights management, [and] encryption or authentication systems'') are concerned. Unfortunately, in today's networked world, no software is untouched by security concerns, and any non-trivial internet application must make use of and interoperate with encryption and authentication systems. Further, non-disclosure of security-critical techniques and protocols is unnecessary: the professional computer security community is nearly unanimous in its disavowal of the notion of ''security through obscurity''. A well-designed system should be secure even in the face of an attacker who fully understands the algorithms and protocols used to enforce the security. This is not as difficult as it sounds: the academic literature is filled with encryption algorithms and protocols that have never been broken despite massive peer-review, and even some that are ''provably secure''. Historically, non-disclosure of security techniques in software has more often served to provide cover for shoddy work than to even arguably enhance security. ''Security by trade secret'' is invariably broken, because, invariably, secret techniques are not subjected to sufficient peer review, and weak secret techniques can be reverse-engineered and then compromised. (See the recent history of CSS, a once-secret, easily broken, scheme for protecting DVDs, for a topical case-in-point.) Microsoft has a particularly poor security record, with respect to both the inadequate security of its products, and its attempts to restrict disclosure in hopes of covering up embarrassing lapses.

Open source software, in general, has a much better reputation for security, owing in large part to the fact that security algorithms in open source software are necessarily published, and are therefore subject to widespread review. Thus it is ironic that Section III.J.2 of the Proposed Final Judgement explicitly allows Microsoft to condition disclosure of security-sensitive technologies to those who ''meet[] reasonable, objective standards established by Microsoft for certifying the authenticity and viability of its business''. Since most open source software projects are not developed or ''owned'' by any one business, and since the terms of open source licensing often require disclosure of source code, III.J.2 effectively excludes open source software from any access to protocols, APIs, and other information that might be required to interoperate with or compete against Microsoft products that include a security component. Any significant application now must have security designed into it, so Section III.J.2 could be used to effectively lock open source competitors out of the disclosure requirements of the Proposed Final Judgement. It would be difficult to oppose Microsoft in court for discriminating against its troublesome open source competitors when the discrimination is based on the language of a court-sanctioned Final Judgement.

PFJ ''Enforcement Mechanisms'' Would Hinder Effective Enforcement

The following portions of the Proposed Final Judgement would hinder effective enforcement of the agreement:

. Section IV.B provides for the appointment of a Technical Committee to ''assist in enforcement and compliance'' with the PFJ. The constitution and role of the ''TC'' is described in detail. The Technical Committee would oversee Microsoft's compliance with the agreement in an ongoing way, and would respond to complaints from the plaintiffs or third parties. However, the Technical Committee has no power other than to assist in Voluntary Dispute Resolution, and, according to Section IV.D.4.d, ''No work product, findings, or recommendation by the TC may be admitted in any enforcement proceeding before the Court for any purpose, and no member of the TC shall testify by deposition, in court or before any other tribunal regarding any matter related to this Final Judgement.''

. Section IV.A.1 requires that ''the plaintiff States shall form a committee to coordinate their enforcement of this Final Judgement. A plaintiff State shall take no action to enforce this Final Judgement without first consulting with the United States and the plaintiff States'' enforcement committee.''

. Section VIII explicitly excludes third parties from taking any role in the enforcement of the Proposed Final Judgement.

Let us be perfectly clear: At the end of the day, the Proposed Final Judgement provides the United States and each of the plaintiff States with a right to sue to enforce its terms. But let's also be honest: the choice by a State of whether or when to enter into complex antitrust litigation against a well-known and well-heeled opponent is politically fraught under the best of circumstances. Under the terms of the PFJ, an unsatisfied plaintiff would be faced with two bad options: 1) the plaintiff can expend resources on a dispute resolution mechanism (the ''TC'') that the PFJ endorses, but that has no power, cannot be used at all as a basis for further proceedings, and will have no effect unless an amicable resolution is reached; or 2) eschew the dispute resolution mechanism endorsed by the settlement, thereby facing accusations of burdening Court resources unnecessarily, as well as a politically treacherous ''consulting'' process that would predictably lead to accusations of judicial overzealousness by reluctant former co-plaintiffs. A reasonable non-judicial enforcement mechanism would serve as a basis for judicial enforcement if required. Instead, the PFJ creates a ''middle path to nowhere'', that increases the political difficulty of undertaking any binding action against the company Under the PFJ, the real-world probability that misbehavior on Microsoft's part would bring legal consequences would be less than without the proposed enforcement mechanisms. Thus, the Proposed Final Judgement does positive harm to the public.

Complex, Vague, and Contradictory Language Hides New Anticompetitive Tools For Microsoft The ostensible purpose of Section III.1 of the Proposed Final Judgement is to require that Microsoft license under ''reasonable and non-discriminatory terms'' intellectual property that software vendors and other parties might require in order to offer middleware products interoperable with Windows. If the wording were less vague (and if ''reasonable and non-discriminatory'' were changed to ''royalty free'' to include open source developers), this would be a serious and legitimate remedy: Having unlawfully restricted the development of competing middleware, it is fair that Microsoft be compelled to license, under generous terms, whatever intellectual property nascent competitors would find necessary to interoperate with Windows.

However, the wording of this section is astonishingly vague. Microsoft may be compelled to license its IP to ''ISVs, IHVs, IAPs, ICPs, and OEMs'' only as required to ''exercise options and alternatives expressly provided to them under this Final Judgement''. Exactly what ''options and alternatives'' are provided to these parties by the Proposed Final Judgement is not a matter of scientific clarity, even to the avid reader of the document. What is crystal clear, however, is that those to whom the PFJ purports to offer this relief—the alphabet soup of third parties—have absolutely no standing to enforce (and therefore to enlist a Court's aid in interpreting and clarifying) this or any other section of the Proposed Final Judgement (Section VIII of the PFJ, see above).

Further, in an astonishing twist, Section III.I.5 exacts the remedy of compulsory licensing not only of the convicted monopolist, but of innocent competitors seeking relief. Section III.I.5 insists that a software vendor who wishes to provide a middleware product for a Microsoft operating system, if they require access to Microsoft IP to interoperate, must license to Microsoft its own intellectual property. The following language is no doubt intended to soothe competitors: ''[T]he scope of such license shall be no broader than is necessary to insure that Microsoft can provide such options or alternatives'' (Sec III.I.5). However, nowhere in the PFJ have I been able to discern any ''options and alternatives'' that Microsoft must provide to any third parties that would require a license on its part. Microsoft must merely permit practices that it has heretofore managed to prevent, in part by refusing to license its own IP, and it must disclose some of what it has heretofore kept secret. The requirements of Section III.I.5 unnecessarily and specifically envision a situation where a competitor, attempting to interoperate with Windows in ways that arguably would require some license of IP from Microsoft, could be asked to license its own IP to Microsoft, or else to cease and desist. If Microsoft and the putative competitor were to disagree about what ''no broader than necessary'' means, a competitor could not enlist, any court to resolve the dispute and compel licensing under the PFJ. Thus, the PFJ sets up a situation where Microsoft could ''leverage'' an interoperability requirement by a competitor or ISV in order to acquire access to the attractive IP of its competitors. In the absence of the PFJ, a court might look at a ''we'll show you ours only if you show us

yours'' requirement as anticompetitive, given that Windows Operating Systems are a de jure monopoly with which many third parties must interoperate or die. However, the Proposed Final Judgement gives cover to the practice by explicitly foreseeing and sanctioning a cross-licensing requirement, diminishing the likelihood of a successful outcome and increasing the burden in litigation for companies that may find themselves in the crosshairs of Microsoft's IP lawyers. Again, the public is positively harmed by the PFJ, because it diminishes the likelihood of legal consequences should Microsoft engage in foreseeable anticompetitive behavior.

Conclusion

A District Court found, and a Federal Court of Appeals, affirmed, that Microsoft engaged over a period of years in multiple unlawful and sometimes deceptive practices in order to maintain its monopoly on PC-compatable operating systems. The fruits of this illegally maintained monopoly have been and continue to be huge for the company and its principals. The Proposed Final Judgement fails to provide any strong remedy for this conduct, and instead shelters the monopolist from potential consequences of past and future misconduct. The Proposed Final Judgment, by providing court sanction to practices a court might well find to be anticompetitive absent the proposed settlement, leaves consumers, competitors, open source software developers, and other interested parties in a worse position than they would be in if Microsoft were simply left to face private litigation as a de jure monopolist without any specific remedy being imposed in the present case. The Proposed Final Judgement would therefore be harmful to the public interest, and, unless it is very substantially modified, it should be rejected.

Notes

[1] Section III.C.1 suffers from the same flaw. It permits OEMs to install ''icons, shortcuts, and menu entries'' for pre-installed, competing middleware, but ''Microsoft may restrict an OEM from displaying icons, shortcuts, and menu entries for any product in any list of such icons, shortcuts, or menu entries specified in the Windows documentation as being limited to products that provide particular types of functionality, provided that the restrictions are non-discriminatory with respect to non-Microsoft and Microsoft products.'' Microsoft would be freed again to create an ''ours or both'' situation, justified by language it could graft into contracts directly from the Proposed Final Judgement.

[2] For an informal measure of the perceived threat that open source software presents to Microsoft's monopoly, we might examine the lengths to which Microsoft has gone in disparaging such software recently. Microsoft CEO Steve Ballmer has called Linux ''a cancer'' [Chicago Sun-Times, June 1, 2001] that has ''the characteristics of communism.'' [The Register, August 2, 2000] Ballmer has explicitly described Linux as ''threat number 1.'' [upside.com, January 20, 2001i According to the public comments of Microsoft exec Jim Allchin, ''Open source is an intellectual property destroyer... I'm an American, I believe in the American Way. I worry if government encourages open source, and I don't think we've done enough education of policy makers to understand the threat.'' [CNet news.com, February 15, 2001] [URLs:

http://www.suntimes.com/output/tech/cstfin-micro-01.html;

http://www.theregister.co.uk/content/1/12266.html;

http://www.upside.com/texis/mvm/news/story?id=3a5e392ca3;

http://news.com.com/2100–1001–252681.html?legacy=cnet]

MTC–00030454

6320 Chaprice Ln.
Montgomery, AL 36117
J.R. SMITH
1535 WILDLIFE TRAIL
UNION SPRINGS, AL 36089
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Ave, NW
Washington, DC 20530

Dear Mr. Ashcroft,

I was recently surprised to hear of the recent development in the Microsoft settlement. After three years of negotiations, I cannot believe that this agreement may be held back even further. The terms of this agreement were part of a sophisticated, detailed process and all affected were involved. At this point in time, the settlement is fair and reasonable and should be used as a guideline to get our technology industry back to business.

Under the settlement, Microsoft will design all future operating systems so that competitors can easily place their components on the system. Also, under this settlement, the government will appoint a full-time monitor to observe Microsoft. These concessions are clearly a step toward a more unified, stronger II sector. By getting back to work. we can maintain our place in the competitive world market, and car, get our economy back on track To enforce this agreement would be beneficial to the consumer, the IT sector and the entire economy.

Please work to help stop any further actions against this agreement. As we support our technology industry, we support the growth of our economy and the advancement of this great country.

Sincerely.
I.R. Smith
334–738–2182

MTC–00030455

Cipher Systems
80 Glastonbury Blvd
Glastonbury, CT 06033
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

This letter is to inform you of my full support of the antitrust settlement that was reached by the Justice Department and Microsoft Corporation.

The settlement is fair and reasonable, and should be finalized as soon as possible, since Microsoft did not get off easy. In fact, Microsoft has agreed to share portions of its interfaces and protocols for its Windows operating system. This is nearly priceless intellectual property. It also agreed not to retaliate against software or hardware developers who develop or promote software that competes with Windows or that runs on software that competes with Windows. The settlement changes every aspect of the way Microsoft conducts business. I hope the settlement is finalized soon.

Thank you generously for your attention.

Sincerely,
Bert Sirkin
Chief Technology Officer
Cipher Systems LLC

MTC–00030456

Carole Tovar
P.O. Box 13675
Mill Creek, WA 98082–1675
January 21, 2002
John Ashcroft
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I'm writing to encourage you to support the recent anti-trust settlement Microsoft reached with the U.S. Justice Department. I feel this is something Microsoft has agreed to merely so it could end the suit and so it can return to the business of making good and innovative software.

Microsoft has, for example, agreed to allow computer makers to change Windows so that Microsoft's products can be removed from the operating system and competing, non-Microsoft products can be installed in their places. AOL Instant Messenger can be installed in the place of Windows Messenger; RealNetworks RealPlayer can be installed in the place of Windows Media Player; and Netscape Navigator can be installed in place of Internet Explorer. Microsoft has also agreed to not take any actions against computer makers who choose to do this, or who decide to ship operating systems that compete with Windows, or who develop software that runs on such alternative operating systems.

That sounds pretty, far-reaching to me. To give its rivals a break: Microsoft is giving up all kinds of fights over its freedom to contract and over its own property. There's no point in hounding them with even more litigation.

I encourage you to accept the terms of the settlement so Microsoft can continue to make good software and provide jobs to thousands around the country.

Sincerely,
Carole Tovar

MTC–00030457

TOVAR PROPERTIES
January 21, 2002
John Ashcroft
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I'm writing to encourage you to support the recent anti-trust settlement Microsoft reached with the U.S. Justice Department. I feel this is something Microsoft has agreed to merely so it could end the suit and so it can return to the business of making good and innovative software.

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That sounds pretty, far-reaching to me. To give its rivals a break, Microsoft is giving up all kinds of rights over its freedom to contract and over its own property. There's no point in hounding them with even more litigation.

I encourage you to accept the terms of the settlement so Microsoft can continue to make good software and provide jobs to thousands around the country.

Sincerely,

Carole Tovar

MTC–00030459

650 Halfway Road
Crawfordsville, IN 47933
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

My name is Ginger Todd. I am a resident of Crawfordsville, Indiana. I am happy to hear that a proposed settlement has been reached between the federal government and Microsoft in the antitrust case.

While I don't know all of the details of the lawsuit or this settlement proposal, one thing the proposal clearly deals with is the most frequently voiced consumer complaint against Microsoft: the lack of choice when utilizing the Windows operating system. Microsoft has agreed to allow computer makers to change Windows to have non-Microsoft programs built-in—programs that compete directly with Microsoft features and programs that usually come included with Windows.

The agreement by Microsoft to allow competition within Windows will be of great benefit to both consumers and competing software designers and manufacturers. I hope that you will approve the agreement so we consumers will be able to benefit from it soon. Thank you for taking time to read my comments.

Sincerely,

Ginger Todd

MTC–00030460

FACSIMILE COVER PAGE
To: Renata B. Hesse
From: HARRY MESSENHEIMER
Sent: 1/25/02 at 8:33:16 PM
Pages: 3 (including Cover)
Subject:
Comments on Microsoft Settlement
Rio Grande Foundation
P.O. Box 2015
Tijeras, NM 87059
505 286–2030
www.riograndefoundation.org
January 25, 2002
Antitrust Division
U.S. Department of Justice
601 ''D'' Street NW, Suite 1200
Washington, DC, 20530
Attn: Renata B. Hesse
Subject: Comment on Proposed Final Judgment re Microsoft

Dear Sir or Madam:

I am writing to you on behalf of the Rio Grande Foundation of New Mexico, an independent, non-partisan policy research group dedicated to promoting free markets and open competition. I appreciate tile opportunity to comment.

In my capacity as Senior Fellow for Economic Research at the Foundation, I urge you to accept the proposed settlement in the anti-trust case involving Microsoft. In urging you to accept the settlement my arguments are that (1) we do not know enough about possible harms to take more aggressive action against MS and (2) we should be careful about opening up antitrust law to unproductive, rent-seeking activity.

The proposed settlement is file one that likely will do file least harm. I say that with a good deal of humility, since I think many economists tend greatly to overstate what we really know of tile possible harms alleged in this case. But one thing we do know is that competition is beneficial to society. Competition in an environment of economic freedom tends to promote human prosperity, an assertion strongly supported by recent empirical evidence.

What we don't know much about, however, is how the competitive process leads to prosperity. The economist's model of ''perfect competition'' is not particularly useful in informing us about antitrust law as it relates to possible harms that may reduce prosperity. Knowledge is not given; innovative change has been taking place at incredible speed. The premier scholar who wrote about competition and our lack of knowledge was Professor F. A. Hayek, who said in a famous essay about competitive process:[1] ''.–.–. we should worry much less about whether competition is perfect and worry much more about whether there is competition at all.'' Undoubtedly some of MS's restrictions on access to Windows were only intended to increase its market share while raising cost barriers to potential entrants. But it is hard to differentiate those restrictions from actions that substantially benefit consumers, as some of the alleged predatory behavior on the part of MS would appear to do. It is not readily apparent, for example, that the tying of Internet Explorer to the Windows desktop is anything but a benefit to those who purchase Windows. The issue boils down to whether or not this tying will result in differential harm to consumers over time. The only way that could happen is if the barriers to entry were so substantial and the resulting MS monopoly so inefficient as to erode away this short-run benefit. But those barriers actually seem to be quite small. Any time I surf the Internet I am amazed at how much competition there is. And how can we tell if MS is more or less efficient now than an unseen evolution under a different set of antitrust doctrine in which MS has a court-dictated constraint on behavior to reduce its market share? Market share as a measure of harm seems to be a red herring. The threat of entry, itself, tends to promote expanded service and lower costs. I think what we have observed over the past 40 years at least partially justifies my assertion.[1]

Hayek, F.A, ''The meaning of competition,'' in Individualism and Economic Order, Univ. of Chicago Press 1948, Midway reprint 1980, p 105.

As mentioned above, my second argument involves the unproductive cost of seeking differential advantage over competitors through the government in general and antitrust law in particular. In economics this is know as ''rent-seeking'' behavior. Economists are in wide agreement that rent-seeking is a loss the economy. Rather than seeking differential advantage from the government, firms could be using those resources to produce a better product at lower cost. The costs of rent-seeking behavior in this case alone seem to be enormous. And the draconian ruling by Judge Jackson would appear to open the door for like kind of wasteful activity. It would lead to severe impacts far beyond one company, acting as a drag on one of the most vibrant sectors of our economy. We can do nothing about the resources already used in this case, but we can prevent this kind of wasteful activity in the future.

That is why the settlement should be approved. It is a common-sense solution that recognizes the limitations in what we know about competition and innovation. And its approval also would serve to reduce predatory, rent-seeking behavior in the future.

Thank you for your consideration.

Sincerely,

Harry Messenheimer, Ph.D.

Senior Fellow, Rio Grande Foundation

MTC–00030461

Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NVV
Suite 1200
Washington, DC 20530–0001
January 25, 2002

ISSUE: It is my understanding that the Dept. of Justice is asking for public comment concerning the negotiations over the Microsoft antitrust suit.

Microsoft has already agreed to hide its Internet Explorer icon from the desktop. I personally believe, this case against Microsoft is little more than ''welfare'' for Netscape and other Microsoft competitors, with not a nickel going to those supposedly harmed by Microsoft: the computer user. The Clinton/Reno Justice Dept. began this suit for some nebulous masons of their own, I have never trusted their motives in the situation, and I for one, would cheer Bill Gates if he shut down his complete US holdings and moved to Singapore or somewhere else where the government would not be trying to destroy a successful business during a recession. Please put a stop to this madness. The destruction to the economy already done

is huge, and continuing this blunder will only exacerbate an already bad situation.

Thank you for considering my opinion.

Ray Grace
468 West Street, Box 222
Heppner, OR 97836
Fax 541–676–5292

MTC–00030463

FAX
Date: Friday,
January 25, 2002
Time: 8:13:00 PM
2 Pages
To: U.S.Attorney General John Ashcroft
From: Ronald J. Markham
Fax: 616–9937
Fax: 860,349,3816
Voice: Voice: 860,349,3816
Comments:
The Honorable Attorney General John Ashcroft Washington DC
27 Dunn Hill Road
Durham, CT 06422
Jan. 25, 2002

Dear Attorney General,

re: Microsoft Settlement

Please count me in the opposed column to the pending suit against the Microsoft Corporation. Night after night I see on television or read in the newspapers adds for cars and tracks, appliances, and other products hawking giveaways if you will just buy this or that product. I see no difference in the marketing of many other corporations than the marketing of Microsoft. Is not the idea of building a better mousetrap or marketing a better mousetrap the ''American Way''?

I am an ordinary citizen with no axe to grind, but I find it very distasteful to waste tax dollars on such a silly exercise. Microsoft has improved our way of life in so many ways by pursuing this legal action leaves me saddened and frustrated. Please Attorney General Ashcroft, stop this waste of manpower and tax dollars and redirect the governments legal efforts to meaningful pursuits.

Very truly yours,
Ronald J. Markham

MTC–00030464

January 25, 2002
Renata Hesse, Trial Attorney
Antitrust Division, Department of Justice
601 D Street NW, Ste. 1200
Washington, DC 20530
VIA FACSIMILE
(202) 616–9937

Dear Ms. Hesse:

The case against Microsoft has been a tremendous waste of time and money. Monopolies are when train companies won't let other train companies use their rail system. Monopolies are not when companies load a browser on to a computer—when a consumer can simply download the competing browser at the click of a button. When did this country lose the idea of open competition in the market place?

The cries from Microsoft's competitors were not legitimate. However, assuming they were justified, those issues are certainly dealt with in the existing settlement. This settlement will end much of the case and get the software industry working again, I urge the courts to endorse the settlement.

Sincerely,
Bill Carlson

MTC–00030465

Michael S. Giorgino, Esq.
1634 Pomona Avenue
Coronado, CA 92118–2932
(619) 437–8217
mgiorgino@aol.com
Renata Hesse, Trial Attorney
Antitrust Division,
Department of Justice
601 D Street NW, Ste. 1200
Washington, DC 20530
VIA FACSIMILE
(202) 616–9937

Dear Ms. Hesse:

I am writing the court because I am very concerned about the case of US v. Microsoft. From my reading on the case, I believe I am able to introduce public comments into the record. Please accept this letter as my public comment.

I am an attorney licensed to practice law in the State of California and in the Federal Courts. While I have not reviewed this case in depth, I understand its core issues. I am a concerned citizen who truly abhors government waste. My concern about wasted taxpayer dollars inspired me to write this letter.

Before September 11, the US Government spent more on the case against Microsoft than it did trying to stop the actions of Osama Bin Laden. We, the American taxpayers, have funded this case long enough. It has gone on almost four years and cost untold millions of dollars. To date, I know of nothing positive which has come from this case. The t??ch industry is down, innovations have slowed, and almost every state (including California) went from a surplus to a deficit in their budgets.

Novelist/philosopher Ayn Rand wrote that Antitrust is ''the penalizing of ability for being ability, the penalizing of success for being success, and the sacrifice of productive genius to the demands of envious mediocrity.'' Microsoft's competitors initiated this case so they could gain from the courts what they were unable to accomplish in the free market. Enough is enough! Wasting a single additional taxpayer dollar persecuting Bill Gates'' brilliant and innovative company is unacceptable—economic progress cannot be achieved at the point of a gun.

I urge the court to accept the proposed settlement in the interests of fiscal responsibility and economic justice.

Sincerely,
Michael Giorgino
Attorney at Law

MTC–00030466

FAX
TO:
FR:
RE:
DATE:
# of pages: (including this page)
January 25, 2002
Renata Hesse, Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street, NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

Thank you for this opportunity to state my opinion regarding the government's proposed settlement of its case against Microsoft.

First of all, the government had no business interfering with the operation of Microsoft when it began its pursuit of them back during the Clinton administration. The federal government was wrongly attempting to control and regulate a new, growing, and very vital part of our nation's economy. The last thing the technology industry needed was bureaucrats and Justice Department lawyers hovering over them like vultures.

I have read the proposed settlement/stipulation, and I believe Microsoft is being more than reasonable to agree to this document. Setting up the governmental *technical committee'' seems particularly onerous. However, in the interest of ending this whole misplaced attack, I urge you to approve this settlement.

Thank you for your consideration of my comments.

Sincerely,
Cynthia M. Lyon
2315 Iowa Avenue
Independence, IA 50644
(319) 334–3490

MTC–00030467

Chris H. Pipkin
January 21, 2002
Judge Kolar Kottely
U.S. Department of Justice
601 D Street, NW, Suite 1200
Washington, D.C 20530

Dear Judge Kolar Kottely

It is my understanding that you are currently considering whether to accept the proposed settlement reached by the Department of Justice and Microsoft. I am writing m you in order to express my strong support for this settlement.

I am an investment officer in Cedar Rapids. The ebbs and flows of the economy, along with any outside forces that impact it, are of great interest to me. There is no doubt that bringing closure to the Microsoft case will have a positive impact on the national economy.

The government's case against Microsoft had potential to set far-reaching precedent for government intervention and regulation of an industry. This reality caused much concern for investors who worried that the growth of the technology industry would be hampered by government regulation. While there are many causes for our weakened economy, the uncertainty erented by this ease was a contributing factor in the decline of many technology stocks.

Bringing the Microsoft case to end is in the best interest of the economy and this proposed settlement is the vehicle to make it happen. While I do not know all of the intricate details of the settlement, what I have read lends me to Believe a fair compromise addressing the concerns of the complaint was reached. For example, Microsoft will be bound to share intellectual property and must create new versions of Windows that allow the promotion of non-Microsoft

products. The settlement also establishes a committee that will police Microsoft's compliance with the settlement.

Thank you for your consideration

Sincerely,

Chris H, Pipkin

3604 HEATHERIDGE DR. + Cedar Rapids, + 52402 + 319–862–2293

MTC–00030468

To Renata Hesse

The following six (6) pages of this facsimile are a comment on the Microsoft Settlement in the Microsoft antitrust case. This comment has been simultaneously submitted by email.

Mason Thomas

(805) 530–1502

As a professional working in the technology sector, I often have occasion to use Microsoft software and competing products. I am therefore concerned that the Revised Proposed Final Judgment in the Microsoft antitrust case has a number of deficiencies that prevent the Judgment from providing certain and effective relief for Microsoft's violations of the Sherman Act. Unless these flaws are corrected, the Revised Proposed Final Judgment is clearly against the public interest and will positively harm third parties.

This Comment addresses five serious deficiencies of the Revised Proposed Final Judgment, The deficiencies are discussed in the order they appear in the Judgment, not necessarily in their relative order of impact on injunctive relief. The deficiencies are:

1. The Judgment provides no remedies for past unlawful conduct.

2. Allowing volume discounts anticompetitively maintains Microsoft's monopoly (Section III.A. and III.B.).

3. Restrictions on disclosure of communications protocols maintains a barrier to competition (Section III.E.).

4. Arbitrary five year term of Judgment harms the public interest (Section V.).

5. The definition of ''Non-Microsoft Middleware Product'' maintains a barrier to competition (Section VI.N.).

Although it is unreasonable to expect a truly optimal Judgment that best serves the public interest, the existence of any one of the above deficiencies—and certainly the coexistence of several of them—will not end Microsoft's unlawful conduct nor avoid a recurrence of violations of the Sherman Act, and is thus outside the reaches of the public interest.

1. Judgment provides no remedies for past unlawful conduct

Although the Revised Proposed Final Judgment provides limited remedies ''to halt continuance and prevent recurrence of the violations of the Sherman Act by Microsoft'' (Competitive Impact Statement, Section I.), it does not in any way ''undo its anticompetitive consequences'' (Competitive Impact Statement Section IV.B.) , There is no provision in the Judgment to remedy any past anticompetitive actions by Microsoft: all provisions in the Judgment attempt to alter the current and future behavior of Microsoft. As such, the Judgment does not effectively restore the competitive conditions experienced by Microsoft prior to its violations of the Sherman Act. An effective remedy for Microsoft's past illegal actions requires a careful balance to empower injured competitors while not unduly damaging Microsoft. A simple but fair remedy would create a pool of Microsoft's money based on a percentage of sales of Microsoft Operating System Products since the filing of the antitrust complaint till the time of the Final Judgment entered by the Court. The parties damaged by Microsoft's anticompetitive behavior (e.g., Sun Microsystems, Netscape Communications Corp., etc.) would be payed from this pool. The size of the pool and the relative payment terms to competitors are details that require careful consideration.

2. Allowing volume discounts anticompetitively maintains Microsoft's monopoly allowing volume discounts serves no procompetitive interest and is in fact very much against the public interest as it serves to illegally maintain Microsoft's monopoly. Section III.A. of the revised proposed final judgment stipulates that ''Nothing in this provision shall prohibit Microsoft from providing Consideration .–.–. commensurate with the absolute level or amount of that OEM's development, distribution, promotion, or licensing of that Microsoft product or service.'' Section III.B.2 provides for a licensing fee schedule that ''may specify reasonable volume discounts based upon the actual volume of licenses of any Windows Operating System Product .–.–.'' These provisions allow Microsoft to continue to leverage its monopoly position to illegally maintain that monopoly. The Competitive Impact Statement entirely ignores the anticompetitive ramifications of these terms.

Unlike traditional manufacturing, where the production or distribution of a large quantity of a product can generate ''economies of scale'' and thereby procompetitively justify non-uniform pricing (e.g., volume discounts), the licensing of software has no significant economies of scale. A comparison with traditional manufacturing is useful. For a car dealership selling hundreds of cars per month, there is economic justification for the car manufacturer to provide a volume discount to the dealership: the distribution costs (shipping) per car are lower than for a dealership selling only ten cars per month, with software however, the only economy of scale obtained is slightly cheaper production materials: compact disks for distribution and paper for documentation and product boxes. OEMs typically only include a compact disk with a new computer purchase, for which the volume production cost is under one dollar (US$1.00). Hence the economies of scale afforded by large scale OEMs to Microsoft are less than one percent (1%) of the retail value of typical Windows Operating System Products. Hence there is no significant procompetitive reason to allow volume discounts to large OEMs.

Allowing Microsoft to offer volume discounts will further entrench its monopoly position. With volume discounts, Microsoft would retain the ability to price its Windows Operating System Product licenses at an artificially low cost to the largest OEM vendors. These vendors would thus have a strong incentive to continue to offer exclusively or predominantly the Microsoft Operating System Product on new Personal Computers, The largest OEM Personal Computer suppliers would have a free market incentive to choose alternate Operating System Products if Microsoft's Operating System Product were instead priced at an open market value. Avoiding volume discounts increases competition while preventing Microsoft from leveraging its monopoly to stifle competition.

This deficiency of the revised proposed final judgment is remedied by deleting the words ''distribution'' and ''licensing'' from the last paragraph of Section III.A. and by modifying Section III.B.2 to read ''the schedule may not specify volume discounts based upon the actual volume of licenses of any Windows operating System Product or any group of such products.'' These modifications will still allow Microsoft to compete in the marketplace based on the merits of the windows Operating System Products, but prevent Microsoft from anticompetitively erecting barriers to competitive products.

3. Restrictions on disclosure of communications protocols maintains barrier to competition The Revised Proposed Final Judgment maintains a significant barrier to competing Non-Microsoft Middleware Products by restricting the disclosure of Communications Protocols. Section III.E. of the Judgment provides that Microsoft shall disclose Communications Protocols ''on reasonable and non-discriminatory terms.'' Such terms, however, prevent a large number of established and nascent competitors from obtaining the Communication Protocols. ''Reasonable and non-discriminatory'' license terms act as an anticompetitive barrier to potential Microsoft competitors, while providing no procompetitive advantage for Microsoft.

''Shareware'' software developers typically provide software products (including middleware) free of charge for end users to evaluate, and only demand payment if the end user decides to continue using the software product. Such developers would be unable to comply with ''reasonable and non-discriminatory'' licensing terms unless a very large percentage of end users payed for the software product. Similarly, the entire ''open source'' class of software would be unable to meet ''reasonable and non-discriminatory'' terms as the ''open source'' licenses allow virtually unlimited duplication and derivation rights. Several important Non-Microsoft Middleware Products are ''open source'', notably the Samba program (http://www.samba.org), that provides file transfer and print Services through the Microsoft SMB Communications Protocol. The Samba program is a well-established and widely used alternative to Microsoft Middleware Products, but it would be effectively prevented from competing with Microsoft through the adoption of ''reasonable and non-discriminatory'' licensing terms for future changes in the SMB protocol.

This deficiency of the Revised Proposed Final Judgment can be remedied by a simple wording change. The phrase ''reasonable and non-discriminatory'' in Section III.E. of the Judgment should be changed to ''royalty

free''. Since Microsoft's ability to hide Communication Protocols serves only to prevent competitors from effectively interoperating with Microsoft products and does not in any way increase competition, a mandatory royalty free license would serve to allow both large and small competitors to interoperate with Microsoft products.

4. Arbitrary five year term of Judgment harms the public interest The Competitive Impact Statement in Section IV.C. claims that a five year time frame for the Judgment ''provides sufficient time for the conduct remedies contained in the Proposed Final Judgment to take effect .–.–. and to restore competitive conditions to the greatest extent possible.'' The Competitive Impact Statement provides neither evidence, nor precedence, nor logic to support this claim.

In fact, a five year term may well be too long. The provisions of the Revised Proposed Final Judgment may turn out to be so effective at restoring competition that Microsoft loses its dominance in less than two years in the Operating System market for Personal Computers and becomes unnecessarily hobbled by the restrictions of the Judgment. In such a case, Microsoft would be unfairly restricted from competing in the market for another three years, possibly causing great economic damage to Microsoft and depriving consumers of the fruits of a vibrant competition in the Operating System market.

Alternatively, the provisions of the Revised Proposed Final Judgment might not be sufficient to hinder Microsoft's anticompetitive actions, and Microsoft could continue to violate the Sherman Act through an extended seven-year Judgment period. Clearly such a situation would severely harm the public interest, again depriving consumers of the benefits of a competitive market and stilting the entire Operating System and Middleware market. The arbitrary five year Judgment term length would only be beneficial in the most serendipitous of circumstances, and the arbitrary two-year extension does not mitigate this fault.

The overriding concern of this Judgment is to prevent Microsoft's anticompetitive actions and to restore competitive conditions to the market, and it is that principle that should guide the term length of the Judgment. The most straightforward application of this principle would be to terminate the Judgment when Microsoft no longer enjoys monopoly status. This could be achieved with the following replacement for Section V. (Termination) of the Revised Proposed Final Judgment:

''This Final Judgment will expire when Microsoft's windows Operating System Product has less than fifty percent share of the Personal Computer Operating System market (as determined by a market study provided by a mutually agreed upon third party).''

With this revised termination clause, the Judgment will stand exactly as long as necessary for the public interest. An alternate definition of monopoly status (i.e., instead of ''fifty percent market share'') may also be acceptable, provided it is logically and legally defensible, and maintains the intent of the Judgment.

This new termination clause will ensure the return of healthy competition to the Operating System market without unduly burdening—or harming—Microsoft. At the point that Microsoft's windows Operating System Products have less than fifty percent share of the Personal Computer Operating System market, there is clearly healthy competition in that market, with at least one other dominant competitor to Microsoft. There is then no further reason to impose the conditions of the Judgment. However, Microsoft is not prevented from maintaining its monopoly on the technical merits of its products. The ongoing terms of the Judgment would not be onerous to Microsoft should it maintain a monopoly position without resorting to anticompetitive actions.

5. Definition of ''Non-Microsoft Middleware Product'' maintains barrier to competition Although the Revised Proposed Final Judgment seeks to ''restore the competitive threat that middleware products posed prior to Microsoft's unlawful conduct (Competitive Impact Statement, Section IV), the proposed definition of ''Non-Microsoft Middleware Product'' serves instead to maintain barriers to competition. Section VI.N. of the Revised Proposed Final Judgment stipulates that a software product, among other requirements, can only be considered a ''Non-Microsoft Middleware Product'' if ''at least one million copies were distributed in the United States within the previous year.'' This requirement is explained in the Competitive Impact Statement, Section IV.A. as being ''intended to avoid Microsoft's affirmative obligations .–.–. being triggered by minor, or even nonexistent, products that have not established a competitive potential in the market .–.–.'' As the Competitive Impact Statement makes clear, the definition of ''Non Microsoft Middleware Product'' intentionally limits the possible competitive impact of nascent middleware products. Such a limitation is antithetical to the desired goals of the Judgment.

This deficiency of the Revised Proposed Final Judgment can be easily remedied by deleting Section VI.N.(ii) and thus removing the restriction on number of copies distributed. The Competitive Impact Statement in Section IV.A. states that the restriction on number of copies distributed ''is intended to avoid Microsoft's affirmative obligations—including the API disclosure required by Section III.D. and the creation of the mechanisms required by Section III.H.—being triggered by minor, or even nonexistent, products .–.–.'' In other words, Microsoft should not endure an onerous burden in its obligations. However, deleting Section VI.N.(ii) would not create such a burden. Since Section III.D. already specifies that APIs and related Documentation shall be disclosed via the Microsoft Developer Network or similar mechanisms, Microsoft will not require any further effort to make the APIS and Documentation available to ISVs or other middleware developers that have not established a competitive potential in the market—but that nevertheless have the potential to become competitors with Microsoft, Furthermore, the mechanisms required in Section III.H. (such as the creation of Add/Remove icons) are sufficiently generic that they will only need to be created once—and likely already exist—to accommodate all Microsoft and Non-Microsoft Middleware, and hence the expansion of the number and kind of possible middleware competitors to Microsoft again does not create an undue burden on the company.

This Comment has been submitted through both e-mail and facsimile copy.

Respectfully submitted,
Mason Thomas
4333 Wildwest Circle
Moorpark, CA 93021
(805) 530–1502
January 25, 2002

MTC–00030469

13405 NW Spirit Court W
Silverdale, WA 98383–9507
(360) 697–2461
January t2, 2002
Attorney General John Ashcroft
United States Department of Justice
Washington, DC 205300001

Dear Attorney General Ashcroft:

I urge the Department of Justice to accept the proposed Microsoft anti-trust settlement, which goes far beyond the original scope of the lawsuit as it was originally filed. I feel Microsoft made this settlement so it can back to its business of developing software.

As terms of the settlement Microsoft has agreed to grant computer manufacturers and software developers the ability to remove Microsoft products and install competing products in their places. Examples include: Netscape Navigator, RealNetworks RealPlayer, and AOL Instant Messenger. You should note, though, that consumers can install these products on their computer systems regardless if those products came preinstalled on their systems. Microsoft has also agreed to not enter into agreements with third-party computer manufacturers or software developers that would require them to exclusively or in a fixed percentage distribute or promote Windows, unless there is no competitive issue.

Microsoft also must grant intellectual property rights to those third parties that choose to exercise any options in the settlement if those options would infringe on Microsoft's intellectual property. Also as part of the settlement, a three-person ''Technical Committee'' made of software engineers will be overseeing compliance and assisting in dispute resolution, when needed, The settlement also makes it easy for an individual or company who feels Microsoft is not complying with the settlement provisions to file a complaint, thus making it more likely that Microsoft will abide by all terms in the settlement. For these reasons, I support the Microsoft settlement. I look forward to seeing this matter finalized and put behind us so we can get on with the business of business. Thank you.

Sincerely,

MTC–00030470

FAX COVERSHEET
URGENT
To: Attorney General John Ashcroft
Fax Number: 1–202–307–1454

From: Sharon Miller
Fax Number: 1–716–388–7329
Pages: 2
Date: 1/26/2002
Subject: Microsoft Settlement
21 Cedarview
Fairport, NY 14450
January 25, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I was really happy when Microsoft and the Department of Justice reached an agreement; now my hopes were dashed when I learned that several states want to pursue further litigation. Why? Microsoft has already agreed that if a third party's exercise of any options, provided for by the settlement, would infringe any Microsoft intellectual property, Microsoft will provide the third party with a license to the necessary intellectual property on reasonable and nondiscriminatory terms.

They also agreed to license file Windows operating system to the largest computer companies on identical terms, conditions, and price.

I urge you to end all litigation so that we can move forward. No more action should be taken at the Federal level.

Sincerely,
Sharon Miller

MTC–00030471

John J. Petroci Jr.
1909 Kirkby Drive
South Park, Pennsylvania 15129
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to let you know my views on the Microsoft settlement, First and foremost, this case has been in litigation for many years now. Secondly, this lawsuit should not have concerned the federal government, since no laws have been broken. Settlements have been reached in various states, all of which have involved appropriate concessions, including more information sharing and changes in Microsoft's business practices.

I have firsthand experience with big business. I previously worked in the steel industry, and due to government intervention and regulation, I was put out of work when the companies were broken up. Pennsylvania's steel industry will never be the same. I urge to you please do your best to see that this does not happen to Microsoft. Our nation's IT industry depends on companies such as Microsoft, and our economy also depends on the IT industry, Please discontinue these lawsuits and help our economy return to normalcy. I strongly suggest that it is in the best interests of everyone to discontinue these lawsuits so our economy can return to a sense of normalcy.

Sincerely,
John J.Petroci Jr.
cc: Senator Rick Santorum

MTC–00030472

371 Bald Road
Touchet, WA 99360
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I think the federal government never should have filed the lawsuit against Microsoft. At this stage in the proceedings, however, I think it is in everyone's best interest that the case is settled. It is a shame that the remaining plaintiff states have not joined in the settlement efforts. The concessions Microsoft has made are more than reasonable. Microsoft has agreed to disclose portions of its code to its competitors. They have agreed to establish a uniform price list for computer manufacturers. They have agreed to make it easier for servers to interoperate with one another. They have agreed not to take actions against computer manufacturers who install the competition's software on their computers. All of these concessions amount to establishing fair competition for other software companies.

The settlement agreement should be approved, and the federal government should take no further action in this case.

The Clinton Administration should have never initiated this suit. They were totally anti-business and their motives were entirely political!

Sincerely,
Mark Wagoner

MTC–00030473

Christopher & Sharon Moline
12407 Madeley Lane
Bowie, MD 20715–2904
January 22, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

We are writing to show our support for the settlement reached between Microsoft and the government. It is fair and reasonable.

The fact that Microsoft has agreed not to retaliate against software or hardware developers who develop or promote software that competes with Windows or that runs on software that competes with Windows shows me that Microsoft is not looking for ways to hurt consumers, but to help them, Further, Microsoft won't enter into any agreements forcing a third party to distribute or promote any Windows technology exclusively or in a fixed percentage. Finally, the government will establish a ''Technical Committee'' that will monitor Microsoft's compliance with the settlement and assist with dispute resolution.

This is a good settlement and Microsoft deserves a lot of credit for taking the lead on resolving these issues. We hope the settlement will be approved so Microsoft can get back to developing innovative software.

Sincerely,
Christopher & Sharon Moline

MTC–00030474

PhoneTools
BVRP
software
508 North View Road
Mount Airy, MD 21771
Phone: 301–831–0927
Fax: 3010–831–0927
Message:
Please review the attached document.
From: Steve and Linnea Capps
To: us Department of Justice Attorney General John Ashcroft
Date: 1/26/2002
Page(s): 2
January 23, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

As a woman aspiring to start her own business, I am discouraged and disheartened by the manner in which the federal government treats success. I am bitterly disappointed that our government—MY government—feels it necessary to oversee the financial castration of inventors and creators, hobbling what is supposed to be free enterprise. I feel strongly that government has no right to insert itself into legitimate and successful business, to legislate and litigate, to attempt to regulate a product that clearly outshines other, similar products. Smaller companies, who can't compete became the quality of the product they offer is no match for the ''big guy'', cry foul and the government steps in to try to level the playing field, The playing field for business will never be level It is not only futile to attempt to level that field with legislation or legal action, it is a childish wish for fairness that assumes that it can be done. If Linux and Unix were such operating systems, they would be where Microsoft is now, became the consumer would have demanded their products over Windows. If WordPerfect or Lotus 1–2–3 were as user-friendly as MS Word or Excel, they would be the applications in great demand. The fact is, Microsoft is guilty of nothing more than being popular—popular became they provide an intuitive, user-friendly, and versatile environment in which to work. How can you, as Attorney General, support, represent, or oversee the punishment of a company whose only crime is that the consumer prefers its product over the competition's?

For example: The entry of Wal-Mart and Target into the discount department store business, offering better products at lower prices, drove KMart into Chapter 11 bankruptcy. Consumers regulated the market with their purchases. In the eyes of the consumer, Kmart just didn't measure up to the competition. It has always been consumers who ensure the success or demise of a business. We have, and should be allowed to retain, without legislative or litigious interference, the power to regulate business with our wallets.

I am not so naive as to think Microsoft is entirely without fault or abuse of power in their rise to their current market position. The proposed settlement with the government, which I have reviewed, appears to be genuinely equitable. It not only provides a solution to the anti-trust ''problem'' Microsoft presented (in the eyes of the Department of Justice), it also provides

concessions to Microsoft and its competitors. At this point, I do not believe additional action is necessary on the federal level.

I am concerned that the federal government has been so intrusive and vituperative against Microsoft. Success, innovation, and creativity should not be a federal offense, and are certainly no reason for litigation to continue. I urge you and your office to finalize the settlement and move on.

Sincerely,
Linnea Capps
(Mrs. Stephen R.)

MTC–00030475

Natalie Dunlap
316 Webster Street
Lewiston, ME 04240–4854
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I was pleased to learn the federal government decided to settle its antitrust case against Microsoft. This should have been done a long time ago. Nonetheless, I am in favor of the steps that have recently been taken to resolve this lawsuit.

I am a very strong supporter of Microsoft. As a result of Microsoft's hard work and innovation, we live in a world where I can communicate with loved ones across the country with ease. I firmly believe this case was brought as a result of the misguided idea that a successful company should be knocked down, and its competitors should be awarded the fruits of their labor, Notwithstanding my belief that this case lacked merit from its inception, I think the settlement agreement's terms are fair. The court should not hesitate in its approval of the settlement. Microsoft has agreed to make it easier for its competitors to compete with Windows. They agreed to document and disclose to their competitors portions of the Windows code. They also agreed not to retaliate against those who promote software that competes with Windows. Nothing more should be expected or required of Microsoft beyond the terms of the settlement agreement.

Sincerely,
Natalie Dunlap

MTC–00030476

Jan 26 02 10:07 am
January 16, 2002
Attantion: Renata Hesse
Judge Kolar Kottely
U.S. Department of Justice,
Antitrust Division
801 D Street, NW, Suite 1200
Washington, DC 20530

Dear Judge Kottaly.

From the perspective of a regulatory compliance officer for lowa's state-designates secondary market for student loans. I have followed the Microsoft antitrust case with great interest and look forward to a settlement.

Working with college graduates and students of lowa colleges and universities, we are well aware of the growing number of young people a??ting our state after compi??ting higher education. To start this tide, businesses and our state government continue to focus attention on how best to keep and attract college graduates to lowa—investment in our cities, increasing amounts and avaliability of vonture capital, creating a business ??mate that is Inviting to companies.

It is unfortunate our state is one of only nine others whose Attorney General did not sign onto the proposed Microsoft antitrust s??tlement before you. It does not help our state's cause to attract burg??ning tech companies or young professionals. I do not believe his position is representative of the majority of lowa residents or businesses—which is what com??iled me to write. The settlement on the table has taken a great deal of time and effort from the parties involved. It is a fair settlement and your approval of it would take a large pace toward the finish line in this marathon case.

Thank you for accepting my comments.

Sincerely.
camas G. Solo, CPA. CIA
Compliance Officer
Iowa Student Loan Liqui??ty Corporation

MTC–00030477

Facsimile transmittal
To: Department of Justice
Fax: 1–202–307–1454
From: Don Phillips
Date: 1/26/2002
Re: Microsoft Settlement
Pages: 1
CC:
X Urgent
To: Department of Justice

From: Don Phillips, Consumer, Engineer, Voter

I believe the US Government should settle its antitrust suit against Microsoft immediately. The current proposed settlement should be approved and implemented as soon as possible. This lawsuit never, in any way, represented the interests of consumers. Microsoft has had a long track record of developing and selling software products that consumer like and use. The company's growth and profits are evidence of this. On the other hand, no credible evidence was ever presented during the trial (or after) to show that Microsoft ever did anything that was against consumer interests. Clearly this lawsuit never had any basis In fact and never should have been undertaken.

In fact, the lawsuit, itself, has caused major harm to consumers and to the entire US economy. Also, the government's reputation as being objective and fair has been seriously eroded. In short, the whole process has been a disgrace to justice and an insult to American consumers. I have worked in the semiconductor industry for 30 years and have had many dealings with Microsoft as well as many of Microsoft's competitors. Also, I have personally used many products from Microsoft and from its competitors. Based on my Long experience with technical products it is very clear to me why Microsoft's competitors have not prevailed in the marketplace. This lawsuit has clearly been shown to be nothing more than a thinly veiled attempt by weak competitors to do serious harm to a more successful company. This is very disgraceful behavior! For the government to continue to perpetuate this case would be a major miscarriage of Justice.

Respectfully, Don Phillips, Pale Alto, CA

MTC–00030478

1721 15th Avenue Southwest
Olympia, WA 98502
January 23, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I understand the Courts will make a final decision at the end of this month on whether the proposed Microsoft settlement is in the best interest of the consumer. I personally believe that we need to leave it alone. It has already cost us billions of dollars in legal fees, lost production and loss of jobs in the technology sector of the economy.

Microsoft has agreed to grant computer makers broad new rights to configure Windows, in order to promote non-Microsoft software programs that compete with programs included within Windows. They have also agreed to document and disclose various interfaces that are internal to 'Windows' operating system for use by its competitors. This is definitely beyond what is expected in any antitrust settlement.

Let's end this before we get in over our head. There are far more pressing issues we need to concentrate on such as reviving this fragile economy.

Sincerely,
Edward Heffernan

MTC–00030479

John & Darlene Cooke
Phone: (252) 537–0960
P.O. Box 495
Fax: (252) 308–0990
Gaston, NC 27832–0495
email: dcooke@schoollink.net
TO: Attorney General John Ashcroft
FROM: Darlene Cooke
DATE: 1–24–02
NUMBER OF PAGES (including cover page): 2
COMMENTS: Re?? Microsoft Settlement
P. O. Box 495
Gaston, NC 27832
January 23, 2002
Via Facsimile (202)–307–1454 or(202)–616–9937
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Attorney General Ashcroft:

As part of the public comment phase, I am writing to urge the Department of Justice to accept the settlement proposal in the Microsoft anti-trust case. I believe the terms of the proposed settlement will protect consumers and will shield Microsoft's competitors from unfair business practices. By accepting the proposed settlement, Microsoft will change many of its former business practices and will agree to abide by the stipulations therein. If Microsoft is willing to accept those terms, the Department of Justice should be willing to endorse the settlement and bring the issue to a close.

Our nation is facing profound challenges on several fronts. I think your department

and the various states'' Attorneys General should settle the Microsoft case in order to focus on other more pressing issues.

Sincerely,

Darlene Cooke

MTC–00030480

Frederick & Coleen Walther
P.O. Box 30
West Poland, ME 04291–0030
January 25, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I would very much like to see the Microsoft settlement agreement which, in my opinion is very well conceived, approved by the Court. It seems to me that the goals set forward were met and that no antitrust laws are in jeopardy.

From what I understand, Microsoft has agreed to significantly change the way it conducts business so that its competition has a level playing field, and it will not take negative actions against any competitor of Windows. They have also agreed not to enter into agreements with third parties obligating them to sell Windows exclusively.

I just can't see why taxpayer dollars would be spent wisely by litigating this case further. It is time to get on with business and allow Microsoft to help stimulate the economy and reward its patient shareholders like my family. Government actions have already cost our portfolio far more than we would like!

Thank you for your time and attention.

Sincerely,

Frederick & Coleen Walther

MTC–00030481

Helga Gardetto
475 Windridge Drive
Racine, WI 53402–2658
January 21, 2002
Attorney General John Ashcroft
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I would like to propose finalization of the agreed settlement deal with Microsoft and the government. I don't think a company should be held down in its attempt to prosper, and this lawsuit has over-stepped any reasonable bounds of dealing with the free market.

The settlement proposed offers several steps to allow more competition. Microsoft will not require computer companies to use Microsoft software, and will allow competitors unheard-of access to Microsoft's proprietary technologies. This deal should be appear quite accommodating to the company's opponents, as it will be monitored regularly by industry experts. Meanwhile, I'm sure that a break-up would not offer such favorable cooperation and results for those groups.

Please move forward with this settlement and allow the PC industry to be stable and successful in the coming years ahead. Thank you for your time.

Sincerely,

Helga Gardetto

MTC–00030482

12938 Kingsbridge Lane
Houston, TX 77077
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing you today to express my opinion in regards to Microsoft and the antitrust dispute I support Microsoft in this dispute, and I believe this litigation is costly and a burden on taxpayers and consumers I support the settlement that was reached in November as an adequate means to end this dispute.

Microsoft has agreed to carry out all provisions of this agreement and will be monitored for compliance. Under this agreement, Microsoft must license its Windows operating system products to the 20 largest computer makers on identical terms and conditions, including price. Microsoft has also agreed to disclose various interfaces that are internal to Windows'' operating system products, which is a first in an antitrust settlement. Microsoft did not get off easy in this settlement.

This settlement not only keeps Microsoft together as a company but will also foster competition. Continuing this litigation will only have adverse effects on consumers and the economy Please support this settlement so our precious resources can be devoted to more pressing issues. Thank you for your support.

Sincerely.

Amanda Quam

MTC–00030483

12938 Kingsbridge Lane
Houston, TX 77077
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing you today to express my opinion in regards to Microsoft and the antitrust dispute I support Microsoft in this dispute, and I believe this litigation is costly and a burden on taxpayers and consumers I support the settlement that was reached in November as an adequate means to end this dispute.

Microsoft has agreed to carry out all provisions of this agreement and will be monitored for compliance. Under this agreement, Microsoft must license its Windows operating system products to the 20 largest computer makers on identical terms and conditions, including price. Microsoft has also agreed to disclose various interfaces that are internal to Windows'' operating system products, which is a first in an antitrust settlement. Microsoft did not get off easy in this settlement.

This settlement not only keeps Microsoft together as a company but will also foster competition. Continuing this litigation will only have adverse effects on consumers and the economy Please support this settlement so our precious resources can be devoted to more pressing issues. Thank you for your support.

Sincerely.

Amanda Quam

MTC–00030484

6585 South Military Trail
Lake Worth, Florida 33463
(561) 968–1111
Fax (561) 968–1804
FAX
COVER PAGE
DATE 1–26–02
TO ATTORNEY GENERAL JOHN ASHCROFT
FAX # 1–202–616–9937
PHONE 1–202–307–1454
FROM: JERRY DOSER
UMBER OF PAGES INLCUDING COVER 2
ORIGINALS TO FOLLOW: NO ?? YES
MESSAGE: COMMENTS REGARDING MICROSOFT SETTLEMENT.
3855 Jonathans Way
Boynton Beach, Florida 33436
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The intent of this letter is to go on public record and express my support for the settlement that was reached in the antitrust lawsuit between Microsoft and the Department of Justice. The settlement was reached on November 2, 2001, and I was relieved to see that the suit had finally come to an end.

There are still individual states that are continuing with litigation against Microsoft, and I hope that will soon come to an end, but I am happy to see that it has been settled at the federal level. Hopefully the remaining states will see that they are wasting funds that could be used for so many other more important issues. Microsoft had to concede more than they would have initially liked, but settling the dispute and getting back to business was more important. Microsoft will be monitored by an ongoing technical oversight committee, so. they will have to abide by the terms of the settlement. I am glad to see that two sides come to an agreement, and I fully support the settlement.

Sincerely,

Jerry Doser

cc: Representative Robert Wexler

MTC–00030485

Henry M. Gubitosi
13 Easton Street
Cantonment, FL 32533–6559
January 24, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

For the past three years, the people who depend on Microsoft's products everyday have waited for a settlement to be reached in this antitrust suit. Now it seems that the end is in sight. I hope that this settlement goes forward so that this case can finally be put to rest.

Microsoft is willing to give up a lot in order to reach a settlement and I for one hope they do. Out of the many elements that

Microsoft is willing to forfeit, one of the most overlooked is the right they're giving to computer manufacturers. By giving them the freedom to configure Windows with whatever applications they choose, Microsoft is ceding significant portions of its market share. Microsoft has also agreed to provide a uniform price list to them.

I hope that people will spend the time to go over the settlement, to see exactly what Microsoft is forgoing in order to put this case to rest. The settlement should be acceptable to everyone but the most ardent Microsoft opponents. I hope that it will be finalized soon so that everyone can just move on.

Sincerely,
Henry Gubitosi
cc: Representative Jefferson Miller

MTC–00030486

Cathy Bason
125 Phillips Rd
Longville LA 70652
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

Please allow this letter to serve as my vote of support for the settlement agreement that was reached in the Microsoft antitrust case.

Under this agreement, Microsoft will be making changes in its pricing structures, distribution agreements and Windows systems configuration in an effort to promote increased competition and greater consumer choice. It is in the public's best interests to enforce this agreement and end this case.

Thank you for considering my opinion.

Sincerely,
Cathy Bason
125 Phillips Rd
Longville, LA 70652

MTC–00030487

1200 Harger Road Suite 521
Oak Brook, IL 60523
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am taking this moment to write you concerning the current settlement between the US Federal government and Microsoft. I feel it necessary to voice my opinion during this period of public comment, after all, it is people like myself, the American consumer, that are suffering throughout this overdrawn litigation.

The current settlement plan is, in my view, a fair and just compromise and the federal government should remove itself from the corporation's future business tactics. Microsoft has only made the face of technology easier for America, not to mention the whole world, and thanks to Microsoft, America has continued to be one of the leaders in the global economy. Please take into consideration my opinion as an active member of my community and an American consumer who wants to see Microsoft back in the business of innovation.

Sincerely,
Anthony De Paul
cc: Representative Henry Hyde

MTC–00030488

Bob Jones Tax Service
3333 Brea Canyon Rd. Suite 201
Diamond Bar, CA 91765
January 17, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Attorney General Ashcroft:

I would like to convey to you my support for the settlement reached between Microsoft and the Department of Justice. This settlement ends an expensive court battle and will facilitate the American technology industry in its efforts to once again flourish.

This unprecedented settlement will create more openness in the technology sector. The settlement gives competitors more access to Microsoft's product information and code than any other company has ever had to disclose in the history of the technology industry. More expensive courtroom battles and conflict will serve only to increase the legal bills of the government and Microsoft. Microsoft has agreed to more terms in the settlement than were actually at issue in the lawsuit to facilitate a reasonable conclusion to the suit.

Undoubtedly this settlement's time has come. No further Federal action is required in this case. Microsoft and the DOJ should finalize the settlement and help to focus the high tech sector of our economy on technology and not lawyers.

Sincerely,
Robert Jones
Bob Jones Tax Service

MTC–00030489

Tim L. Long
January 24, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

The basis of the Microsoft lawsuit has been weak from the start, a failed attempt to shake Microsoft through negative media attention and distraction. Microsoft has been hog tied by fresh legal complaints answering each advance they have made since the original suit. I fail to see how Microsoft is more corrupt than any other of the litigating parties, as opposition has blatantly used the courts to stall Microsoft in hopes of their own gain.

The lawsuit against Microsoft may have originated with legitimate concerns regarding modern day antitrust issues, but has digressed to a manipulation of the courts by misguided ambition. Enough resources have been wasted on this debacle. The proposed settlement should be an acceptable solution for all After all, Microsoft's competition has already won more than three years worth of media battles and scrutiny throughout the trial.

Sincerely,
Tim L. Long
1830—2nd Street SW
Cedar Rapids, Iowa 52404

MTC–00030490

Gary A. Bean
January 24, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

Thank you so much for considering comments from the consumer in your deliberation of the Microsoft antitrust suit. What may have begun as a test of modem day antitrust law has become a corrupt forum for corporate lobbyists. It seems as though this suit has gone strangely awry, focusing on corporate influence and loopholes rather than law.

The speed of advancement in the tech sector today is scarcely confinable by current antitrust law. Microsoft's competition may have gained better results at challenging antiquated antitrust law rather than Microsoft's specific business practices.

The abuse of corporate power in this case certainly dispels any merited changes to current law. Paradoxically, the competition hemmed themselves in to more government scrutiny rather than gaming a leg up on Microsoft.

Quiet, prompt settlement is the most graceful exit from such poorly intentioned litigation.

Sincerely,
Gary A. Bean
6016 Sharon Lane NW ??
Cedar Rapids, Iowa 52405

MTC–00030491

Samantha West Gudheim
137 ½ West ?? Street
Manch??, New Hampshire 03101
January 23, 2002
Renata Hesse
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Attorney Hesse:

I am aware of a period of public comment in the case of the U.S .and Microsoft is now open and will be until January 27, 2002. I would like to express my support of the settlement that has been reached.

I understand that these settlements are difficult to reach. Knowing how much time and effort goes into these cases I believe that no more time should be spent on this case. Further litigation in the Microsoft case will only keep government lawyers and staff from more meaningful business. The government now needs to focus on other more pressing national matters. Needless to say, too much money has already been spent.

Microsoft lawyers and staff should also be allowed to concentrate on the business of technology. They should be allowed to continue to be a progressive and productive company. As such, Microsoft will contribute to the economy and the computer industry. At a time when many companies are failing the government should be encouraging all

companies, especially large and productive ones, to continue to grow—not restrict or regulate them needlessly.

Thank you for your consideration and for your service in the United States government.

Sincerely,

Samantha Gudheim

MTC–00030492

Fax Cover Sheet
copyworks??
OPEN 24 HOURS
Date: 1–26–02
Number of Pages (including Cover): 2
Fax Directed To: Department of Justice
Sent By: ??
Fax Number: 202 616 9937
Fax Number:
Phone Number:
Phone Number:
Company:
Message:
?? AMES ?? AUBURN ?? CEDAR FALLS ?? CEDAR RAPIDS ?? CORALVILLE ?? DUBUQUE ?? LINCOLN 105 Welch Ave. 212 West Magnolia St. 2227 College Street 4837 1st Ave. SE 309 2rid St. 136 Wacker Plaza 1320 Q St. Ames, IA 50014 Aubum, AL Cedar Falls, IA 50613 Cedar Rapids, IA 52402 Coralville, IA 52241 Dubuque, IA 52002 Lincoln, NE Ph: (515) 292–3630 Ph: (334) 826–3555 Ph: (319) 266–2306 Ph: (319) 373–5335 Ph: (319) 338–5050 Ph: (319) 557–2679 Ph: (402) 477–7400 FAX: (515) 292–5011 FAX: (334) b26–3553 FAX: (319) 266–5422 FAX: (319) 373–5436 FAX: (319) 338–1717 FAX: (319) 557–2004 FAX: (402) 477–8966
Patricia E. Masteller
345 Marion Boulevard
Apartment # 112
Marrow, Iowa 52302
January 24, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

American consumers have been bilked out of tens of millions of dollars enduring prolonged litigation in the Microsoft antitrust case. And their own attorneys general and the very companies trying to woo their business have done the bilking.

Microsoft's competitors would tell like they are the proverbial ''David'' to Microsoft's ''Goliath'', but several of these companies have grown and merged to monolithic conglomerates themselves. In the biblical story, it is David who threw stones, and Microsoft's competitors have fervently done so, encouraging media frenzy through bitter accusations and editorial campaigns. Somehow excusing their own anti-competitive behaviors, competition has rabidly sought to achieve through the courts what they haven't been able to in the marketplace.

This shameful abuse &our judicial system should not be tolerated. I understand this highly publicized case has come to you through a questionable course of litigation. I am confident that prompt settlement ends this tragic scene of corporate manipulation, and I hope you'll agree.

Sincerely,

Patricia E. Masteller

MTC–00030493

WHITE & JOHNSON, P.C.
ATTORNEYS AND COUNSELDRS AT LAW
January 21, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW. Suite 1200
Washington, DC 20510

Dear Ms. Hesse:

The settlement proposed in the Microsoft antitrust case deserves strong consideration. The independent Technical Committee set out in the proposal provides an enforcement device. If compliance backsliding by Microsoft should occur, the committee would be engaged ?? the cost of Microsoft.

End users would receive the kind of continued flexibility that we have already seen in the release of their new Windows XP operating system guaranteeing consumers the freedom to select applications from competitor providers with ease.

Information technology consumers of Microsoft's operating system would have access to technical specifications of Windows that actually makes it easier for its competitors to provide compatible applications to be used on computers and with servers of Microsoft's operating system.

Although shor?? of breaking apart the company, there are also fair provisions set forth in this settlement that would punish the company for the sections of which they have been found guilty.

I trust you will give this settlement offer sufficient deliberation.

Thank you

Brent Cl??son

MTC–00030494

The ?? Comm?? Massachasetts ??
FRANCIS L. MARINI ??NTATIVE
MINORITY LRABER ??
ROOM 124
TEL: (617) 722–2100
FAX: (617) 722–2300 ??
January 24, 2002
Ms. Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001

Dear Ms. Hesse,

There is a growing sentiment among economists that we are finally seeing the light at the and of the tunnel of our nation's recession. The markets are improving, and the economic forecast is generally positive. However, state revenues are down and most states will have to consider tough outs on spending in coming budgets.

In Massachusetts, we have witnessed a shrinking state revenue base mostly caused by the recession. Many growth opportunities were squandered in the 1990s, and now, in ?? of trading on our accomplishments, we are ?? over what might have been.

On thing that can be done to aid states'' economies is to end the Microsoft lawsuit. We are writing in support of the nine states and the Department of Justice's settlement agreement. It is a fair and reasonable agreement which brings a satisfactory conclusion to this long-running anti-trust case. As the old saying goes, a rising tide floats all boats. And just as a rising tide will float a boat sitting at the lowest point first, so the resolution of this case will help those who have the farthest to rise first.

The technology-driven ''innovation economy'' has created tremendous opportunities for the citizens of the Commonwealth. But we must act now to take some of the uncertainty out of the economy. We urge you to endorse this settlement agreement, which would provide states greater confidence in fiscal planning and would allow entrepreneurs and businesses to get back to the business of creating new and better products for consumers.

Sincerely,

Fra?? L. M??ini
Minority Leader
Georg?? Peterson, Jr.
Minority Whip
Bradley ?? Jon?? Jr.
Assistant Min?? Leader
Mary S. Rogeness
Assistant Minority Whip

MTC–00030495

HOUSE OF REPRESENTATIVES
2 STATE HOUSE STATION
AUGUSTA, MAINE 04333–0002
(207) 287–1400
TTY: (207) 287–4469
Roger L. Sherman
P.O. Box 682
Houlton, ME 04730
Telephone: (207) 532–7073
E-Mail: reproger??man@??
E-Mail Home: ??-2000@yahoo.com
Renate Hesse
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

I am a ??red teacher and current legislator I am writing to express my support for the proposed settlement reached with Microsoft, by the Department of Justice and nine of the States involved. In reviewing the settlement I see several benefits particularly for our schools.

The opportunity to provide funding for critically need training of educators and staff. Hardware and software, available for use on multiple operating systems, and for the critical resources needed to acquire hardware for financially strapped schools across the nation.

Microsoft has been put on notice they need to change their business practices, and has agreed to do so. The Federal and State Governments have exercised their rightful authority in protecting the public interests, have reached a reasonable solution.

Now is the time to show the public that we are being responsible and ??nd the long drawn out legal process. We must be responsible with the resources of the people with which the government has been entrusted. It is time to restore faith in our legal system by showing that we know when to end the seemingly endless stream of

litigation. Thank you for consideration of my comments and for all you do.

Sincerely,

Roge?? L. Sherman

State Representative

MTC–00030496

Saturday, January 26, 2000 11:30 AM
To:
From: Dave Poage
Sharla S. Poage
9390 264th Road
Arkansas City, KS 67005
Judge Kolar Kottely
Attn.: Ranata Hesse, Antitrust Division
Public Comment
U.S. Department of Justice
601 D Street, NW, Suite 1200
Washington, DC 20530

Dear Judge Kottely,

Since the Clinton years the federal government and several states have been pursuing on anti-trust case against Microsoft which has been one of our country's leading producers of innovative technology. It appears that we are now faced with an opportunity to clear our courts of this case for good. I am hopeful that those in charge will cease this opportunity.

While I am not directly involved with the technology industry and am not a legal scholar, I am a consumer and taxpayer that follows current events very closely. When this case was first brought I was disappointed to learn that my own Attorney General, Carla Stovall, was dragging Kansas into this litigation. It is my belief this case should have never been brought in the first place because it serves no public good.

The theory under which this case was brought is that Microsoft was harming the consumers of their product and had established a sort of monopoly. I do not believe this theory has been borne out with substantial evidence.

What I see is a company that has put products on the market that are appreciated and purchased by consumers. Because of Microsoft's ability to provide customers with products they want, the company has experienced tremendous growth. This is not a reason to punish them! Rather, it is more proof that our system of free enterprise and competition works.

Companies like Microsoft that succeed through supplying innovative and highly demanded goods to consumers should be celebrated not torn down. It is just these types of companies that help stimulate our economy by encouraging consumer confidence, creating jobs, and growing their industry. When the government steps in to flex its regulatory muscle real harm is done. Again, the settlement on the table provides those in charge with an opportunity to end a case that has been harmful to the public good. I urge you to take that opportunity and give your approval to the settlement.

Thank you,

Sharla S. Poage

MTC–00030497

January 25, 2002
Renata Hesse, Trial Attorney
Antitrust Division, Department of Justice
601 D Street NW, Ste. 1200
Washington, DC 20530
VIA FACSIMILE (202) 616–9937

Dear Ms. Hesse:

One of the reasons the American economy is in such a weakened state is the flaws in our system. Specifically, special interests have too much power in Washington DC. The Microsoft case is a perfect example.

Microsoft's competitors don't want to compete against Microsoft in the marketplace, They spend their money on politicians rather than research and development—next thing you know—Microsoft is facing antitrust investigation.

US v. Microsoft has been competitor driven since the day it began. Those opposed to the settlement are still promoting their self interest over the interests of the rest of the country.

Sincerely,

Pete Whittet

MTC–00030498

Jan 26 02 11:25a
John J. DiPietro
ABC/D ADVANCED BUSINESS CONCEPTS/
DiPIETRO
Marketing Strategies.Advertising.Public
Relations.Speaking.Training
January 25, 2002
Renata Hesse
Trial Attorney
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530
VIA FAX: 202–616–9937

To Whom It May Concern:

It is my understanding that the Justice Department is seeking input, regarding the proposed settlement in the Microsoft lawsuit.

As a small business owner, I understand competition and know that it is healthy for our economy. I use Microsoft products daily in my business and they have been a great help to me. They have allowed me to better serve my customers clients, to manage our business and to actually expand. Given the state of our economy right now, we should do everything possible to spur growth, not hinder it.

There has been no consumer harm as a result of any actions taken by Microsoft. Microsoft's innovations have, in fact, have helped many small businesses like mine grow.

It is also my understanding that an additional benefit to settling the suit is the proposal to donate about 200,000 computers to the public schools. It think this is a great idea. We need workers who are computer literate.

I would suggest that we end this action and approve the settlement.

Sincerely yours,

John J. DiPietro

Managing Partner

672 Main Street.Holden, Massachusetts 01520.Tel: (508) 829–9949.FAX'' (508) 829–9959.e-mail: market4you@aol.com

VISIT US ON THE INTERNET AT www.joindipietro.com

MTC–00030499

January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am pleased that a settlement has been proposed to Microsoft by the U.S. Department of Justice. This settlement is long overdue. I understand that we are currently in a sixty-day period for comments on what is in the best interest of the public. In light of this, I am taking this opportunity to express my views on the matter.

Microsoft opponents persistently seek to give the impression that Microsoft has gotten away with easy terms. I beg to differ! If the millions of dollars that they had to spend in their defense is no indication the very opposite is true, then look at all the concessions they have agreed to make. For example, Microsoft has agreed to grant their competitors licensure to their intellectual property. Competitors will now also have the assurance of interoperability within the Windows environment because Microsoft has agreed to disclose Windows protocols. Future versions of Windows will also allow users and computer makers to reconfigure Windows to remove potions of the operating system and substitute competing alternatives.

In my estimation, Microsoft obvious willingness to cooperate with these terms should be enough to abate the concerns of the dissatisfied states. hope that your decision will bring this matter well-needed closure.

Sincerely,

Frank Lempert

31600 S.W. Arbor Glen Loop ??
Wilsonville, Oregon 97070

MTC–00030500

01/26/2002 21:55
508–435–7788
VERNE KAMINSKI
Verne Kaminski
185 West Main Street
Hopkinton, MA 01748
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I want to take a moment to express my support for the settlement that was reached between Microsoft and the Department of Justice in November. I believe it is time to move forward and stop this unnecessary litigation.

I believe Microsoft has agreed to many tough concessions to reach this agreement. One such concession is that Microsoft has agreed to grant computer makers broad new rights to configure Windows. This should satisfy those consumers who felt they were locked into only using Microsoft products as it allows them to buy competing products if they so desire.

This agreement will allow Microsoft to return their focus solely to producing the next generation of innovations. Microsoft can turn its attention to the competitive environment instead of the legal environment. I hope your support of this consumer-friendly settlement will continue. Let's remember that this country was founded on competitive ideas.

Sincerely,
Verne Kaminski

MTC–00030501

2684 Taft Court
Denver, CO 80215
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I express my fullest support regarding the Microsoft settlement. This settlement should bring any pending issues against Microsoft to closure. Microsoft did not deserve to go through such a long litigation.

The terms in the settlement are very beneficial to software developers. As a writer of database programs in the chemical engineering field I have personally enjoyed using Microsoft programs. The only real concern Z have is the recent allegations from AOL/TIME Warner (Netscape) about the Internet web browsers. I am confident the U.S. Government will try and resolve their issues. Overall, the settlement should reap big benefits for businesses and individual consumers.

Because it allows computer-makers the flexibility to configure Windows as well as the ability to promote non-Microsoft software programs that compete with programs included within Windows.

Sincerely,
Stephen Erickson

MTC–00030502

Don G. Baker
3725 Lucy Trimble Road
Burleson, TX 76028
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing you today to inform you of my position in regards to the Microsoft antitrust dispute. I fully support Microsoft and the settlement that was reached in November, and I am anxiously waiting for an end to this dispute.

The settlement that was reached in November is fair and reasonable. Microsoft has agreed to all provisions, including provisions that extend well beyond the products and procedures that were actually at issue in the suit, for the sake of wrapping up the suit, Microsoft is willing to license its Windows operating system products to the 20 largest computer makers on identical terms and conditions, including price. Microsoft has also agreed to design future versions of Windows, beginning with an interim release of Windows XP, to provide a mechanism to make it easy for computer makers, consumers, and software developers to promote non- Microsoft software within Windows.

This settlement will serve in the best public interest. I strongly urge you to support this settlement so consumers and the economy can feel the positive effects of allowing Microsoft to get back to business as usual. Thank you for your support.

I actually believe Microsoft did no wrong.

Sincerely,

MTC–00030503

59 Laurel Avenue
West orange, HJ 07052
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

We would like to use this opportunity of public comment to give our support for the settlement reached between Microsoft and the Department of Justice. The settlement is good for our country and gives each side the chance to move forward.

The terms of the settlement are comprehensive and mandate many changes in Microsoft's past business practices. For example, Microsoft has agreed to grant computer makers broad new rights to configure Windows so as to promote non-Microsoft software programs that compete with programs included within Windows. This gives computer makers the ability to replace access to features of Windows with access to non-Microsoft so—re such as programs from AOL Time Warner. Finally, the agreement calls for the creation of Technical Committee to supervise Microsoft's compliance with their responsibilities.

This case has gone on for too long and neither side wins with continued litigation. The settlement gives Microsoft the opportunity to focus on innovation while the federal government can focus dwindling resources on stimulating the economy.

Sincerely,

MTC–00030504

January 21, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I cannot see how a case was ever brought against Microsoft in the first place. They are not a monopoly; they simply make the product that most people enjoy. That's why I was so pleased when a settlement has finally reached in November.

I was sorry, however, that Microsoft had to give up so much in order for the Justice Department to agree to end its suit. Microsoft is being asked to hand over software, that it has taken time and hard work to create, to its competitors for free. They even have to make sure that subsequent versions of Windows are more geared toward non-Microsoft products.

I feel that while this is all a bit extreme, it would be worth it in order to put an end to this case. Both Microsoft and the Justice Department have more important issues to worry about right now, and it would be good to have them free to do so.

Sincerely,

MTC–00030505

COVER PAGE
TO:
FAX: 12823871454
FROM: JIM CARLETON
FAX: 7137231403
TEL: 7137293417
COMMENT:
Jim Carleton
6043 Lymbar Drive
Houston, Texas 77096
January 26, 2002
Attorney General John Ashcroft
Department of Justice
950 Pennsylvania Avenue
Washington, DC 20530

Dear Mr. Ashcroft,

It has become apparent that some anti-Microsoft forces are attempting to derail the settlement that was reached in the antitrust case this November. It would be very unfortunate if the case was resumed, and Microsoft was forced to continue wasting time and money on this case.

A settlement was agreed to by all sides, and approved by a federal judge. Sadly, forces opposed to the settlement are trying to interfere and have this case resuscitated. Many want to see Microsoft face injury in the court because they are unable to compete with Microsoft in the free market.

It is unfortunate that this opposition exists because the settlement is beneficial to all, including Microsoft's rivals. The settlement give non-Microsoft companies the ability to view and use Microsoft code to create better software. It also will make it very simple for non-Microsoft software to be placed on Microsoft operating systems. Undoubtedly, it is time to conclude this case, and promote competition in the market, not the courts.

Sincerely,
Jim Carleton
Cc: Rep. Tom DeLay

MTC–00030506

53 Arrowhead Road
Duxbury. MA 02332–5035
January 25,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Attorney General Ashcroft:

I am writing to give my support to the recent settlement between the Department of Justice and Microsoft The proposed agreement was a long time coming, and we are only' days away from the end of the comment period. ! hope that once everything is all said and cone, the settlement is approved and implemented as soon as possible.

It is time to move on The Department of Justice has accomplished its goal of making Microsoft. technology more accessible to competing companies Microsoft has agreed to a number of changes opening up its codes and books to other manufacturers. The Justice Department has held Microsoft's ''feet to the fire'' long enough, and the settlement even goes as far as having a ''Big Brother'' feel to it. A three-member committee of software engineering experts has been assembled and will monitor Microsoft's compliance to the agreement. Please support the proposed agreement between the Department of Justice and Microsoft as I do, and approve it with haste Thank you.

Sincerely,
David Delory

co: Representative William Delanunt

MTC–00030507

Darryl LaRocque
P.O. Box 2772
Big Bear City, CA 92314
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I have been following the Microsoft antitrust case in the federal courts since its inception three years ago. Last November, a settlement was proposed, and it is curtly pending approval. This bodes well for the economy, which has been steadily declining since the case began.

Unfortunately, Microsoft's opponents are not happy that Microsoft will emerge intact in this settlement, and are striving both to undermine agreement of the settlement and to bring additional litigation against Microsoft.

Further litigation will serve no one. Microsoft has agreed to make the necessary adjustments in policy and product to prevent further antitrust violations; no further action is necessary. The settlement reached late last year is fair both to Microsoft and its competitors. Microsoft will be allowed to retain control over the bulk of its operations, but will be required to restrict some other practices deemed monopolistic and alter certain products in order to facilitate fair competition.

For example, Microsoft has agreed not to retaliate if software is introduced into the market that directly competes with Microsoft software. Microsoft also plans to allow computer makers broad fights to reconfigure Windows to their own specifications using non-Microsoft software, and enable them to do so by reformatting upcoming versions of Windows in order to support non-Microsoft programs.

I believe the settlement is fair and that no additional measures need to be taken against Microsoft on the federal level. I urge you to support finalization of the settlement.

Sincerely,
Darryl LaRocque

MTC–00030509

Constance Reynolds Lewis
1611 Ninth Street
Lake Charles, LA 70601
FAX COVER SHEET
Date: 1–26–02
Time:
To:
Phone:
Fax: 1–V02–Z07–1454
From:
Phone:(337) 439–4245
Fax: (337) 439–4245
RE: MICROSOFT
Number of pages including cover sheet: 2
Message:

Jie:

I do not believe Hat the government has ANY ?? ?? to ?? Microsoft ?? the posilion?? ?? ?? it has

EARNE?? ??
ROBERT M & LET. RUDE
21301 8th Place W
Lynnwood, WA 98036
January 25, 2002
Attorney General John Ashcroft
U.S. Department oú Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

We have taken this opportunity to write in and express our opinion of the antitrust suit against the Microsoft Corporation. We feel that this suit has been bogged down in the judicial system for long enough and it is time for the government to allow Microsoft to get back to work. It needs to continue setting the standard in the worldwide technology industry.

It is our opinion that this suit has pulled the American economy down, especially in the vital IT sector. The bottom line is, Microsoft is one of this nation's largest employers, and the perpetuation of this case during these times of economic uncertainty is imprudent. Microsoft is and always has been a great company. They have given millions of dollars to charity and have changed the way we view computers forever. Microsoft made technology accessible to Americans in a form that was usable. Without this company, there would have been no ''P.C. revolution.'' We believe that the terms of this settlement will ensure that there are no further violations of antitrust committed by the company, especially with the establishment of a technical committee which will monitor Microsoft and prevent them front any future violations.

We are please that an end to this litigation is in sight. Please continue to support the settlement and the future of free enterprise in this nation.

Sincerely,
Robert Rude
Lc Rude

MTC–00030510

Jerry Stork
6528 Volley Stream Way
* Cumming, GA 30040
Cell Phone 770.329.3794
* Answering Machine 770.475.0922*
Home phone 770.475.1225
* Fax 770.664.1404*
E-mail jrsdll@bellsouth.net
Saturday, January 26. 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

Please do whatever you can to help expedite a settlement of the Microsoft anti-trust case. This nearly four-year-old case has produced little, but controversy. There is now, as you know, a settlement agreement that has been preliminarily accepted by the major parties and the court. This agreement fairly balances the concerns of the parties and offers a fair solution to the dispute. In return for retaining its corporate integrity, Microsoft has agreed to adopt certain practices, which will render it more vulnerable to its competitors. It has, in fact, agreed to help raise its competitors to its own level of play. For example, Microsoft will now invite competition by configuring its Windows platforms to easily incorporate non-Windows software. Microsoft will now offer computer manufacturers licensing agreements without a condition of Windows software exclusivity. Microsoft has even promised to disclose to competitors certain internal Windows interfaces. In other words, Microsoft has agreed to encourage the industry to catch up with itself.

These concessions and this change in philosophy will inure to the benefit of the industry and the public. Please support this settlement.

Sincerely,
Jerry Stark
Teleflex Fluid Systems,
One Firestone Drive, Suffield, CT 06078
1–800–225–9077 or 1–860–668–1285
Fax 1–860–666–2353
www.teleflexhose.com

MTC–00030511

350 S Clinton Street Apt. 9A
Denver, CO 80231
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing today to encourage the Department of Justice to accept the Microsoft antitrust settlement. A settlement is available and the terms are fair, Microsoft has agreed to a wide rang of concession in order to settle. I would like to see the government accept the settlement and allow Microsoft and the industry to move on.

Many people think that Microsoft has gotten off easy, in fact they have not. The settlement was arrived at after extensive negotiations with a court-appointed mediator. Microsoft has agreed to terms that extend well beyond the products and procedures that were actually at issue in the suit. To make sure that Microsoft complies with the settlement a technical committee will be set up to monitor Microsoft's compliance. The settlement that was reached is fair and it is guaranteed to be followed.

Microsoft and the industry need to move forward, and in order to move forward this issue needs to be put in the past. Please accept the Microsoft antitrust settlement.

Sincerely,

MTC–00030512

Justice Department:

Three years of litigation is enough. Dragging out this legal battle further will only benefit a few.

The aggressive lobbying campaign to undermine the settlement is only serving to line the pockets of wealthy competitors, lawyers and special interest bigwigs. Not one new product that helps consumers will be brought to the marketplace.

I strongly urge the U.S. Department of Justice to end this wasteful investigation. The proposed settlement offers a reasonable compromise. It is time to move on with the agreed settlement negotiated and allow businesses who wish to compete to compe??. Those who can't muster up the competitive edge need to either merge or get out of the business arena

Sincerely
Ben Jones
E-mail

MTC–00030513

Complimentary Fax Cover Sheet
To:
From:
Fax #
Phone #
Date: Urgent
Confidential Confirm Receipt
Number of Pages: (Including Cover)
Reply Fax #:
Message:
Dorothy Klughers
30 John Lane
Levittown, NY 11756–1905
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
Dear Mr. Ashcroft:

I am in favor of the Microsoft antitrust settlement agreement. The terms of the settlement agreement are more than fair. I urge the court to approve the agreement. Among other things, Microsoft has agreed to grant computer makers many new rights. The manufacturers will be able to remove various features of Windows. such as Microsoft's web browser. Internet Explorer, and replace them with browsers made by Microsoft's competitors. This will result in giving consumers more choice when it comes to software they purchase. Microsoft has also agreed not to take retaliatory action against those who promote or develop software that competes with Windows.

The settlement agreement will help level the playing field among the software companies. Litigating this case further will not prove to be as beneficial to consumers as this agreement will be.

Sincerely,
Dorothy Klughers

MTC–00030514

16 Charles River Road
Medway, MA 02053
January 18, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

I am writing to strongly urge you to support the current settlement between Microsoft and the Department of Justice. I firmly believe that there should be no further action against Microsoft regarding the proposed negotiated settlement A/though the litigation should have never brought forth several yearn ago, this current settlement is the result of a fair, judicious and reasonable process that should be respected.

This settlement is unique in that it has the necessary enforcement powers to ensure that the terms of the agreement are abided by. The agreement contains a provision that allows private companies such as SUN Microsystems, Apple and IBM to sue Microsoft should the company not follow the terms of the settlement. Additionally, the agreement requires Microsoft to submit to a government technical oversight committee and to change their business, licensing and marketing practices to foster greater competition. This settlement signals the end of a long and drawn out process and should be respected.

With all that is going on in the world, a faltering economy, and more significant national priorities I hope that you will help support this settlement in its current state. It is a shame that a company like Microsoft who builds a superior product and is a major contributor to the economy would be consistently hounded by a government that is supposed to support free enterprise.

Sincerely,
Allen Sisson

MTC–00030515

DANIEL HICKY GRANT, Ed.D.
Board Certified Forensic Examiner, Fellow of the American College of Forensic Examiners, Diplomate of the American Board of Psychological Specialties—American College of Forensic Examiners
Board Certified Expert in Traumatic Stress
Diplomate, American Academy of Experts in Traumatic Stress
Board Certified Neuropsychologist—The Americana Board of Professional Neuropsychology
Diplomate in Pain Management—American Academy of Pain Management
Licensed Psychologist—Georgia License # 859
Post Office Box 1359
Richmond Hill
Georgia 31324
912–727–3158
danielgrant@msn.com
899 Mill Hill
Landing Road
Richmond Hill, GA 31324–4625
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
Fax #: 202 307 1454
January 25, 2002
Dear Mr. Ashcroft:

I am in support of Microsoft and its right to practice ethical business in a free market economy. I am also in support of the proposed antitrust settlement between them and the Department of Justice. I believe this is a fair resolution to this lawsuit,

Microsoft is disclosing much of the features that give it a competitive edge. This includes disclosure of interfaces that are internal to Windows'' operating system, and allowing software developers to develop competitive software. The release of this information should be enough to satisfy the government.

I urge you to support this settlement and conclude this case. I would feel more comfortable with the Government focusing its efforts on pursuing more suspicious and illegal companies.

Thank you.

MTC–00030516

Don & Arlene Fenno
1124 S. Ave. B
Washington, IA 52353
(319) 653–2365
534 Princeton Greens Ct.
Sun City Center, FL 33573
(813) 634–5494
Justice Department
Re: Microsoft Settlement.

We believe that the Federal court settlement was very adequate. Any further harassment could damage our inventive spirit and curb new efforts when we need them most. States should stop now.

Don & Arlene Fenno

MTC–00030517

Attention: Concerning comments about Microsoft Litigation Microsoft has gone thru enough. The settlement the federal government came up with should be enacted. We can thank Microsoft for a lot of the Standands enjoyed today to computing and the internet.

X-president Clinton should have been going after Bin Laden and not Bill Gates.

Thanks,
Mike Stuart
P.S.

Would you mail or E-mail me a schedule of upcoming topics and issues for ocmment by the
DOJ.
mikesutart@coastalnet.com
1104 Karen Dr. A-6
New Bern, NC
28562
Thanks

MTC–00030518

10831 Valmay Avenue NW
Seattle, WA 98177–5336
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
Dear Mr. Ashcroft:

I am writing today to encourage the Department of Justice to accept the Microsoft antitrust settlement. It disappoints me that the government has in the past chosen to harass a company like Microsoft. Microsoft has added such a great economic contribution to this country. The contribution extends from Washington State all the way to Washington, DC Microsoft is a core holding of most company retirement plans, 401Ks, IRAs and mutual funds throughout America Therefore it is in the best interests of almost every American to get this case settled.

In order to settle this issue Microsoft has agreed to many terms. It has agreed to design future versions of Windows to be more compatible with non-Microsoft soft-ware. It has also agreed to change several aspects of the way it does business with computer makers. Microsoft did not get off easy, there are pages of terms agreed to in addition to these two.

Microsoft needs to be able to get back to business. This suit has bogged down the company for over three years now. For the good of American's everywhere ! urge you to accept the Microsoft antitrust settlement

Respectfully
J. Bradford Borland

MTC–00030519

7957 2nd Avenue S

St. Petersburg, FL 33707–1023
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
Dear Mr. Asberoft:

I am writing in support of the settlement that you have reached with Microsoft in November. I know that, while not yet finalized, this settlement brings the promise of an end! to the Microsoft lawsuit at the federal level.

I hope that everyone will see just how much Microsoft is willing to sacrifice in order to bring about an end to this settlement. By offering its proprietary code and the rights that go along with it, Microsoft is forgoing billions in creative profits. And that provision is merely a small portion of the overall settlement.

This settlement should be agreeable to everyone and I feel that the states that refuse to settle are only trying to pad their own budgets like they did with the tobacco companies. But this time, they are attacking a company that is vital to the average American and the economy. Hopefully, with this settlement finalized, they will fall in line with the rest of America.

Sincerely,
Jim Engel

MTC–00030520

3115 Lafayette Street
Houston, TX 77005
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

I would like to point out some of my views regarding the Microsoft antitrust case. I do not agree with every decision that Microsoft has made, but understand that business is business. I feel that there was merit behind many of the issues that brought about this case, but that was three years and countless taxpayers'' dollars ago. I feel that the settlement agreement is the best way to close this case, and ensure that it never reaches the federal level again.

Although the settlement calls for concessions, Microsoft has agreed in an effort to end this case sooner rather than later. Microsoft has agreed to change the way it markets, licenses, and develops its software, as well as the way it deals with independent vendors. Microsoft Ins agreed to stop retaliating against those that promote or design non-Microsoft programs, and computer makers will be allowed to configure Windows so as to promote those programs.

It appears to me that Microsoft has made the necessary concessions, and now we must move our focus to the states that are pursuing further litigation. I fear that since the tobacco settlements, states have seen corporate lawsuits as additional forms of state revenue. I hope you are Wing to recognize when states are using consumer protection as a veil for return on investment. As long as Microsoft is willing to give up some of its market share and competitive advantage, there will always be those requesting more. I hope you will do everything in your power to attempt to close this case as soon as possible, or we might be back in a few years trying to protect Microsoft.

Sincerely,
Catherine McNamara

MTC–00030521

29303 NE 11th Street
Carnation, WA 98014
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

I am very much in favor of the Microsoft antitrust case settlement agreement. The remedies provided in it are good for everyone involved, and I would not like to see the case dragged on through the courts any further.

The terms of the settlement agreement are quite reasonable by any standards. Once the agreement is approved, Microsoft will be helping the competition by leveling the playing field in the high-tech industry. For example, Microsoft has agreed to make it easier for consumers to run other software programs simultaneously with the Windows operating system. They also agreed not to retaliate against retailers that promote software that competes with Windows. Additionally, Microsoft has agreed to implement a uniform price list for the top 20 largest computer manufacturers. Microsoft's competitors should be satisfied with these types of concessions.

I appreciate your efforts toward settling this case. Thank you.

Sincerely,
Ron Beman

MTC–00030522

Benjamin Friedman
* 17846 Beckley
* CircleVilla Park, CA 92861
January 23, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

I would like to take a moment to express my opinions regarding the Microsoft antitrust case. I think I might feel differently about Microsoft if it had become powerful by malicious intent, but it achieved its position because it made a better mousetrap and sold it at the lowest price. I am a supporter and avid user of Microsoft products, and would like to see this case put behind us. Although the settlement may reach further than Microsoft may have wished, it realizes that settling the case sooner, is better than later. In order to do this, it has agreed to concessions that make antitrust precedent. Microsoft has granted broad new rights to computer makers, software engineers, and to consumers. It has allowed them to configure Windows so as to promote non-Microsoft programs that compete with the programs already included within. Also, Microsoft has agreed to document and disclose various interfaces within its Windows operating system. This boils down to Microsoft opening its doors to the competition, and allowing them to use its invention to promote their own competing products. Imagine if Nike put Reebok logos on its shoes, or if Ford built cars with Toyota engines. It seems ridiculous when considering products that we are more familiar with, bat nevertheless, Microsoft has a agreed to these concessions to speed a conclusion. We should consider the very foundations of free enterprise and competition and realize that the longer this case precedes, the greater the risk that we may cause irreparable damage to the IT industry, and the economy.

Sincerely,
Berjamin Friedman
cc: Representative Christopher Cox

MTC–00030523

January 17, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

I am writing you today to express to opinion in regards to the Microsoft anti- trust dispute. I support Microsoft in this dispute, and I favor the settlement reached in November. This settlement is complete and thorough, and I am anxious to see this dispute resolved permanently. Microsoft has agreed to carry out provisions in this agreement. such as: designing future versions of Windows to provide a mechanism to make it easy for computer makers, consumers, and software developers to promote non-Microsoft software within Windows. The mechanism will make it easy to add or remove access to features built into Windows or to non- Microsoft software. Microsel5 has pledged to create more opportunities for competing companies. ''

Microsoft is a company that delivers quality product to the marketplace. I have used Microsoft's products for years now, and I hope I will be able to enjoy these products for years to come. Please do your part to stop litigation against Microsoft. Thank you for your support.

Sincerely

MTC–00030524

Earl W. Mallick
13 Lands End Way
Hilton Head Island, SC 29928
January 26, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear General Ashcroft:

I am writing, as a long time admirer of yours as well as a small shareholder in Microsoft, to voice my support for the federal settlement with Microsoft. I believe that Microsoft has earned a position of leadership in the technology sector through its focus on excellence. It has consistently and continually provided its customers with innovative products. I feel that it is improper to stifle creativity by permitting those less innovative companies to go to the federal government to file lawsuits as a substitute for their own lack of imagination, and I therefore believe that the case against Microsoft is without merit.

The time has come to finally resolve this lawsuit to let Micorsoft concentrate on doing what they do best—developing innovative products. Microsoft has made plenty of concessions. The government should not be wasting funds on this lawsuit when we need to spend more on fighting terrorism. The third-party oversight committee which Microsoft has agreed to will keep everybody honest. Please see that the Department of Justice recognizes the importance of finalizing this settlement and does so soon.

I can't close this letter without commending you on the outstanding work you are doing on the terrorism front. May God continue to bless you, the President, and all of the others working to preserve our way of life. Cc: Senator Strom Thurmond

Sincerely,
Earl W. Mallick

MTC–00030525

15 Broadway
Ocean Grove, NJ 07756
January 22, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I urge you as strongly as possible to settle the Microsoft antitrust case and to end the extensive and costly legal proceedings against them. I find the amount of money spent fighting the case an irresponsible use of resources, and the case should be wrapped up as quickly as possible at this point.

As an everyday computer user, I find a uniform operating system to be beneficial in my ability to smoothly operate my PC. Though some of Microsoft's tactics have been heavy-handed, there is no denying the success they have had in making programs work seamlessly with each other and creating a standard other companies have yet to match. Though they will lose some of their entrepreneurial freedom in disclosing Windows coding to competitors, it will allow Microsoft to get back to business, and to continue paving the way for innovations that benefit millions of people.

Therefore, I am in favor of settling the case as soon as possible. If our past President, Mr. Clinton had spent as much time, energy and money pursuing Bin Laden and company as he had pursuing Bill Gates and company (Microsoft), we as a nation would be in better shape. One of the main reasons I voted for President Bush was in the belief that he would do the right thing.

Sincerely,
John Sosenko

MTC–00030526

Sandra Drake
12201 NE Olive Drive
Kingston, WA 98346–9265
January 26, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington. DC 20530–0001

Dear Mr. Ashcroft:

I believe that the antitrust lawsuit against Microsoft has gone too far. I feel that it has been fueled by political motives and personal avarice since its conception three years ago. It is not my belief that Microsoft was guilty of antitrust violations in the first place, and finally I believe that the settlement that has been reached in this case must be accepted for the simple reason that it is the quickest way to end this case.

This settlement will require Microsoft to design all future versions of Windows to be compatible with the products of its competitors. While I believe that this is a bit harsh I would like to urge you to accept this settlement. Microsoft has agreed to the terms because it understands the importance of ending this litigation—not just for its own sake, but for the sake of the U.S. economy as well as the technology industry.

Thank you for the work that you have done in this case and for your support of this settlement.

Sincerely,
Sandra Drake

P.S. The U.S. should be ?? of ??government officials. In ?? Government, what a concept.

MTC–00030527

John Gilstrap
36 South Marion Circle
Ringgold, GA 30736
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The court should approve the Microsoft antitrust settlement. Entering into the settlement agreement will ensure Microsoft will be able to get back to focusing on developing innovative products while safeguarding against the complaints made about anticompetitive business practices. Continued prosecution of this case by the federal government is unnecessary. Microsoft has agreed to make many changes in the way it conducts its business. They agreed to design future versions of Windows in a way that will make it easier for consumers to run software made by other companies along with Windows software.

While I have not been directly impacted by this lawsuit, I have friends in the technology industry who have. Drawing out this lawsuit is not beneficial to them, or to the tech community as a whole.

Thank you for working toward a resolution of this case.

Sincerely,
John Gilstrap

MTC–00030528

FAX COVER SHEET
ATTENTION: Attorney General ??
COMPANY: Department of Justice
FAX NUMBER: 1–202–307–1454
DATE:.1.26.2002
NUMBER OF PAGES SENT INCLUDING THIS PAGE: 2
FROM: ??
COMPANY:
PHONE: (253) 582 8368
FAX: (253) 581–9178
MESSAGE: As attached
NOTICE: If you have any problems receiving this fax, please con :act
Mail Masters at (253) 581–9177 immediately.
8302 104th Street Southwest
Lakewood, WA 98498
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I want to express my support of the settlement reached between Microsoft and the Department of Justice. I do not believe the anti-trust case against Microsoft had any merit in the first place. Yet, I was pleased to hear that Microsoft and the Department of Justice had agreed to the terms of a settlement. I urge the Justice Department to enact the settlement this month.

The proposed settlement contains many stipulations that will benefit the IT industry. Microsoft has agreed to disclose the protocols and interfaces of its Windows system, which provides for the development of new software. This new software should be more compatible with the Windows system. Competing developers will clearly benefit from the disclosure of this information. Finally, everyone will benefit from this settlement. Microsoft will be allowed to return its full focus to business, and technology companies will benefit from the increased confidence in the sector. For these reasons, and many more, the Justice Department must enact the settlement.

Sincerely,

MTC–00030529

Carlotta Boyd
6104 36th Avenue NW
Seattle, WA 98107
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am in favor of the Microsoft antitrust settlement agreement. It is in the public's best interest that this protracted litigation come to an end.

The terms of the settlement agreement are fair. Microsoft has taken appropriate steps to restore fair competition in the software industry. Microsoft has agreed to make available to its competitors the information necessary to enable servers to interoperate natively with Microsoft server operating systems. They also agreed to not to enter into contracts with third parties which would require that third party to exclusively sell Windows products. Concessions such as these will help foster competition.

I appreciate your commitment to resolving this case. Further litigation is obviously not going to accomplish anything more than running up legal expenses and creating more uncertainty in the tech world.

I support the settlement, and I look forward to the end of this case. Thank you for your time and consideration.

Sincerely,
Carlotta Boyd

MTC–00030530

867 Plymouth Street
Pelham, NY 10803–3128

January 15, 2002
Attorney General John Ashcroft
US Department of Justice
Washington, DC 20530–0001

Dear Attorney General Ashcroft:

Extending litigation In the Microsoft antitrust case would be a mistake. A settlement has been reached between Microsoft and the Justice Department, Our Justice Department should continue to support this settlement,

Certain spatial interests would like to see the case continue. The continuation of this case, however, will benefit no one but some special Interests. The settlement is fair and balanced. It will create more openness in the technology Industry, It allows competitors unprecedented access to Microsoft cede, In addition to the code openness, Microsoft has agreed to submit to a three person, government appointed technical oversight committee who will ensure that Microsoft is complying with the terms of the agreement.

Unquestionably the Microsoft antitrust case should be settled. Despite the wishes of some special Interests to continue with this case, It Is time for this costly and time-consuming case to and. Attorney General Ashcroft, please continue your outstanding support for the settlement.

Sincerely,
Albert Andresen

MTC–00030531

1985 Green Lane Road
Lansdale, PA 19446–5043
January 22, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington. DC 20530–0001

Dear Mr. Ashcroft:

I wish to express my frustration about the fact that it took the Department of Justice three years to end its costly antitrust lawsuit against Microsoft. Our tax money can be far more properly spent. The agreement they came up with is strict. It requires Microsoft to grant computer makers broad new ways to set up Windows with non-Microsoft software programs. Computer makers will now be free to remove the means by which consumers access various features of Windows. They can also replace access to those features with access to non-Microsoft software.

The big deal in this settlement, however, is that Microsoft has also agreed to disclose various interfaces for its rivals, so that they can write more effective software programs and applications. Certainly this agreement is more than fair and reasonable. The federal government should now allow the provisions of this settlement to fall in to place. No more litigation should be brought against Microsoft beyond this agreement.

Sincerely
Fran Henshaw
CC: Senator Rick Santorum

MTC–00030532

12230 SE 61st Street
Bellevue, WA 9,8006
January 23, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing this letter because of my expressed interest of putting this matter behind us. We need to move forward and get beyond this point. It is a lingering process that is not in the best interest of the people, the industry or the economy of our great state of Washington.

I believe the settlement is a reasonable solution to this ongoing litigation process. Microsoft will, under this settlement, share information with its competitors that will enable them to place their own programs on the Windows operating system. In addition to the federal government, I would also like to see the other individual nine states that are still pressing this case settle at the state level.

The settlement is an important one and I thank you for giving me the opportunity to share my opinions.

Sincerely,
Arvid Portin

MTC–00030533

1985 Green Lane Road
Lansdale, PA 19446–5043
January 22, 2002
Attorney General John Ashcroft
U.S, Department of Justice
950 Pennsylvania Avenue, NW
Washington. DC 20530–0001

Dear Mr. Ashcroft:

I wish to express my frustration about the fact that it took the Department of ,Justice three years to end its costly antitrust lawsuit against Microsoft. Our tax money can be far more properly spent.

The agreement they came up with is strict. It requires Microsoft to grant computer makers broad new ways to set up Windows with non-Microsoft software programs. Computer makers will now be free to remove the means by which consumers access various features of Windows. They can also replace access to those features with access to non-Microsoft software.

The big deal in this settlement, however, is that Microsoft has also agreed to disclose various interfaces for its rivals, so that they can write more effective software programs and applications. Certainly this agreement is more than fair and reasonable. The federal government should now allow the provisions of this settlement to fall in to place No more litigation should be brought against Microsoft beyond this agreement.

Sincerely.
Joseph Henshaw
CC: Senator Rick Santorum

MTC–00030534

R MILTON LAIRD
Certified Public Accountant
4550 Union Road
Paso Robles, California 93446
Tel (805) 237–9202 Fax (805) 237–84.49
January25,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington DC 20530

Dear Mr. Ashcroft:

I am deeply disturbed by the travesty of justice caused by legal actions that have been and are icing taken against Microsoft. Microsoft, in fact, is one of the primary contributors to the success of our economy. The efficiency and productivity of our entire workforce has been dramatically increased by Microsoft's software.

Along with other companies such as Intel, Microsoft has enabled computer users to speedily communicate and handle complicated problems efficiently on PCs and network by replacing numerous cumbersome, complicated and slow operating systems with Windows and other products that are amazingly effective and economical.

Before Microsoft s software was available, only engineers and sophisticated mathematicians were able to program and operate the massive computers in use, Now anyone who can read and write can expertly operate their PCs and business networks.

As a reward for this massive contribution to oar economy and improvement in the work forces efficiency, Microsoft has been severely penalized by actions brought by competitors who could not develop competitive systems and turned instead to the government in an attempt to limit Microsoft's effectiveness.

Even though the proposed settlement is severe, Microsoft has agreed to make future programs easier for other companies to release their products. Windows XP will have a device that enables other companies to add or remove computer attributes built into Windows, so if anyone comes up with better programs, (which I doubt will happen) these programs can be easily introduced into new computers.

Yet some greedy State Attorney Generals are trying to exceed the already unjust penalties proposed for Microsoft and AOL is bringing a lawsuit which can only lead to more unnecessary and unproductive litigation to the detriment of all except attorneys.

Let's conclude this hassle and get on with making America more efficient.

R. Milton Laird
cc. Senator Dianne Feinstein

MTC–00030535

Haskell Rosenberg
4 Bridgewater Court
Pittsford, New York 14534
716:381 -2340
Fax—716:381—3094Haskelini@aol.com
Fax Cover
January 26, 2002
FROM: Haskell Rosenberg
Phone: 585/381 -2340
Fax: 585/381—3094
TO: Attorney General John Ashcroft
FAX: 202/307–1454 202/616–9937
I trust that, despite your overcrowded agenda, you will be able to give consideration to something that has already gone on much too long.
Haskell Rosenberg
2 Pages, including cover
Haskell Rosenberg
4 Bridgewater Court
Pittsford, New York 14534
Ph. 716:381—2340
Fax:716: 381- 3094
email: haskelini@aol.com
January 26 2002
Attorney General John Ashcroft

US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing in support of settling the Microsoft antitrust case according to the settlement agreement negotiated in November. The case should never have been brought in the first place and has resulted in enormous expense to taxpayers and a great waste of everyone's time. In the settlement agreement Microsoft has made a number of concessions, including the implementation of a uniform price list for the largest computer manufacturers, and an agreement not to take retaliatory action against competing software companies. With these concessions Microsoft has gone far to level the playing field, giving these companies a meaningful opportunity to compete with Windows and with the applications Microsoft writes for it. Microsoft has earned its dominant position because they earned it in the hurly-burly of the market-place. It ill becomes giving sore losers the opportunity to bring down a company, especially one so important in our ''new economy'', simply because of its success. It would be better for all parties to see this case resolved. The November settlement agreement is an appropriate way to put an end to at least a portion of this needless litigation.

With best wishes.

Sincerely,

Haskell Rosenberg

MTC–00030538

[illegible]
January 25, 2002
Attorney General John Ashcroft
U.S. Department of Justice
9500 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft,

I am writing to you to express my support for Microsoft and the sttlement in the antitrust case. This case has dragged on for long enough and it is time to conclude these legal proceedings. Microsoft has offered generous terms in the settlement: the licensing of intellectual property, [illegible] on Windows for rival software developers free reign for computer makes in relation to what software they install, and a uniform price for the top 20 computer makes to purchase Microsoft products. These are only a few of the concessions Microsoft has offered in the November 2001 settlement.

Microsoft is a great company that has revolutionized the technology industry. It is time [illegible] move forward once again and continue to make fine products without the threat of a lawsuit hanging over them. I strongly urge you to accept this settlement because it is fair to all parties involved.

[illegible]

MTC–00030539

January 9, 2002
Judge Kollar Kotelly
Antitrust Division
U.S. Department of Justice
601 D Street, NW, Suite 1200
Washington, DC 20530
Attention: Renata Hesse

Dear Judge Kotelly:

After years in the courtroom and millions of dollars of taxpayer money spent, the Department of Justice has reached a proposed settlement with Microsoft, I am aware that you are considering the merits of this settlement and that the law allows for comments from the general public on this matter. I am grateful for this opportunity to participate in this way.

When news of this settlement was first announced I was very pleased to know this case seemed to be drawing to a dose, While I have never seen the merit of the 9overnment's case in this matter, my greatest concern was the clear lack of regard for the financial impact this case would have on our national economy.

Since this case started over $30 million dollars of taxpayer money has been spent pursuing this boondoggle, This is unacceptable at a time when states like mine are facing real budget constraints and the federal government should be placing its resources in areas that truly protect the interests of Americans.

At this time of economic recession and heightened budget concerns this proposed settlement is the best solution. I am hopeful you will agree to support this proposed settlement.

MTC–00030540

3690 Woods Road E
Port Orchard, WA 98366
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to you today to express my support of the settlement that was reached between Microsoft and the Department of Justice. While I ardently question the merits of this case, I was pleased to hear that a resolution may finally be in sight given the three-month mediation process that has already ensued. The enactment of this settlement would be beneficial. I urge the Justice Department to enact the settlement and suppress any further action against Microsoft. Some people have made the mistake of seeing Shunt's work as a load of rubbish about railway timetables.

Microsoft has done more for this country under the leadership of Bill Gates than any many other entrepreneurs in American history. Further, Microsoft, as a corporation, has gone above and beyond the scope of the original litigation in an attempt to resolve this issue. Microsoft has agreed to disclose the internal interfaces of the Windows system. This is a first in any antitrust settlement.

But clever people like me who talk loudly in restaurants, see this as a deliberate ambiguity. A plea for justice in a mechanized society.

I would hope that the Justice Department recognizes the immense benefits of enacting this settlement and proceeds accordingly at the end of the month. When Shunt says the 8:15 from Paddington he really means the 8:17 from Paddington. The places are the same, only the time is altered.

MTC–00030543

A HY YO! HIHARA DESIGN
San Gabriel, CA
91775
Voice:
(626) 284–0233
FAX.
(826) 284–5411
Ms. Renata Hesse
Antitrust Division
Department of Justice
601 D Street, NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I am writing in support of the Microsoft settlement. It is time for the federal government to stop spending millions on a lawsuit, when a reasonable settlement is at hand. This settlement, which all parties have agreed to, will put this issue to rest.

At a time when the stock market at is down and the economy is in recession, the market is looking for stability—not the uncertainty of an ongoing lawsuit against one of America's most successful companies. There are many more important issues that the government can fund—from programs for children to paying down the national debt.

The consent decree is a fair compromise. Please support it. Thank you.

Sincerely,

Ka by Yoshihara

President

K hy Yoshihara Design

MTC–00030544

CALIFORNIA DEMOCRATIC PARTY
Sc
1401 21st Street,
Sacramento, 455 22
916,442,570
Ms. Renate Hesse
Antitrust Division
Department of Justice
801 D. Street, NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I am writing in support of the Microsoft settlement. The time has come for the federal government to jet its spending prior straight. Instead of wasting millions o?? dollars on a lawsuit that will do??thing for the consumer except make an already shaky economy worse, the time has come to and the ch??ade.

By supporting the co??ent degree, you will put the issue behind us and help refocus the spending priorities of the administ??ation. Hopefully, the consumer backlash?? this west??ful spending will in??cause this administration to focus its effects on important priorities such as working men and women, programs for our nation's youth and paying down the national debt. The first step, ??owever, is to avoid wasting the millions of dollars fun??ed into it is laws it that could be better spent almost anywhere else.

Thank you.

Sincerely,

Bob H??ndy
Director, Region 10
CA Democratic Part
*This letter represents the opinion of the author of the letter and shall hot be construed to
implement it represents the official California Democratic Party position.
Class S. Fig?? Str??t Suite 400

Let Angeles, CA 9–017–5440
213,239,8736- F?? 2398737
DE-?? Web site
imfo@??dem.urg
www.ci-dcm.org

However not intervention into the world of nigh tech programming and design sets a dangers is, and potentially dis??rous prec??dent. Di??tating to Microsoft what technology it can develop to in?? the effectiveness of existing products of meet the rapidly expanding needs of us?? the technological into a from that has been the hallmark of our high tech, internet??

?? could argue in fact that the ger??esis of the huge decline in the Nasdaq, which so far ?? in ?? than $2 million of loss wealth, it primarily the result of the government's ?? attach Microsoft's right to innovate. After ?? today Microsoft, to norrow Intel.

Microsoft appears to be a Government target because of their success as a company. We need to guard success and innovation, r than attack a company because of their success. Microsoft's success should be viewed as an ?? not a liability. The consumer has benefitted from Microsoft's success. The prospect of ?? benefits to the consumer should not be stifled by our ?? government. Similarly, other companies should not have to worry that their success could so ready be h??eatened by heavy-handed government action, oppressive attorneys foes and a legal a ?? designed to harass, publicly smear and possibly even break apart the business. The message we must and is that success should be rewarded and not punished.

We hope the consent decree is adopted and the federal lawsuit is dropped.

Sincerely,
Joe An?? ??
Executive Director,
Sit Council ?? Association

MTC–00030546

City of Santa Barbara
City Hall
De Le Guerre Plaza
(806) 584–5324
mailing address
Post Office Box 1990
Santa Barbara, CA 93102
Fax (808) 594–5475
[illegible]
January 25, 2002
Renata Hesse
Trial Attorney Antitrust Division
Department of Justice
601 D Street, NW, Suite 1200
Washington, DC 20530

Des Ms. Hesse:

I urge the Department of Justice to end the class action lawsuits against Microsoft. The millions of dollars being spent on this lawsuit would offer more of a benefit to the public if they were spent on programs for youth it our communities.

There is a severe lack of funding for mentoring programs, after-school activities, sponsor programs, summer reading programs, gang violence prevention, school facilities monies, and many other important youth-serving programs.

Children are the future for this great country. Please, help to redirect the money that is being wasted on a class action lawsuit this provides no benefit to the consumer, to programs that will make a positive difference in the lives of our children. Please support the settlement.

Sincerely,
Harold P. [illegibel]
Mayor Pro Tempore

MTC–00030547

Mires Promotions
1228 Leavenworth St..San Francisco, CA 94109 * 415–793–7933 Field Marketing . In-Store Promotions . Event Management
January 21, 2002
Ms. Renata Hesse
Trial Attorney, Antitrust Division
Department of Justice
601 D Street, NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

I was a dot-tom victim. My previous employer was partially funded by Microsoft. It was a new and amazing telecommunications concept.

When we went back to Microsoft for more funds in late 1999, they refused on the grounds that the Anti-trust lawsuit would make it more difficult to move investments into the telecommunications space. They feared what the media and the courts might say.

I know that the settlement can't bring back my failed dot-corn. But ending a three-year lawsuit that has cost Microsoft and the Government millions will allow everyone to get back to work,

That's just what our economy needs right now.

Thank you,
David Mires
President, Mires Promotions

MTC–00030548

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George Mason University
Richard K. Vedder
Department of Economics
Ohio University
Bruce Yahd??e
Department of Economics
Clemson University
27 January 2002
Renata Hesse, Trial Attorney
Antitrust Division, Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse:

Millions of average Americans like myself have invested in Microsoft; many directly, even more through their pension funds. We've witnessed with alarm your office's case against the company cause dramatic flux in the stock market. All investors, not just those holding Microsoft shares, have been hurt by the general downturn in the market.

Speaking of ''markets,'' in my view it was only an extremely narrow, and unrealistic definition of the ''operating-system market'' that allowed the judge to conclude that Microsoft was ''monopolizing.'' Microsoft is big—it shipped product to 100 million people just in the last year—but this is because Americans, and many people overseas, have made Windows the operating system of choice, not because there is no competition, or any illegal restraint of trade. The fact that there are other competing operating systems such as Apple's Macintosh platform, and the Linux share-ware platform seems to have been lost.

All high-tech companies live and die by guarding the make-up of their key intellectual products, particularly software. Yet the proposed remedy that Microsoft, and of course the government, agreed upon would force the company to share such information with its competitors. Although this may trample the heart of commercial and intellectual property law in the country with untold harm done not just to this one company, but also to an entire sector of our economy, Microsoft appears to have agreed to it in an effort to, in the currently popular phrase, ''move on.'' It's important we let the high-tech sector of the American economy continue to increase the standard of living of the average American to levels never before seen in history If Microsoft's competitors and the government act like the greedy persons who killed ''the goose that laid the golden eggs,'' our economy is likely to end up as dead as the goose did in the fairy tale. It's time to ''close the book'' on this case by approving the proposed settlement.

Sincerely,
Dr. Don Racheter, President

MTC–00030549

Dr, Jacqueline, Bartol
Doctor of Veterinary Medicine
157–2 Hare Road

Milton, New Hampshire 03850
January 23, 2002
Renata Hesse
Antitrust Division
Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Attorney Hesse:

I am writing to contribute public comment in the case of U.S. v Microsoft. It is time for the government to stop spending time and money on the Microsoft case.

Millions of dollars have already been spent arriving at the current settlement. The settlement should allow both Microsoft and its competitors to be productive. It is unfortunate that individual companies have tied up the government's time on this issue, but the reality is that they have, We should recognize it and move on.

Microsoft has contributed greatly to the technology industry and the economy. In this time of recession and national insecurity we need companies like Microsoft to help pull the country out of difficult economic times and continue to lead the world in technological advances. As an elected official, I work hard to make sure that taxpayer dollars are spent wisely and in areas that make a positive difference in peoples lives. I urge you to do the same and end this needless spending spree.

Please accept this letter as support of the Microsoft settlement. There are many other important issues facing our country at this time. It would be in everyone's best interest if the government spent our money and time dealing with these rather than Microsoft.

Sincerely,
Jacqueline Bartol, DVM

MTC–00030550

Paul Dow Dawson, Ph.D.
318 Maranon Way
Punta Gorda, Florida 33983
pdawson@sunline.net
1–941–235–0197
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
January 27, 2002

Dear Mr. Ashcroft:

The reason for this letter is because I am interested in American business, and I am also interested in having the stock market make a comeback. With that said, the settlement between Microsoft is good for two reasons. First, the absurd antitrust suit is finally over. Second, Microsoft can now devote all of its resources to bringing new and advanced products to the market instead of to wasting time in court.

Better products in the marketplace will result boost the ailing tech sector. The litigation against Microsoft started the economic downturn, and now we are in a recession. While all of this was happening, Microsoft's competitors were lobbying as hard as they could to keep Microsoft in court. Innovation was stifled. Who cares how much money Bill Gates makes? I consider myself successful, and if he makes more money than me, fine. The more money people make, the stronger the economy. The one good thing that came out of the settlement is that Microsoft will not be able to retaliate against companies who ship software that competes with Windows. This will encourage competition and benefit the economy.

Although there should have never been a suit in the first place, I am in support of anything that will put an end to the litigation.

Sincerely,
Paul Dow Dawson

MTC–00030551

E 2370 Spring Rock Lane
Hayden, ID 83835–8355
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC? 20530

Dear Mr, Ashcroft:

The Microsoft antitrust case has dragged through the federal courts for nearly four years now last year, a settlement was reached between Microsoft and the Dep??mont of Justice, and that se??tlemem is currently pending, in the federal courts Unfor??naiel Microsoft's opponents are currently seeking to undermine the settlement and bring additional litigation against the Microsoft Corporation in the federal corals. ??urther sail would be a waste of time and money, and I think it is in the best interest of the public to finalize the settlement, rather than allow the federal courts to become the playground for personal vendettas to be hashed out.

The settlement is by no means unfair, especially to Microsoft's competitors In fact in the interest of wrapping up the case, Microsoft has agreed to terms and conditions that extend to aspects of the corporation that were not found to be in violation of antitrust laws. In other words, the settlement represents generosity on Microsoft's part Microsoft has agreed to refrain from retaliating against computer makers who introduce software into the market flint directly competes with Microsoft technology. Microsoft has also agreed to license the Windows operating system to twenty of the largest computer makers on identical terms, including price. I do not believe that, with a perfectly reasonable settlement available, further litigation is necessary. Microsoft has paid its debt to society and it is time to move on. I ask you to support the finalization of the settlement as soon as possible.

Sincerely,
Helen Tester
cc: Senator Larry Craig

MTC–00030552

284 Melrose Avenue
Merion Station, PA 19066
January 23, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

Now that the Department of Justice has reached an antitrust agreement with Microsoft, what's next? Will this matter get dragged on for another three years, leaving the technology sector in a major recession?

Microsoft has been more than willing to settle this matter. They have agreed to license their Windows operating system to the largest computer makers, with identical terms and conditions. They have also agreed to design future versions of Windows to provide a mechanism to make it easy for computer makers, consumers, and software developers to promote non-Microsoft software within Windows.

Let's end this dispute and allow economic law—supply and demand—determine how business is done. I support the settlement and look forward to the end of this case.

Sincerely,
Jordan Driks
cc: Senator Rick Santorum

MTC–00030553

T&K Solutions
12126 Feldwood Creek Ln
Riverview, Fl 33569
(813) 671–7362
(813) 671–7413 (fax)
eMail tomg@t-k-solutions.com
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I have been an avid user of Microsoft and am happy to see the government finally reach a settlement in their antirust case against Microsoft. I feel that the settlement is fair and I just wish the whole issue were already resolved.

While I have been pretty neutral throughout the whole case, I have anxiously been awaiting an outcome. Microsoft was not wholly innocent, but that was three years ago and the concessions they make in the settlement more than cover for what was asked of them. By giving over their source code to the competition, while at the same time designing Windows to work better with outside programs, Microsoft will be helping to increase the diversity of choices for people to use in what have been predominantly Microsoft dominated areas.

In short, I would like to thank you for taking the time to read opinions like mine on this case. I feel that it is important to know how a decision of this magnitude will affect the public before finalizing it.

Sincerely,
Tom Gerhart
Thank you for allowing us to serve you!
Tom Gerhart

MTC–00030554

FAX SHEET
H. Thomas & Patricia H. Norris
403 Wesley Road
Greenville, NC 27858–6404
Phone 252–355–2479 FAX 252–355–8927
tomnor@attglobal.net
FAX TO: Attorney General John Ashcroft—
_____
_____
_____
_____
FAX NUMBER: 1–202–307–1454
FROM: Ab??se—————————————
_____
DATE: 1/27/02
TIME: 6142 AM/PM
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403 Wesley Road
Greenville, NC 27858
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing to you today to express my support for the settlement agreement between Microsoft and the Department of Justice. After three years of litigation, the time has come to finally put this issue to rest. The settlement agreement that was reached is fair and should be quickly enacted.

The terms of the agreement indicate Microsoft's desire to resolve the antitrust dispute. Under the terms of the settlement, Microsoft will now disclose the protocols and internal interfaces of the Windows system. This will allow developers to create software that is increasingly compatible with the Windows system. Information sharing, then, should provide consumers with an increased choice in operable software. Clearly, Microsoft has agreed to disclose this information in an attempt to resolve the dispute.

Please enact the settlement at the end of January. Enough litigation has already gone through the courts.

Thank you for your time regarding this issue.

Sincerely,
H. Norris

MTC–00030555

REALTY EXECUTIVES
WILLAM R. JOHNSON, CRS
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810 Cardinal Lane
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Fax (262) 367–9695
Toll Free: (800) 942–0048
Email: BillJohnson@realtor.com
January 22, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

Although I believe this situation should not have arose in the first place, I wanted to write to express my support for finalizing the Microsoft settlement deal announced in November. Considering Microsoft's incredible contribution to the PC industry—offering a user-friendly, standardized software platform that has changed the world—keeping this company intact should be a priority of this legal action.

The incredible costs that have been endured by this lawsuit, from years of prior litigation to future monitoring, are a major sacrifice of taxpayer time and money. Now that Microsoft has offered guidelines to open up more competition in the industry, changing licensing agreements and design of Windows, let's end this process and move on to more important issues. Leave Windows alone, unlike the government, it works!

To further the course of breaking up a company because of competitive business practices, just because it is so successful at it, would be a major mistake and would preclude the potential opportunity for cooperation from here forward. Please approve the agreement and let the technology industry get back into position to rebound and grow in 2002. Thank you.

Yours trul??
William R. Johnson, C.R.S. G. R. I.
cc: Representative Jim Sensenbrenner

MTC–00030556

January 25, 2002
Ann Rothstein
14 Rolling Way
New Rochelle, NY 10804–2406
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am in favor of the Microsoft antitrust case settling. I urge the court to approve the settlement agreement, and hope that no further action will be taken against Microsoft by the federal government

The terms of the settlement agreement are more than reasonable. Microsoft has agreed to make it easier for their competitors to compete with Windows technology. They have also agreed to design future versions of Windows in such a way that computer manufacturers will be able to more easily add or remove features of Windows and replace those features with non-Microsoft software. Additionally, Microsoft has agreed not to enter into contracts that would obligate third parties to exclusively sell Windows products. Concessions of this type should certainly do away with concerns of predatory business practices on Microsoft's part.

The settlement agreement is good for consumers, and is good for the technology industry as a whole. I would like to see the court approve this agreement without any further delay.

Sincerely,
Ann Rothstein

MTC–00030557

Saturday January 25, 2002
TO: The Department of Justice
Washington, D.C
Subject: Microsoft Settlement;
Fax # 1 202–307–1454

As a voter, living in the state of Colorado, I feel the negotiated agreement made by Microsoft with your department, and nine states, is a fair and equitable to all parties concerned. It time we all move forward without spending more of our tax dollars, and lining the pockets of the attorneys involved.

Regards;
Bill Coriell
Denver, CO

MTC–00030558

2304 41st Avenue E
Seattle, WA 98112–2732
January 25. 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing this letter to express my opinion on the settlement reached between the Department of Justice and Microsoft. For three years I have followed the case against Microsoft with avid interest. I'' have become increasingly annoyed with the length of the litigation process. The terms of the federal settlement are extremely fair and I believe that it should be enacted without hesitation. Any continued mediation in this case would be poor judgment by the Justice Department.

Further, the terms of the settlement include many concessions on behalf of Microsoft. The terms of the agreement call for the disclosure of protocols and internal interface designs of the Windows system. This will result in the ability for competing developers to produce software that may be more compatible with the Windows system. In addition to this Microsoft has allowed for the formation of a technical review board that is composed of outside members. This panel will ensure Microsoft's compliance with the terms of the settlement. It becomes increasingly clear that the enactment of this settlement is important. Resolution in this case will benefit the technology industries and the economy. Please enact the settlement.

Sincerely,
Kurt Buecheler

MTC–00030559

Rebecca Frankel
MIT Laboratory for Computer Science
Room 435, 200 Technology Square
Cambridge, MA
rfrankel@mit.edu
January 26, 2002
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
Response to the Proposed Settlement of the Microsoft Case:

I am writing because I am unhappy about the proposed settlement of the Microsoft antitrust trial. I do not wish to try to enumerate the flaws of the settlement. I think other people have done a good job of that; for instance, I approved of Daniel Kegel's petition and signed it. In addition, I feel uncomfortable saying anything that might imply that I know better than I he judge how to decide issues of law or apply them to a remedy. I am a software engineer; I don't know anything about law. The only special understanding I have is of technology.

However, the problem of the ''understanding of technology'' is an issue in this case. There has been much griping in technology circles that this settlement shows how thoroughly the legal system doesn't ''get'' technological issues. But most of this griping is just that—griping. You legal people must wonder about us: if there really is something you don't ''get,'' why can't we explain to you what it is?

For instance, recently an engineer complained to Lawrence Lessig: ''Members of the judiciary are largely unqualified to comment or judge upon issues of a technical nature, simply because their careers do not incorporate a great deal of technical knowledge, and also because they have not sought it ... My concern is that...we won't have a lot of judges with a high awareness of the intricacies involved for several years. However, the judges presently sitting are essentially creating a body of law to govern what they do not understand.'' In reply, Lessig shot back a challenge to us:

''There was a time when I thought that lawyers wouldn't do too much damage... All that has changed now ... This is, in part, because courts don't understand the technology. But I don't think it's because courts don't know how to code. I think the problem is that courts don't see the connection between certain kinds of technology and legal values. And this is because we've not done a good job in demonstrating the values built into the original architecture of eyberspace:

That the Internet embraced a set of values of freedom...that those values produced a world of innovation that otherwise would not have existed. If courts could be made to see this, then we could connect this struggle to ideals they understand.

Sometimes when I read Slashdot debates, I wonder whether you guys get this connection either... And this leads me to the greatest pessimism: If you guys don't get the importance of neutral and open platforms to innovation and creativity; if you get bogged down in 20th century debates about libertarianism and property fights; if you can't see how the .commons was critical to the .com revolution, then what do [you] expect from judges?

You guys ... built an architecture of value. Until you can begin to talk about those values, and translate them for others, courts and policy makers generally will never get it. Lessig is basically telling us we are being a bunch of inarticulate crybabies. He is right. If we want to claim the right to complain that courts do not understand us, we need to provide a ''translation of our values'' in terms that a layman can understand.

My goal in this letter is to attempt to provide such a translation, and then use it to make an analysis of the nature of the public interest in the settlement of the Microsoft trial. I am deeply involved with the society that created the values to which Lessig refers. I have spent a large part of the last eight years at the MIT Lab for Computer Science—a place whose extraordinary qualities were better characterized by another student from my floor:

[I]t is tough for most people to imagine a building where a young herd can walk out of his office on the 4th floor, argue with the founder of the free software movement (Richard Stallman), annoy the authors of the best computer science book ever written (Abelson and Sussman), walk up one floor to run a few ideas past Dave Clark, Chief Protocol Architect for the Internet from 1981–1989, and walk down two floors to talk to Tim BernersLee, developer of the World Wide Web. I know all these people; many of them feel like family to me. I know what they care about, what they hope for, what they dream about, what they fight, for, and what they fear. I never imagined that, as an MIT engineer, so much of what I would struggle with would not be the ''intricacies involved'' in the practice of engineering, but instead the problems of defining and communicating the value that technology can and can't provide to society. The engineers here are in a constant battle to prevent society from destroying the value they try to build for it: this struggle takes up so much of their energy that it is hard to think of what they do as just engineering anymore. I do not, like this: I want to simply be an engineer. I wish that you, the court, could take from us the job of defining and communicating values, so we could go back to being ordinary engineers. It is much more natural for you to take on this role, than it is for us to have it. But in order for you to do that, first we would have to explain these values to you.

I am unhappy with the proposed settlement because it shows how deeply the courts do not understand the value that engineers here are trying to build. I could pick on the specifics of the settlement terms ad infiniturn, but I feel it would be a pointless exercise, because only a basic failure of understanding of the nature of the public interest could make such a flawed settlement, seem acceptable in the first place. But if I claim that there is a basic failure of understanding, that raises a question: ''What exactly is it that I think government, officials don't understand?'' It is rather shocking that we have failed to effectively answer this question. We have told you many things: long stories of power struggles in the browser market, mind-bendingly technical analysis of the proper design of network protocols, plenty of satirical accounts of Microsoft's shady shenanigans, and many other similar things. But we never have given a simple answer to the simple question ''What is the nature of the public interest in all these matters?'' It is the goal of t, his letter to try to fill this gap. I will make my argument in a context so ordinary that it may well seem childish, but please bear with me: in my silly example, I think I can capture the essential issues at stake and then tie them back to our complex and confusing real situation.

So here is my simple picture—instead of talking vaguely about the ''old economy'' and the ''new economy,'' and about the mysterious difference between them, I want instead to talk about two ordinary household tasks: mowing the lawn and cleaning the basement. In my picture ''mowing the lawn'' will represent the old economy, and ''cleaning the basement'' will represent the new. (I warned you this would sound silly; but please hang on—it is not as dumb as it sounds). Why did I choose these particular examples? Because I think the fundamental change that we are calling ''the appearance of a new economy'' is a shift from an economy that strives to increase productivity by automating manufacturing, to one that strives to increase productivity by automating organizational tasks. The new frontier is the reorganization of supply chains and business processes to take advantage of ''information technology''—the ability of machines to do the organizational tasks that used to be handled by armies of clerks and middle managers. But this shift, is so huge, complex, and hard to picture, that I want to pull it down to earth and discuss its central principles in the context of the kind of organizational task we all are familiar with: the problem of how to bring some order to a messy basement. By way of contrast, I want to compare this task to another one we all know and love: the problem of how to tame an unruly lawn. (You might ask, how is mowing the lawn manufacturing? Well, it is manufacturing shorter grass.) Now that I have identified my representative ''industries'', I want to talk about how we can think about the nature of the ''public interest'' in the context of these tasks. As I continue this description, I hope you will see the advantages of translating our discussion to such a down-to-earth context. In this setting, it is easy to use one's ordinary intuition to understand the public interest, in a conflict. Maybe it is hard to interpret the public's interest in the ''future of an online architecture for e-business,'' but how hard is it to think about what you want for the future state of your basement? I want you to see what our conflict with Microsoft would look like if it occurred in this ordinary context.

So, to start my story, let me describe a conflict which illustrates a threat to the public interest in the context of the ''old economy.'' Suppose I need my lawn mowed, and the kid who I usually hire to push my clunky old gas mower around the yard, instead shows up to work with a shiny, spiffy new lawnmower of his very own. He has broken his piggy bank to buy it: he is very proud of himself and shows it off to everyone on the block. His beautiful new lawnmower mows the lawn twice as fast as the old one did. As a result, he can mow twice as many lawns in the same time. Pretty soon he is raking in the cash. He is making so much money, he can afford to lower his lawn-mowing rates, so he begins to steal business from the other lawn-mowing kids on the block. The other kids get upset. ''He's cheating!'' they cry. They gang up on him, beat him up, and smash his new lawnmower. The original kid, recovering in the hospital, appeals to the adults on the block for justice. ''The other kids were jealous of my success!'' he cries. ''They had no right to hurt, me or my lawnmower. You should protect me so that nothing like this ever can happen again!''

Should the adults listen to him? Absolutely. Not only was what happened to the kid unfair, it also damaged the public interest. When a kid can mow lawns twice as fast for less money, everyone on the block benefits. He put considerable investment and risk into obtaining his lawnmower, and it provided a benefit for everyone. Yes, he also

made a lot of money from his new lawnmower, and maybe he was a little obnoxious about showing it off, but his good fortune was good fortune for everyone. Therefore, his investment deserved to be protected from the destructive jealousy of the other kids. The rich kid should be protected, and the jealous kids should be punished.

Now, to continue, let me introduce another story of a situation that causes harm to the public interest, this time in the context of the ''new economy.'' Suppose I decide to hire a kid to help me clean my basement. This kid works very hard, sorting all the stuff in the basement, building appropriate-sized boxes for various categories of stuff, and carefully labelling all the boxes so it is easy to find things later. His hard work is useful to me: it helps me find tilings more easily. But, there is trouble in my little paradise. One day, my little helper cannot come, so I hire another kid to help out. But this kid is different. He is careless: he puts things in the wrong boxes, and mislabels the boxes. Worse, he is devious: he discovers that if he puts things in the wrong boxes deliberately, and labels the boxes in a scrawl only he can understand, then he can make extra money off me, because I will need his help to be able to find things again. Worse still, he is ambitious: he realizes that if he puts the potting soil in a place where only he can find it, then pretty soon I will be forced to ask him to take charge of organizing the gardening shed as well. Thus he can double the amount of money he can make off me, and there is nothing I can do about it.

So how do we think about the ''nature of the public interest'' in this situation? Well, in order to answer that question, it is important to ask first ''what is the result I am trying to achieve?'' If I hire someone to clean my basement, the result I want is a well-organized basement, a basement in which it is easy to find things. The kid who worked hard to sort things accurately and label the boxes clearly helped me achieve my goal. The kid who deliberately mislabeled the boxes and misplaced the potting soil did not help me achieve my goal. He hurt my interests, not merely because he over-charged me, took over my basement, and hatched devious designs on my gardening shed, but much more simply, because he failed to deliver to me the basic effect I wanted and needed. I needed a basement where I can find things easily: he didn't give it to me. By contrast, the first kid, the one who built me a good system of well-organized; wen-labelled boxes, did give me the effect I needed. The first kid's actions served the public interest; the second kid's did not.

This observation is the whole secret to understanding the ''architecture of value'' of which Lessig spoke. What is an ''architecture of value?'' It is nothing fancy: one can think of it as an information architecture that would remind one of a well-organized basement. This architecture is valuable because the careful sorting and clear labels make it easier to find things. There is nothing terribly subtle or difficult about this idea. The only really deep concept here is the observation that it is useful to ask the question: ''what is the fundamental goal we are trying to achieve?'' We are entering into an ''organization economy,'' and in such an economy, we want to achieve the goal of being well-organized. These central value of such an economy is no more complicated than the admonition we have all heard a thousand times from our mothers: ''it, is nice to put things away where they belong so it will be easier to find them again later.'' But if it is all so simple, why does it seem so hard? It seems hard because it IS hard, but it is not hard because anything about the situation is complicated. It is hard for quite another reason, which I want to illustrate using a third story. This, my final story, is a classic tragedy.

Let us suppose that the first kid I hired to clean my basement returns from his vacation and ventures downstairs to view the state of his handiwork. When he sees what the second kid has done, words cannot describe what he feels at the sight of the ruin of all his hard work. He grabs the second kid by his shirt collar and drags him to me to face judgment. ''He's cheating!'' he cries. (He doesn't say much else: unfortunately this first kid—though a good, honest worker—is not exactly the articulate type.) The second kid replies: ''He is just, complaining because he is jealous of my success! He has no right to handle me this way or damage the valuable ''intellectual property'' I have created. You should protect me so that nobody can ever treat me like this again!'' Now when I hear these words, I remember my earlier trauma when I witnessed the kid with the new lawnmower get beaten up by a jealous gang. I remember how I pledged to the kid on his hospital bed that nothing like that would ever be allowed to happen again. This recollection plunges me into a state of fear and confusion. The first kid comes to me and begs for the right to re-label the boxes correctly: it is hard to deny such a heartfelt request. On the other hand, I made a solemn pledge to the kid in the hospital that I would never, ever allow anything like the disaster that happened to him to happen to anyone else. I am riven in two: I do not know what to do. So I propose a compromise. I propose that certain of the boxes in the basement are to be declared ''Middleware'', and I will require of the kid who now owns the organization system of my basement that he reveal the meaning of the labels on those boxes. ''To protect his ''intellectual property,'' I only require that he reveal these labels to another party when they agree to sign a non-disclosure agreement. The second kid is happy enough to agree to that, especially since he alone knows exactly where he has hidden the potting soil, and he has carefully made sure that the box where it is hidden is not declared ''Middleware.'' In this way, his designs for the takeover of my gardening shed are unaffected. Since summer is coming, the control of the gardening shed is the only thing that really matters anyway, so he loses nothing by signing on to my ''compromise''. Now, what can we say about, this compromise? Should I say that it is a bad compromise because I was not. careful enough to locate the hidden potting soil before I settled on my definition of ''Middleware''? Should I say that it is unfair to require people to sign a non-disclosure agreement whenever they want to get a hammer from the basement? I could say all these things, and more, but they seem to skim over the surface of the problem. Much more fundamentally, this compromise represents a failure to think clearly about what we are trying to accomplish. It is in our statement of the nature of the values which we are ''compromising'' that we have failed. We have failed to understand the essential values that we are pledged to protect. To appreciate the tragedy of this failure, imagine how this situation would appear to the first kid, the one who cares more than anything about properly organizing the basement. He worked hard and honestly to do the very best job he could, but to no avail: all his hard work was ruined, it wasn't even accidentally ruined it was ruined on purpose. But when he tries to protest about this betrayal of his values, not only is he not listened to, he is also treated like a jealous, violent gang leader. Since he is not a sophisticated kid, he cannot figure out why any of this is happening to him. It simply feels to him like all the adults around him have gone mad.

I might ask: what exactly were the essential values I failed to understand when I devised my compromise? One might say that my compromise shows how little I understand the values associated with the ''new economy.'' It is true that I have failed [o understand how overwhelmingly important it is to have clearly labeled boxes in my basement. But this concept of ''value'' in the new economy is so very simple and easy to understand, that one might also maintain that I understood it perfectly clearly. When I insisted that the ''Middleware'' boxes should be clearly labelled, I showed that I do understand what constitutes value in the new economy.

Nonetheless, my judgment was confused, but it was not a lack of understanding of the new economy that caused this confusion. Instead, my judgment was clouded by the pain and confusion that the reminder of an old-economy conflict invoked in me. I ran into difficulties because I was led to apply ''old economy thinking to a new economy problem.'' In particular—this is the key point—my real failure carne not from a failure to understand the values of the ''new economy,'' but from a failure to understand the values of the old one. When I promised to the kid in the hospital that nothing like what happened to him would ever be allowed to happen again, I did not define very clearly in my head what exactly it was I was pledging myself to protect. What exactly did I promise? Did I promise that in every circumstance where a rich and successful kid was challenged by a poorer, less successful kid, I would always side with the rich kid?

No, that is not what][promised. I made the promise to the kid in the hospital because I saw that his good fortune was good fortune for everyone, and therefore I pledged myself to protect it. But when I later found myself in a situation when a rich and successful kid demanded that I protect his good fortune, I forgot the rationale behind my original promise. If I had remembered it, I might have thought to ask myself ''in this new situation, is riffs rich kid's good fortune good fortune for everyone?'' Hopefully it is clear that this

question receives a rather different answer in this situation. So, does my old promise bind me anymore? Am I required to devise a compromise between the interests of the two children in my charge? No, such a compromise doesn't make sense. I could make things much easier on myself if I just worried about protecting my own interests. My interest is to be able to easily find things in my own basement. The first kid fought for my interests, the second kid did not. It is that simple: there is no need for the terrible pain and confusion this case evokes, or the strange and convoluted compromises that are the result. So, to wrap up my Story, I want to summarize the four conceptual errors I made which drove me to devise such a thoroughly flawed compromise.

First, I made two mistakes in my understanding of the ''new economy'':

1. I did nor understand how much value the first, kid provided for me when he carefully sorted and labeled all my stuff.

2. I did not understand how badly the second kid hurt me when he destroyed this careful labeling system. I did not understand how dangerous it is that I have become dependent on his aid to find anything in his system of artfully mislabeled boxes. Second, I made two mistakes in nay application of principles that came from the ''old economy'':

3. When the second kid claimed to me that I had an obligation to protect his incentive to invest, I forgot that the statement of this obligation is that we must protect the ''incentive to invest in machinery to make a manufacturing job more productive.'' I need to protect a kid's incentive to break his piggy bank and buy a lawnmower, or I will have to put up with the fumes and noise from my old gas mower forever. But, this obligation does not apply to the conflict between the kids who are cleaning my basement, because there is no machinery that will aid the task of ''manufacturing'' a cleaner basement. So there is no need to protect the incentive to invest in such machinery.

4. More generally, I made a mistake when I failed to notice how the second kid manipulated and abused my commitment to the values of the old economy with his carefully chosen words. Earlier I said that this kid was careless, and worse, devious: and worse still, ambitious. But worst of all, he is manipulative. He is perfectly willing to take our most central, sacred values and twist them into a empty caricature of themselves to serve his own interests. It is our mistake and our shame that we cannot see what is being done to us.

So now I have completed my story. I have explained the essential failures of understanding that caused me to make a dreadful mistake. I promised earlier that when I was done I would take the lessons I have explained and tie them back to our complex and confusing real situation. So I will describe again the four mistakes I have just identified, this time as they appear in the real world. I contend that this settlement reveals that public officials fail to understand four important concepts that are crucial to understanding the nature of the public interest in the conflict with Microsoft.

First, it reveals that there are two ways that public officials basically misunderstand the ''new economy.''

1. They do not understand the tremendous value to society provided by the creators of the open standards of the Internet, the World Wide Web. the associated free software that supports the Internet (Apache, Bind, Perl, etc) and the free operating systems Linux and BSD. They do not understand the tremendous value to society of open, well-specified APIs on every level of the information architecture we are trying to build to support the future productivity of our society.

2. They do not understand how badly society is hurt by Microsoft's manipulation of its APIs and file formats. They do not understand how much the constantly changing proprietary file formats hurt ordinary people's ability to get work done, nor do they understand the loss of potential productivity that occurs when a API is obscured or destroyed. They do not understand how Microsoft's control of the platform hurts the prospect for real competition and progress in the computer industry.

Second, more seriously, it reveals two ways that public officials are confused about how to apply the values of the ''old economy'' in this new situation.

3. They haven't noticed that, just as you don't need a lawnmower to clean a basement, you don't need a lawnmower to write an opera, ting system. All the effort to preserve a delicate balance between the need for open APIs, and the need to preserve the incentive to invest, have missed the point that we are protecting the incentive to invest in a purely imaginary lawnmower. There is no machinery that will make the job of writing an operating system any easier, so there is no need to protect the incentive to invest in imaginary machinery.

4. Finally, they haven't noticed that Microsoft is lying to them Microsoft is lying in a horrible way: they are invoking the values that honorable public officials have spent their whole lives protecting, and they are manipulating them, using them, twisting them around so they come to mean something entirely different. The government does not detect this duplicity—that is their greatest mistake. We engineers have a name for these kinds of lies: we call them FUD, which stands for ''fear, uncertainty and doubt.'' We watch Microsoft deliberately spread fear, uncertainty and doubt in the government, the courts and the general population, and we view with amazement and horror the enormous power that these lies have over the world.

We are lost: we do not know what to do to combat lies which have such terrible power. We are like children who live in a world where all the adults have gone mad.

Yours sincerely,
Rebecca Frankel

MTC–00030560

4404 Burke Drive
Metairie, LA 70003
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr Ashcroft:

As a supporter of Microsoft, I cannot say how pleased I was to see that the Justice Department finally came to its sense and resolved to settle with Microsoft. This case has gone in far too long for people like me, who depend on Microsoft's products in our daily lives

I hope that the settlement will not be too harsh on Microsoft. With giving over their trade secrets to their competitors and allowing people who ship computers to configure Windows anyway they want, Microsoft could lose out on a lot of money. However, I feel that they will continue to succeed like they always have despite these handicaps,.

I hope that the government will refrain in the future from attacking business that are integral to our economy like Microsoft is. This whole case, which has taken up so much of their time, could be the reason why we are currently in a recession. End this case and let Microsoft get back to work.

MTC–00030562

2454 28th Street
Long Island City, NY 11102–1917
January 25, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

Now that the Courts will make a final decision next week on whether the proposed settlement benefits the public, I'd like to express my opinion.

Microsoft has agreed to not enter into any agreements obligating any third party to distribute or promote any Windows technology, exclusively or in a fixed percentage, subject to certain narrow exceptions where no competitive concern is present. The company has also agreed not to enter into agreements relating to Windows that obligate any software developer to refrain from developing or promoting software that competes with Windows. Microsoft has also agreed to not retaliate against software or hardware developers who develop or promote applications of operating systems that compete with Microsoft's.

So why should we pursue further litigation? The agreement seems more than fair. Let's move on.

No more litigation!!

Sincerely,
Nikolaos Natsoulis

MTC–00030564

6419 Fairbanks Street
New Carrollton, MD 20784
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing you today to express my opinion in regards to the antitrust dispute involving Microsoft. I support Microsoft in this dispute and feel that this litigation is a waste of precious resources, time, and talent.

I believe the settlement that was reached in November is a fair and reasonable agreement to end this three-yearlong dispute.

This settlement is thorough, and Microsoft did not get off easy. Microsoft has agreed to license its Windows operating system to the 20 largest computer makers on identical terms and conditions, including price. Microsoft has also agreed to grant computer makers broad new rights to configure Windows so as to promote non- Microsoft software programs that compete with programs included within Windows.

This settlement will benefit companies attempting to compete with Microsoft. This settlement will also benefit consumers by allowing tiffs company to remain together and continue delivering innovative products to the marketplace. Please support'' this settlement. Thank you for your time.

Sincerely,

Sesil Rubain

MTC–00030565

Doug and Marle Oison
4180—71st Ave NE
Marysville, Wash. 98270–8807
Phone: (425) 554 0188
Pax (425) 334 1010
doug.mariooison@luno.com
January 28, 2OO2
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr, Ashcroft:

As a concerned constituent, I write to inform you of my support of the Microsoft settlement. Over the last three years I have followed the federal suit against Microsoft. I have been increasingly annoyed with the Justice Department's pursuit of Microsoft. Microsoft has been more than willing to compromise In attempts to resolve this issue.

With the release of Windows XP, Microsoft will now put into effect a mechanism that will allow users to add or delete Microsoft programs at their own discretion. This will revolutionize consumer ability to configure their operating systems and should be beneficial.

I believe Microsoft has gone above and beyond themselves to meet the demands of the Justice Department. It is finally time to resolve this issue once and for all. Thank you for your concern regarding this issue.

Sincerely,

Marle Olson

MTC–00030566

JAMES D. SMTIH
10675 NINB MILE ROAD
WAITMORB LAKE, MI 48189
EMAIL Jameeds Oum??h.odu
VO??E 734 449–8836
FAX 734 449–8849
C&IL 734–476 1109
January 26, 2002
Anor?? ?? John Ar??roft
US D?? of Ju??tice
950 Pe?? Av??ue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I urge you to accept the settlement with Microsoft. We should one the begal?? system to insure a highly competitive marketplace. We should not, however, be misged??ded by constructs of competitiveness in an industrial economy when analyzing an informationed one. Microsoft has made a major contribution to growing the American economy. It has a lead?? po??ition in the software market, but its station is easy prey to innovative comp??sons. Microsoft has made concessions that will enhance the ability of others to challenge it. It is time to ?? the conflict from the courtroom to the marketplace.

The real danger we face is excessive government incursion in the marketplace. If the last hundred years tell us anything, it is flee peoples and free markets knock the socks off bureaucratic decision making.

MTC–00030567

117 Northwood Court Bayport, NY 11705
January 25, 2002
Attorney General john Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing you today to inform you of my opinion as regards the Microsoft antitrust suit. I support Microsoft in this dispute, which is now in its third year. I believe we should be focusing on more pressing issues, and not prolonging litigation against Microsoft that will only be a waste of time and precious resources.

This agreement is thorough. Microsoft has agreed to license its Windows operating system products to the 20 largest computer makers on identical terms and conditions. Microsoft has also agreed to grant computer makers broad new rights to configure Windows so as to promote non-Microsoft software programs that compete with programs included within Windows. A technical oversight committee has been created by the government to oversee Microsoft compliance.

The terms of this settlement are sufficient to end the lawsuit. Please support this settlement.

Thank you for your time.

Sincerely,

Martha Schary

MTC–00030568

AVIATION SIMUI?? A??TIONS
INTERNATIONAL. Inc.
POST OFFIC?? BOX 358 ?? TEL & FAX
516271–6476
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I support the settlement of the Microsoft antitrust lawsuit ??hile your office primarily seems concerned with Microsoft's impact with?? the technology industry, I feel that it is important to consider their role in our overall e??nomy, which has slowed considerably in the past few years. Aside from the economy slowing, the U.S. still retains a large surplus in exporting software, Microsoft is a leader in that market and why mess with a good thing? As a small-scale software developer, t appreciate the standard platform that Microsoft has created. Many average PC users probably do as well. It simplifies all of our lives.

The changes Microsoft is making in the settlement are reasonable and favorable to its competition Easing its bundling and exdus??ity pacts with computer makers will immediately open the door wider for other com??nies to market their software. Because that is the government's main contention with Microsoft, the company's endorsement of the settlement should leave you with no reason not to finalize it

Sincerely,

Everett Jo??ne

MTC–00030569

Walter W. Lerch
15220 Golden Rain Drive, Chesterfield
Missouri, 63017
January 26, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft,

I am writing to voice my support to an end to the Microsoft antitrust case. The proposed settlement between Microsoft and the Justice Department reflects a fair balancing of the interests and should be approved and implemented.

If given the opportunity, I am sure Microsoft's opponents will nickel and dime tiffs agreement to death. This should tell you that they are not after fairness, but are truly after a permanently crippled Microsoft. This snow job on Microsoft by competitors is most certainly not in the public interest any more than any alleged antitrust violations.

Microsoft has responded to the main complaint against it by agreeing that non-Microsoft software programs can be installed in the Windows operating system. They do this both by changing their licensing scheme and their program as a whole. I do not see the need to return to court when the main objective can be accomplished short of further litigation.

Thank you for considering my comments.

Sincerely,

Walter W. Lerch

MTC–00030570

System Integrators Inc.
Developing Solutions of Tomorrow—Today
January 27, 2002
Attorney General John Ashcroft
United States Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Sir:

We are a small business and develop products targeting Microsoft??* Windows??* platforms. The general economy as you are aware is not helping any business, especially small business. Add another dimension to the problem—the Microsoft, Justice Department legal battle. We see customers have taken a wait and see attitude toward new purchases and upgrades, on account of both the delays in the lawsuit settlement and the general economy. We are also unable to plan our future business for the same reason as our products generally support Microsoft technologies. I feel the suit should have been resolved one way or the other long time ago.

At long last, there is a settlement that covers the points in the suit. It fairly changes Microsoft's business practices, particularly with respect to licensure and software development, and prevents the retaliatory action Microsoft allegedly used to keep its hold on the market. I am hopeful that the current review process will come to a speedy conclusion so that consumers and other software publishers such as us will be able to move forward. Let's break this period of uncertainty, and accept the current settlement. Let's channel our efforts and time to innovate for the benefit of the consumer, instead of wasting it on long drawn legal wrangling.

Sincerely,
Ganesh Srinivasan
President

MTC–00030571

114 Eddy St. #5
Ithaca, NY 14850
January 27, 2002
Renata Hesse
Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street, NW, Suite 1200
Washington, DC 20530
Facsimile: (202)6:6–9937 or (202) 307–1454
Email: microsoft.atr@usdoj.gov
Re: Microsoft Trial Tunney Act Comments

I am very concerned about the proposed settlement of the antitrust case against Microsoft. I don't think this settlement is in the public interest. After enduring years of litigation and continued anti-competitive action on the part of Microsoft, the public deserves an effective remedy. The proposed remedy, if adopted, will not be effective. The proposed remedy restricts Microsoft's actions very little and allows them to continue the same anti-competitive business practices that have resulted in the bleak software business of today.

The most important and most critical effect of any final judgment in this case should be to restore competitive conditions in the markets affected by Microsoft's unlawful conduct. The proposed settlement is bound to fail in this goat because it is ill-conceived, ambiguous, and full of holes. Effective relief would be based on principles, not an enumeration of prohibited conduct. Just as a judge must avoid even the appearance of impropriety, Microsoft should be required to avoid even the appearance of anti-competitive conduct. Given its history of unlawful behavior, Microsoft must be held to the highest standards of ethical, pro-competitive behavior. There must also be an effective, efficient, and powerful enforcement authority.

The proposed settlement has none of these properties. Rather it is full of holes, restrictions, and limitations that will make it wholly ineffective:

1. The proposed settlement is confusing and ambiguous. Given Microsoft's history, one must assume that every ambiguity will be interpreted in the most advantageous possible way by Microsoft. This practically ensures future litigation over the meaning of the terms and conditions.

2. The proposed settlement is backward looking. Rather than focus on restoring competitive conditions to the markets as they are now or will be, it focuses on the past.

3. There is no effective means for enforcement. Some sort of oversight board with actual power is necessary, as are actual penalties for noncompliance. The proposed settlement permits only further litigation.

4. The proposed settlement aims to protect the market for personal computer operating systems, but not the market for server operating systems. Should not Microsoft be enjoined from using anti-competitive practices to monopolize the server market in addition to the PC market?

5. The proposed 'Technical Committee'' is worthless, in part because of its secrecy. It needs real investigative and oversight powers. It should be a resource for further litigation. It should have the right and responsibility of reporting the behavior of Microsoft to the public.

6. The proposed settlement fails to adequately protect 'open source' competition. As 'open source' software is generally provided to the public with source code as a public service at no charge, it is deserving of the highest protections from unlawful anti-competitive practices. 'Open source' software is commonly written as a hobby by individuals or small associations. The proposed settlement discriminates against open source software by allowing Microsoft to deny access to those with out a 'legitimate business need'. Similarly, the 'reasonable and non-discriminatory' terms for API and communications protocol licensing may be used to discriminate against open source developers and products. Microsoft could impose non-disclosure licensing terms that prohibit distribution of source code, for example.

7. The protections of OEM's are inadequate. The proposed settlement provides maximum protection to only the largest twenty. All OEM's should be treated equally, and price schedules should be published for all to see.

8. The term of 5 years, extensible to 7, of the proposed agreement is inadequate, given Microsoft's record of ignoring such agreements and litigating.

9. Microsoft's competitors need to be protected against the 'Embrace and Extend' strategy of hijacking established standards and modifying them to be incompatible. Microsoft should be enjoined from using these tactics, and rather should be required to work with standards groups. Java and Kerberos are two standards that have suffered this fate in recent years.

10. Recent price increases in volume licensing agreements have demonstrated to the public that the Microsoft monopoly is alive and well despite the ongoing litigation. The final judgment should ensure that pricing is kept at a reasonable level,

11. Microsoft should be enjoined from using patents to prohibit or discriminate against 'Open Source' software. Perhaps Microsoft should be required to license for free 'Open Source' use any patent that it owns or otherwise licenses.

12. Microsoft has been recently trying to leverage its operating systems monopoly and Internet subsidiaries to promote its 'Passport' on-line authentication service. Microsoft should be enjoined from using its currently monopoly to eliminate or prevent competition in the on-line authentication service business.

13. The definition of middleware is poor. Middleware should be defined based upon functionality or character of a product, not on whether it is trademarked.

I have enumerated but a few of the serious limitations of the proposed settlement. The proposed settlement is wholly inadequate and is not in the public interest.

Sincerely,
Stephen D. Holland

MTC–00030572

6803 244th Street Court E
Graham, WA 98338
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am a small business owner and I have used Microsoft products to help run my business for years. I feel that the antitrust case against Microsoft is senseless. The settlement should stand the way it is and this whole mess should be over.

Microsoft has contributed greatly to the IT industry and I feel that they've earned what they have. According to one of the terms of the settlement, as I understand it, Microsoft is required to release their internal codes to Windows so that other companies can use them to produce their software. I feel as though others are simply taking advantage of Microsoft, I don't think the courts should support that.

I hope that the Department of Justice decides to clear this matter up. To finalize the settlement is clearly in the best interest of all involved. I would hate to see any more money wasted on this.

Sincerely,
Jerry Taylor

MTC–00030573

Watts and Associates
22622—50th Avenue S E
Bothell, WA 98021
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am in favor of the proposed Microsoft vs. The Department of Justice antitrust settlement. In my opinion, the settlement as put forth, is a reasonable one providing all of the participants fair and just resolution; not to mention putting all of this government financed litigation behind us. This settlement accomplishes a number of specific changes. For instance, computer makers will be able to replace access to various features of Windows with access to non-Microsoft software. Another change that I believe to be very generous on Microsoft's part is the proposed licensing of Windows operating system to computer makers.

I am particularly disturbed that while the government was searching for ways to break up Microsoft, other institutions were getting

away with countless acts of corruption. It's time that Microsoft got back to business and the government went back to governing. Why is it that we allow the liberals in the government to continue rewarding the do-nothing persons and punishing those who accomplish and contribute to the economy?

Sincerely,
G W Watts

MTC–00030574

Shirley M. Sebright
1047 Crystal Lane
Springfield, OH 45502–9567
Fax
To: Attorney General John Ashcroft
From: Shirley M. Sebright
Fax: 1–202–307–1454
Date: 1–27–02
Phone: Pages: 2 Including Fax Sheet
Re: CC:
x Urgent %62 For Review %62 Please Comment %62 Please Reply %62 Please Recycle
Comments: [Click here and type any comments]
Shirley Sebright
1047 Crystal Lane
Springfield, OH 45502
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing to give your support to the Department of Justice and Microsoft. I think the government should leave Microsoft and Bill Gates alone and allow the company to get back to be the creative, innovative company it is. The Department of Justice had no business bringing the suit against Microsoft. This suit was more a political ploy brought about by Microsoft's competitors. This lawsuit sets a dangerous precedent in that the government is being used as a weapon against a competing company. This lawsuit also threatens the innovative and creative spirit of our country. What effect do you think this action has on those who have dreams of creating a product, but then see a very creative company being hounded? Yes, the company was aggressive, but business is aggressive. Microsoft did nothing more or less than what their rivals did.

Microsoft will ultimately be giving up its interfaces and protocols to other software developers so that they can more comprehensively write software for Windows. The company will also be held to a regimented licensing code that will ensure that computer makers are able to use the software they want with Windows. A Technical Committee will make sure these rules as well as others are followed.

Leave the company be. Give your support to this agreement.

Sincerely,
Shirley Sebright

MTC–00030575

1860 Hall Street SE
Grand Rapids, MI 49506
January 25, 2002
Attorney General John Ashcroft US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

Microsoft has had to suffer through three years in the antitrust case with the Justice Department. It is pleasing to know a settlement was reached in this case, however it is unsettling that this case could be re-opened.

The fact is that this case has a good settlement available to end it, and it should be implemented.

The settlement will allow Microsoft's competitors to access Microsoft code so they can design better software. Competitors under this settlement will have the ability to effortlessly place their software on Microsoft operating systems. Despite these improvements opponents of the settlement have launched a campaign to have it revoked, and Microsoft dragged back to court. There is no good reason to let this happen, the settlement is good and it is too expensive to continue this case.

Once more I would like to state that this case should be concluded with the current settlement.

Sincerely,
Ron La Mange

MTC–00030576

JBMB CONSULTING
January 26, 2002
Michel G. Bernard
President
29 East 64th Street New York, NY 10021
Tel (212) 879–6242
Cell (917□ 881–2224 Fax (212) 744–2552
mbernard@jbmb.org
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The settlement reached between Microsoft and the Department of Justice, appears to be fair. It is my strong belief that at this point additional litigation will not help anyone, including the States that are seeking to continue suit. It is now time to settle and move on.

Microsoft tins agreed to a number of terms and conditions, all of which restrict monopolistic behavior and promote competition within the technology industry. Microsoft will refrain from engaging in retaliatory behavior should software developers and computer makers introduce a product into the market that directly competes with Microsoft technology. Microsoft has also agreed to license its Windows operating system to twenty of the largest computer makers on identical terms and conditions, including price, and to grant them broad fights to reconfigure Windows to their own specifications.

I do not believe additional action is necessary on the federal level. The proposed settlement is equally beneficial to Microsoft and its competitors, and a cessation of litigation would most definitely be beneficial to the consumer. I urge you to give your support to the settlement.

Sincerely,
Michel G. Bernard
President

MTC–00030577

2304 41st Avenue East Seattle, WA 98112
January 26, 2002
Attomey General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

Today I write to voice my support of the Microsoft settlement. It is true that the Microsoft Corporation has been at the forefront of the technology industries in recent years. Their leadership, however, is the result of a dedication to excelence that is not matched within the industry. The result is the continual production of quality products that out perform any substitutes. This is in by no means a crime. I therefore take issue with the federal pursuit of a case based upon outdated statutes.

Regardless of this opinion, I believe that the settlement agreement is in the best interests of the public. Too much time has already been spent in the litigation process and the entire technology industry has suffered for it. Further, anyone wary of Microsoft's compliance with the terms of the agreement should be cased as the agreement calls for the formation of a watchdog group.

I adamantly believe that enacting the settlement will encourage confidence and growth within the tech. industry. The Justice Department should suppress any opposition to the enactment of this settlement.

Sincerely,
Lori Buecheler

MTC–00030578

January 27, 2002
Attention: Ms. Renata B. Hesse U.S. Department of Justice Fax # 202–307–1454

Dear Ms. Hesse:

This is to inform you that I fully support the proposed settlement of the Microsoft lawsuit. For the sake of national interest I would hope that this can be finalized without delay; the matter has dragged on entirely too long.

Sincerely,
J.C. Hensel

MTC–00030579

Via FAX
432 Greensboro Drive
Dayton, OH 45459
January 25, 2002
Attorney General John Ash??
U S Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

During the period of the past three years, the IT industry, and the general public have been forced to endure the US vs Microsoft lawsuit. This unfortunate quit has slowed innovation and movement in the software industry and has hurt investment in technology as a whole. Consumers have taken the suit in stride even though it is they who will receive the bill for the case by way of higher prices on technology products through the corning years.

The settlement has teeth that force Microsoft to disclose proprietary software code to competitors and will exist under the

constant scrutiny of a three-person committee in its future business dealings. These and other points in the settlement make it more than fair to all the plaintiffs in the lawsuit.

Now that all. the involved parties have been served, a settlement must be formalized. The Department of Justice must see that the needs of the consumer are met in ending this lawsuit as soon as legally possible. I urge the Department of Justice to formalize the proposed settlement as soon as this period of public comment concludes.

Sincerely,
Arthur C. O'Neil

MTC–00030581

P.O. Box 3125
Atlantic Beach, NC 28512
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

As you are well aware, Microsoft has been under public and government scrutiny concerning their business tactics as being a monopoly. In my view, this lawsuit has been going on for far too long and I'd like to see it finished once and for all. The continuation of its opposing competitors who keep pressuring Microsoft are doing damage to this nation far beyond what they could possibly realize.

Thousands of Americans rely on Microsoft in various ways, some in terms of jobs, most in terms of computer technology that they use in their homes and businesses. If we let this suit go back to the Federal Court, our people will continue to lose out on millions of dollars and the possibility of improved software to evolve our way of life.

The settlement is fair and reasonable and it will most definitely benefit consumers and eliminate future possibilities of competitors attacking Microsoft for unjustly dominating the IT market. This country needs to consider the money being spent on file lawsuit and realize that re-direction of funds is in need. Your help m Microsoft's defense is greatly needed and appreciated.

Sincerely,
William Woodbury

MTC–00030582

January 27, 2002
From: Steven White, 5125 Logan Avenue South, Minneapolis, Minnesota 55414
About: Microsoft Settlement

I am sending this in a way that verifies its authenticity (hand writing) because it is regarding a company that has been reported to have commissioned ''spontaneous'' letter writing campaigns to state attorneys general which, in one case, included letters from two dead people. I want to report tht I am alive and strongly opposed to any lieniency toward Microsoft. Three courts have declared that they have broken the law. They should pay the price of their freely-chosen actions. i would like to address one point that I hope has not escaped your notice. This is a company famous for its willingness and ability to squirm around restrictions and whatever it can to win at any cost. They have squashed or stolen innovative ideas from others, driven companies out of business, and finally been convicted of illegal tactics, and they not only show no penitance, but, based on their public statements, seem to be convinced they are in the right.

If you make a settlement that has any imaginable loophole, they will be through it the day it goes into effect. If you say that programming interfaces to Windows must be made public, they will move the interfaces to some layer of ''middleware'' and declare that they are not part of Windows.

They will behave as they did when ordered to release Windows 95 without Internet Explorer; they released a version that didn't work. They will ''comply,'' but, as one journalist phrased it, ''with middle finger extended.''

For the sake of the future of the computer industry, Micorost's anti-competitive grip must be broken.

Sincerely yours,
Steven White

MTC–00030583

www. GenGap.net
Judge Kolar Kottely
c/o Attorney Renatta Hesse
Department of Justice, Antitrust Division
601 D St, NW—Ste 1200
Washington, DC 20530
January 28, 2002
VIA FACSIMILE: 202–616–9937

Dear Judge Kolar Kottely

I am writing to express my overall concern with for the technology sector with the pursuance of the Microsoft antitrust case.

I am the resident of a rural town and owner of a small online business. I am able to conduct business with customers all over the world thanks to the innovation and developments in the technology and telecommunications industries.

What I don't see is the lack of competition in the high-tech industry addressed by this case. Over the last decade the number of jobs in the software industry has grown from 290,000 to close to some 860,000. The 24,000 software companies in 1990 can be compared to the 57,000 software companies today. The growth in this industry is like nothing we've seen in recent history, yet the case against Microsoft was brought on by an alleged lack of competition in the market.

In just the past few years the number of software companies and employees have nearly tripled. This year the software industry alone will add nearly $20 billion in surplus to America's balance of trade. Microsoft is on a list of indicators for the Dow Jones Average and is considered a market bellwether.

These factors do not add up to a lack of competition in the industry. They are instead indicators that the high-tech industry is a flourishing, rapidly growing industry that changes so quickly that tomorrow's Linux will replace today's Microsoft.

Continued litigation in this case will only slow competition and growth in the industry. I hope you see fit to sign off on the fair settlement in this case.

Marlene McLaren
PO BOX 383 Spirit Lake, IA 51360–0363
(712) 336–2346
www. GenGap.net
President, CEO
GenGap.net
PO Box 383 Spirit Lake, IA 51380–0363
(712) 336–2346

MTC–00030584

January 3, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
FAX To:
202–307–1454

Dear Mr. Ashcroft:

I am writing to support the settlement between the Justice Department and Microsoft that will bring an end to their long antitrust dispute.

Some groups do not think the settlement is fair, but they are wrong. The only possible way the settlement could be unfair is if it unfairly harm Microsoft Look at the stipulations Microsoft is willing to accept. It disclose documentation on the internal interfaces of its Windows operation system. It will make future versions of Windows easier to work with terms of removing Microsoft programs and adding non-Microsoft ones. will guarantee that Windows runs as well with the new software as it c with the original Microsoft software. It will not retaliate against any of the companies that sued it. It will change its licensing practices to increase competitors'' viability in the IT market. Microsoft will even submit constant government oversight of their business practices. How mayo outside of Microsoft's boardroom could possibly be dissatisfied with the settlement is a mystery to me.

Microsoft is willing accept these terms. For that reason alone, I think ?? settlement ought to go forward. Thank you for your time.

Sincerely,
Kirk Puffenberger
6263 Indian Field
Norcross, GA 30092

MTC–00030585

7 Edwards Drive
Freehold, New Jersey 07728
January 21, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The consistent persecution and harassment of the Microsoft Corporation must cease immediately, both for the good of our country and because it is the fight thing to do. The past three years of litigation have resulted in nothing besides wasting my money, and the recently settlement services the public interest in this matter and its provisions go beyond the government's original complaints.

The provisions of this settlement, among other things, require Microsoft to submit to a federal technical oversight committee which is required to review Microsoft's business and software practices. Additionally, Microsoft must make its intellectual property available to those compentors who use it in their application of this agreement.

These provisions, the general settlement and the process in which it was reached are all fair, judicious and reasonable. It is my hope that there is no further federal action in this matter.

Sincerely,

Fred Billand

MTC–00030586

COLDWELL BANKER
TRAR PROPERTIES
January 24, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am writing today to encourage you and the Department of Justice to accept the Microsoft antitrust settlement. Microsoft has given up a lot to be able to settle the issue. The terms of the settlement are fair and they should be accepted.

Many people think that Microsoft is getting off easy, in fact this is not so. In the terms of the settlement, Microsoft has agreed to release part of their Windows base code to their competitors. This is so their competitors can make more compatible software. Microsoft is being forced to give up their patented trade secrets. Microsoft has spent years and millions of dollars developing their products, now they have to simply hand part of them over to their competitors. In the technology industry there are companies that develop new products and companies that copy products. Not surprisingly the companies that develop new products are more successful, it is a shame that the government has chosen to harass a company simply because it is successful. This issue has been dragged out for over three years; it is time to put an end to it. The terms of the settlement are more than fair and they should be accepted. Please accept the Microsoft antitrust settlement.

Sincerely,

Diana M. Campbell

Sales associate

FREELAND OFFICE BAYVIEW OFFICE LANGLEY OFFICE OAK HARBOR OFFICE

18205 SR 525 HIGHWAY 525 AT BAYVIEW CENTER 221 SECOND STREET 35 SE ELY STREET

P.O. BOX 760 2869 EAST HOWARD ROAD PO BOX 205 OAK HARBOR, WA 98277

FREELAND, WA 98249 LANGLEY, WA 98250 LANGLEY, WA 98260 (360) 675–7200

(360) 331–6300 (360) 321–6400 (360) 223–1700√Fax (360) 675–8600

FAX (360) 331–8474 FAX (360) 321–5283 FAX (360) 221–4800 cakharbor@coldwellbankerwhidb??y.com

freeland@coldwellbankerwhildbey.com bayview@coldwellbankerwhtdbey.com

langley@coldwellbankerwiudbcy.com

Each Office Is Independently Owned And Operated.

MTC–00030587

January 26, 2001
Diana M. Campbell
7410 Dead Goat Road
Clinton Washington 98236
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington DC 20530

Dear Mr. Ashcroft:

I am writing today to encourage you and the Department of Justice to accept the Microsoft antitrust settlement. Microsoft has given up a lot to be able to settle the issue. I would like to tell you exactly how I feel about this issue, please think back to articles of history of the United States and the Auto Industry. Mr. Henry Ford certainly was not the first automaker competing with other industrialist of his time, His story is fabulous. One story that really talks about the ''American dream.'' And this is only one story of such struggle to produce a sellable product that has lasting quality, No Mr, Ford was not the only automaker of his time but he produced a good competitive product.

Mr. Gates and his company have been producing a sellable competitive product. What is the Justice Department trying to tell the American businessperson? What is this new attack? The United States of America is the home of the free. If we do not have the freedom to create a better ''mouse trap'', then why are our borders flooded with immigrants?

Mr. Gates has not asked to have the status of a King in the United States, He has built a team of people that are of the highest regard working with ideas and values to build competitive soft wear for a very fast growing industry.

Please know Mr. Ashcroft that I am a normal everyday housewife, and I know something about cooking and recipes, some of the ingredients are private, some are family secrets. Are you telling me that I must tell people what I put in a cake should I want to compete in a contest, for my personal gain. I believe in the American Dream. I grew-up having the ability to choose my way of life, I think you are treading on sacred ground.

Please Mr. Ashcroft do not use any more of your precious time and my money. Please accept the

Microsoft antitrust settlement.

Sincerely,

Diana M. Campbell

Wife

Mother of 10, Grandmother of 22

Great grandmother of 6

Real Estate sales associate

MTC–00030588

Mr. Stan Eischen
10113 Keysboruogh Drive
Las Vegas, Nevada 89134
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Ave., NW
Washington, DC 20530

Dear Attorney General Ashcroft,

I support the settlement that has been reached between Microsoft and the Department of Justice. The settlement will bring an end to the costly and contentious court conflict between the two.

Some may criticize the settlement and say it lets Microsoft off too easy. That is simply not the case. Microsoft will agree to many restrictions on its method of doing business. First and foremost among these restrictions is the requirement that Microsoft share its code for Windows with its competitors, thereby allowing them to place their own programs on the Windows system.

Additionally, Microsoft will eliminate any possibility of favoritism in its licensing procedures by using a uniform price list when dealing with the top twenty computer business in the nation.

These two provisions alone would be enough, but Microsoft has also agreed to forgo any retaliation against companies that sell or promote software that competes with Microsoft's products. Some people may claim that Microsoft will just ignore these requirements, but the settlement will establish a technical review committee to make sure that Microsoft adheres to all of its terms. With all of these restrictions, Microsoft will be severely hampered and its competitors will be aided.

There comes a time in any conflict when the sides sit down and ask themselves if the time and effort would really be worth continuing to fight. Microsoft and the Justice Department have decided that the answer to that question is no. This settlement will end their battle, and no one should block an agreement that is amenable to both of them. Thank you for your time and efforts in Washington.

Sincerely,

Stan Eischen

MTC–00030589

Association of
Business and Industry
The Voice of Iowa Business
January 21, 2002
Judge Kolar Kottely
C/O Renata Hesse
Trial Attorney
Antitrust Division
U.S. Department of Justice
601 D Street, NW, Suite 1200
Washington, D.C 20530

Dear Judge Kolar Kottely:

Thank you for the opportunity to participate in the public comment period regarding the settlement of the government's antitrust case against the Microsoft Corporation. As an executive with the Iowa Association of Business and Industry in Des Moines, Iowa I was pleased to hear that a settlement in this case has been reached. While this case has implications for most American consumers, the implications for those of us in the business sector are even greater.

The negative impact this case has had on the technology industry was apparent nearly from its inception, technology stocks began their slide downward at the same time the district court ruled that Microsoft should be broken up. This ruling caused major uncertainty within the tech community and with its investors.

This proposed settlement would provide much needed subility to the technology industry that was absent during the period this case remained unresolved. The conclusion of this suit will send the signal to both investors and innovators that they no longer need to be concerned with unnecessary government regulations as they work to create new technology products and services for the future.

I encourage you to accept the settlement reached by the Department of Justcie and the Microsoft Corporation .

Sincerely,
John R. Gilliland
Vice President

MTC–00030590

HANSER & ASSOCIATES
public relations
4401 Westown Parkway, Suite 212
West Des Moines, IA ??266–0991
Email:nanser@hanser.com
www.hanser.com
January 22, 2002
Ms. Renata Hesse
Department of Justice, Antitrust Division
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

The appeal and success of our great country lies in the opportunity to succeed and to make a better way of life for our families. This has been possible because of our economic and personal freedoms. Those with innovative and pioneering spirits are the reason our country rose so quickly to become a world leads.

Most of those who drive our country because of their innovation and willingness to take risks never become global figures or even nationally known. But there is one such individual who is known worldwide for his technological developments. Bill Gates has prodded software and Interact technologies that have forever changed our personal and business relationship with the computer. With his great ideas turned into reality, he has created thousands of jobs for Americans and provides a great deal of financial support for humanitarian relief. For example, The Bill and Mclinda Oates Foundation announced on January 4, 2001 a $7.5 million grant to help combat the spread of HIV in sub-Saharan Africa and worldwide. And this is just one. example of the impact he has had on our world.

Because we are a lawful society, we certainly have an obligation to enforce our national laws. But that obligation has been met in the Microsoft antitrust lawsuit, it no longer can serve any relevant purpose. A fair and realistic settlement has been proposed and should be signed in order to conclude tiffs case and allow Microsoft to move forward with all new business activities, and to allow Bill Gates to continue providing humanitarian relief throughout the world through his foundation.

Thank you,
Arnanda Carstens Steward
Account Manger

MTC–00030591

Jan 27 02 02:46p
p.2
HANSER & ASSOCIATES public relations
4401 Wastown P??way, Su?? 212
West Des Meines, 1A 50266–1037
575,224??086 Fax. 515.224,0991
Emailhanser@ha??ser.com
www.henser.com
January 22, 2002
Ms. Renata Hesse
Department of Justice,, Antitrust Division
601 D Street NW, Suite 1200
Washington, DC 20530

Dear Ms. Hesse,

Antitrust is defined by Merriam-Webster, as consisting of laws to protect trade and commerce from unlawful restraints and monopolies or unfair business practices. A lawsuit was filed against Microsoft several years ago alarming the company was in violation of the antitrust laws of our country. In other words, theó claim is that other companies competing for the, game customer base were not able to fairly compete with Microsoft. A lower court ruled that the company would have to be broken up, This ruling did not stand up in the Court of Appeals. But in the process, the Federal government has spent millions of dollars and Microsoft has been forced to spend similar amounts defending its case. Now a settlement has been proposed and agreed to by many of the parties involved in the lawsuit.

Until this case is permanently closed, the biggest loser is the American consumer. Not only have our tax dollars been the source of income for the federal government to fund their rose, but it is likely that Microsoft will offset of the millions they have spent by increasing costs on their products.

I think the only reasonable course reasonable is to agree to the proposed settlement, It is in theo best interest of all parties involved, including the American consumer. Your efforts are truly appreciated. Thank you.

Sincerely,
Ron Hanser Prosident

MTC–00030592

JAN—27—0205: 12PM
FAX COVER PAGE
TO: ATTORNEY GENERAL JOHN ASHEROFT
FROM: MS. ALICE FASS
FAX #: 212 828–9854
VOICE # : 212 534–0682
(CALL IF THERE IS A PROBLEM WITH THE FAX!)
TOTAL # OF PAGES: (INCLUDING COVER PAGE)
NOTES: BE: MICROSOFT
Alice Fass
January 18, 2002
Attorney General John Ashore
US Department Justice 950 P, ???sylvania Avenue, NW
Washington, DC 20530–0001
D??? Asheroft:

I am willing to express my support for Microsoft in light, of recent litigation against them Microsoft is a great company with great products available to the public at very reasonable prices. It has been an industry leader who has done much to stabilize the IT industry and the economy. With this lawsuit. Microsoft has been forced to shift their attention from producing new products to defending themselves in court. This reduced production has doubtless made., damaging impact on the IT industry and the economy as a whole.

In the interest of settling the matter mote quickly Microsoft agreed to procedures and obli??ons that the US Court of Appeals did not even find problems with. For one example, Microsoft decided to allots'' computer makers to remove the ''paths'' that consumers use to access venous Windows programs. These include programs like Explorer and Media Player. D??ing ???us well enable sofrware made by companies such as Netscape or RealNetworks to use those paths instead. This will intensity competition, which will benefit consumers.

I look forward to this matter being wrapped up as soon as possible It has gone on for far too long, and has done severe damage to the country on a whole I appre???ate the willingness of your office to hear the views of the public. I trust that you will conclude that wrapping this matter up will be in the best interest of the public.

Sincerity,
Ahe ??

MTC–00030593

FROM DIANE AND BARRY CAVANAUGH
324 ANNA AVENUE
MOUNTAIN VIEW, CA 94043–4704
FAX/PHONE 1–656–968–4524
E-Mail: ebarrydiane@webtv.net
DATE January 27 2002
REF: Microsoft Litigation
TO: US Federal Government
FAX NUMBER 202–3071454
Gentlemen or Madam

We as seniors feel and believe that the settlement against Microsoft was fair and just. We believe that further litigation by selfish lobbyists would be costly and wrong. Pleae sned all further litigation against Microsoft now.

Barry and Diane Cavanaugh

MTC–00030594

Jan 27 02 03: 36p OFFICE DEPOT#617 1 248 968 2486 p. 1
15261 Forrer Street
Detroit, MI 48227
January 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

I am writing today to encourage the Department of Justice to accept the Microsoft antitrust settlement. I cannot understand why the government has gone after Microsoft in the first place. As soon as the government started their suit against Microsoft the entire technology industry went downhill. Now that there is a settlement in place, the government should accept it and allow business to return to normal.

In order to put this .issue behind them Microsoft has agreed to a long list of provisions. Microsoft has agreed to allow computer makers the flexibility to install and promote any software that they see fit, or that consumers request. Microsoft has also agreed to design future versions of Windows to be more compatible with non-Microsoft software. Microsoft has agreed to many compromises to reach the settlement. It is time for the government to accept the settlement and move on.

Please accept the Microsoft antitrust settlement. A settlement this fair has no business languishing in court

Sincerely,
H. Pankratz
Cc: Rep. John Conyers

MTC–00030595

FROM: FAX NO.: 2158785193 Jan. 27 2002 03:01PM P1
6329 Sherwood Road
Philadelphia, PA 19151–2521
January, 26, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001
Dear Mr. Ashcroft:

As a supporter of Microsoft, I write you with concern over the recent developments in the settlement. It is strange to see that, after three years of negotiating, this settlement may be subject to still further litigation. It is ridiculous to waste our time and money on fighting a battle that has already been won.

Microsoft has made sweeping commitments to prove that they are willing to work with their competitors. They have agreed to make changes in licensing and marketing and even design. Microsoft has agreed to design future versions of Windows that will allow for easier installation of non-Microsoft software. They have also agreed to be monitored for proper procedure and even allow- themselves to be sued if a competitor does not feel that they are acting properly.

With concessions such as these it only makes sense to support this settlement. It is clearly beneficial for the consumer, the IT sector and our economy as a whole. I urge you to help support it in its current state and not waste more time, energy and money that could be better spent elsewhere.

Sincerely,
Marcia Levinson
cc: Senator Rick Santorum

MTC–00030596

FROM: RICK & SHERRY BEATTY FAX NO. : 360 779 4958 Jan. 27 2002 01: 06PM P1
P.O. Box 135 Keyport, Washington 98345 January 12,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

I would like to express my support for Microsoft in the government's antitrust case. A settlement has been reached and I think that it should be respected. Microsoft has been punished enough in the last three years. This lawsuit has been a waste of time and money. Everyone, the government included, has better things to do than pursue a lawsuit that punishes a company for being successful.

It is a total injustice to allow every competitor of Microsoft to continue their influence over the courts and to blame Microsoft for their own inability to have and market a better product. I don't believe there has been one consumer financially damaged by Microsoft's business tactics. Enough is Enough.

Microsoft may have made some mistakes, but they are ready to change their ways. The settlement is evidence of that. Microsoft is conceding a great deal in order to move on. They are giving away some of their technology information and making it easier for consumers to use non-Microsoft programs within their Windows platform. Please respect the efforts of Microsoft and their supporters. This settlement is fair and is a good ending to this whole mess.

Sincerely,
Richard R Beatty

MTC–00030597

FROM : RICK & SHERRY BERTTY FAX NO. : 360 779 4958 Jan. 27 2002 01:06PM P2
P.O. Box 135 Keyport, Washington 98345
January 12,2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530
Dear Mr. Ashcroft:

I would like to express my support for Microsoft in the government's antitrust case. A settlement has been reached and I think that it should be respected. Microsoft has been punished enough in the last three years. This lawsuit has been a waste of time and money. Everyone, the government included, has better things to do than pursue a lawsuit that punishes a company for being successful.

Microsoft may have made some mistakes, but they are ready to change their ways. The settlement is evidence of that. Microsoft is conceding a great deal in order to move on. They are giving away some of their technology information and making it easier for consumers to use non-Microsoft programs within their Windows platform. Please respect the efforts of Microsoft and their supporters. This settlement is fair and is a good ending to this whole mess.

Sincerely,
Sherry Beatty

MTC–00030598

JAN-27–2002 01: 44P FROM: Dale L i 11 i e 918–492–9541
TO: 12023071454 P: 1/2
5622 E70th PL
Tulsa, OK 74138–8413
Phone: 918–492–5806
Fax: 918–492–9341
To: ??Dept. of ??
From: Dale G Lillie
Fax: 1–202–307–1454
Date: Jan 27, 2002
Phone:
Pages: 2
Re: Microsoft ??eff??
CC:
Urgent For Review Please Gomment Please Reply Please Recycle
-Comments:
River Forecast Group
5622 E 78 PL
Tuha OK 741.30–8413
www.River Forec???. corn
January 27,2002
U. S Department of Justice
Antitrust Division
601 D Street NW
Suite 1200
Washington, DC 20530–0001
Dear Sir or Madam:

I strongly urge the U.S. Department of Justice to settle the Microsoft case now and enter the revised proposed Final Judgment. The case brought against Microsoft was motivated primarily by competitive malice. Settling this case is certainly in the public interest.

Microsoft has been a boon to me by bringing lower PC prices, faster and better computing, and better software development tools. In addition, this lawsuit has cost investors, literally hundreds of billions of dollars.

I have gladly purchased and used Microsoft products for over 20 years. Professionally, 1 have developed many systems based on Microsoft software products. During this time I have interacted with Microsoft personnel at many levels. At no time did I think that the relationship with Microsoft was not fair or beneficial to me as well as to other parties involved To the contrary, I believe that Microsoft to a large degree is responsible for the current economic good health of the USA, as well as many other countries of the world.

It is time to end this antitrust action begun in 1997

Sincerely,
Dale G Lillie
Principal, River Forecast Group

MTC–00030599

01/12/1995 02: 38 4072996027 VINCENT PAGE 01
1609 Hinckley Road Orlando, FL 32818–5927
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW Washington, DC
20530–0001
January 26, 200
Dear Mr. Ashcroft:

I am writing to express my disapproval with the last three years of litigation brought against Microsoft by the US department of Justice. Microsoft has been the cornerstone of the Technology Industry, and its capacity to generate wealth and create jobs for our nation should not be overlooked. Our Government needs to stop interfering in free enterprise and start worrying about more pertinent issues like security.

The terms of the settlement do not let Microsoft off easily as they stipulate Microsoft will have to disclose interfaces that are internal to Windows operating system products and also grant computer makers broad new rights to configure Windows so as to make it easier for non-Microsoft products to be promoted. This, I believe will be a detriment to Microsoft, the consumer and the free market as we know it.

I urge your office to do what is right for the American public and the Information Technology sector by implementing the settlement. The nine states that want to continue litigation should be reprimanded and this case should come to an end. Thank you for your time.

Sincerely,
Carol Vincent

MTC–00030600

aai
The American Antitrust Institute
2919 ELLICOTT ST, NW . WASHINGTON, DC 20008
January 24, 2002
Renata Hesse
Trial Attorney

Antitrust Division
U.S. Department of Justice
601 D Street, NW, Suite 1200
Washington, DC 20530
Facsimile: (202) 616–9937 or (202) 307–1454
E-mail: microsoft.atr@usdoj.gov
Re: AAI Tunney Act Comments

The American Antitrust Institutes submits these comments under the Tunney Act. Separately, we have filed with the U.S. District Court a complaint for declaratory and injunctive relief, arguing that failures of the U.S. and Microsoft to comply fully with the requirements of the Tunney Act have kept us and the public generally from receiving all the information that is required by statute as a basis for these comments. With that in mind, these comments must be viewed as preliminary, subject to amendment or expansion if and when additional public disclosures are made.

The American Antitrust Institute (''AAI'') is an independent non-profit education, research and advocacy organization, described in detail at www.antitrustinstitute.org. The mission of the AAI is to support the laws and institutions of antitrust. To our knowledge, we are the only public interest organization devoted solely to the field of antitrust.

Executive Summary

This Court should reject the Proposed Final Judgment (''PFJ'') between Microsoft, the U.S. Department of Justice (''DOJ''), and the settling states. The PFJ is not in the ''public interest,'' as this term is defined under the Tunney Act.[1] 1 The PFJ is ambigous, will be extraordinarily difficult, if not impossible, to implement and affirmatively harms consumers and other third parties. Most importantly, however, the PFJ constitutes a mockery of judicial power since it fails to satisfy any of the remedial goals established by the Court of Appeals.

Standard of Review. Under the Tunney Act a reviewing court is not permitted to ''rubber stamp'' a proposed consent order if that consent order makes a ''mockery of judicial power.''[2] Normally, this standard gives substantial discretion to the DOJ's determination of what is in the ''public interest.'' But this deference is not appropriate in cases like this one where there has been a full trial and decision on the merits.[3] In such cases the court has a special obligation to ensure that the remedial goals of the court that imposed liability on the defendant—in this case the D. C. Court of Appeals[1]—have been met. A consent judgment, such as the PFJ, which effectively ignores the findings of liability and remedial goals expressly stated by a unanimous en banc decision of the Court of Appeals is a mockery of judicial power.

Even when courts are reviewing consent orders entered before a trial, a consent judgment is not in in the ''public interest'' if it: (1) is ambiguous;[1] 5 (2) presents foreseeable problems in compliance and implementation;[6] or (3) affects third parties detrimentally.[7] Since virtually every key provision in the PFJ is ambiguous, will be extraordinarily difficult to implement, and will have a direct and substantial detrimental effect on consumers and other third parties, the PFJ is not in the ''public interest'' even under the lower standards of scrutiny applied to pretrial settlements.

Substantive Failings of the PFJ. The DOJ asserts that the PFJ ''will provide a prompt, certain and effective remedy.''[8] While a prompt, certain and effective remedy is often better than a perfect remedy achieved after extended litigation, virtually any remedy this Court would order after litigation would be better than the PFJ. The PFJ is neither prompt, certain, nor effective.

A prompt remedy would take effect quickly and provide procedures to enforce swift compliance. Most of the so-called restrictions on Microsoft's conduct will not take effect for 12 months.[9] Given the rapid pace of change in information technology, Microsoft's dominance of the covered middleware markets may well be a fait accompli before much of the PFJ would take effect. The procedural provisions also fail to provide for quick resolution of disputes over compliance. The Technical Committee cannot resolve disputes, but only ''advise'' Microsoft and the government of its conclusions.[10]

A certain remedy, at the very least, would set forth a clear delineation of what Microsoft can and cannot do. Yet many of the most important putative restrictions on Microsoft are vague and all are riddled with exceptions and qualifications. This lack of clarity will almost certainly compound the delay already present in the PFJ since the inevitable differences of opinion cannot be resolved without extended litigation to determine the ''intent'' of the parties according to the rules of contract law.

Finally, and most fundamentally, the remedy should be effective. As the Court of Appeals explained, a remedy should (1) free the market place from the effects of Microsoft anticompetitive conduct, (2) deny to Microsoft the fruits of its illegal monopolization, and (3) ensure that Microsoft does not undertake similar practices likely to result in future monopolization.[11] Yet the PFJ affirmatively allows some of the most egregious anticompetitive acts such as the commingling of middleware and operating system software.[12]

The following comments focus upon the deficiencies of the PFJ rather than attempt to propose alternative measures. Nonetheless, we urge the Court to consider the proposals put forward by the nine dissenting states. These proposals correct many of the PFJ's deficiencies identified in these comments.

Discussion

I. Standards of Review: The Tunney Act Requires Careful Review of the PFJ To Determine Whether It Is In The Public Interest

The Microsoft case is widely considered the most important antitrust case of our time. It is critically important to the future of antitrust that this case be decided—or settled—on the merits in a way that the public will perceive justice to have been achieved. All the more so when Microsoft has been found (after a full trial and by a unanimous landmark appellate opinion) to have abused a monopoly in an industry that all agree will have a profound impact on our future. With so many economic interests affected in cases like this, it is important that special efforts be made to keep antitrust settlements transparent so that the public will recognize them to be free of political taint or corruption.

A. Especially Careful Review Is Warranted in a Fully Litigated Case

The Tunney Act directs Courts to carefully scrutinize proposed antitrust Consent Orders.[13] The Tunney Act mandates that the Court shall make an independent inquiry into whether the decrees, and it will assure that the courtroom rather than the backroom becomes the final arbiter in antitrust enforcement.'' The Antitrust Procedures and Penalties Act of 1974: Hearings on S. 782 and $. 1088 Before the proposed consent order is in the ''public interest,''[14] and authorizes the Court to take evidence and receive arguments to assure itself that the consent order serves the public interest.[15] As noted in the landmark Tunney Act decision of United States v. AT&T, a degree of deference to the DOJ in the reviewing the consent order is appropriate—otherwise, parties would have no incentive to compromise and settle.[16] The

[1] 1 15 USCS Section 16(e).

[2] The Antitrust Procedures and Penalties Act of 1974: Hearings on S. 782 and S. 1088 Before the Subcomm. on Antitrust and Monopoly of the Senate Comm. on the Judiciary, 93d Cong. 1 (1973). (opening remarks of Senator Tunney); United States v. ABA, 118 F.3d 776, 783 (DC Cir. 1997)

[3] See Section I(A), infra

[4] United States v. Microsoft Corp., 253 F.3d 34 (DC Cir. 2001) (hereinafter ''Microsoft III'').

[5] United States v. Microsoft Corp., 56 F. 3d 1448, 1461 (1995) (the reviewing judge ''should pay special attention to the decree's clarity'').

[6] Id. at 1462 (if the judge ''can foresee difficulties in implementation we would expect the court to insist that these matters be attended to'').

[7] Id (''certainly, if third parties contend that they would be positively injured by the decree, a district judge might well hesitate before assuming that the decree is appropriate.'').

[8] Competitive Impact Statement (''CIS''), p. 2.

[9] See, e.g., PFJ sections III.D and III.H.

[10] See PFJ section IV.D.4.c. Moreover, the PFJ's ''gag orders'' prohibiting both testimony from Committee members and use of their work product in enforcement proceedings will cause further delay since enforcement will always require the government to duplicate the Committee's work in amassing evidence.

[11] United States v. Microsoft Corp., 253 F.3d 34, 103 (DC Cir. 2001). The PFJ does nothing to deprive Microsoft of the fruits of illegal monopolization, and the DOJ's Competitive Impact Statement (''CIS'') omits this goal in its discussion of the remedial goals. CIS, pp. 2 and 24.

[12] See Section II infra.

[13] The Tunney Act ''will make our courts an independent force rather than a rubber stamp in reviewing consent Subcomm. on Antitrust and Monopoly of the Senate Comm. on the Judiciary, 93d Cong. 1 (1973). (opening remarks of Senator Tunney).

[14] 15 U.S.C. 16(e).

[15] 15 U.S.C. 16(0.

[16] See United States v. AT&T, 552 F. Supp. 131, 151 (1982) (''If courts acting under the Tunney Act disapproved proposed consent decrees merely because they did not contain the exact relief which the court would have imposed after a finding of liability, defendants would have no incentive to consent to judgment and this element of

AT&T court also noted, however, that the standard of review would vary depending on the circumstances.[17] AT&T rejected the notion that courts must unquestioningly accept a proffered decree as long as it somehow, and however inadequately, deals with the antitrust and other public policy problems implicated in the lawsuit. To do so would be to revert to the ''ber stamp, role which was at the crux of the congressional concerns when the Tunney Act became law.'' [18]

The need for deference is important in cases where there has been no trial since the ''public interest'' must include consideration not only of an appropriate remedy but also whether and for what the defendant may be found liable at trial.[19] More importantly, the court has little knowledge of the determinative facts. But once a trial has established the defendant's liability, the need for deference diminishes greatly. As the court in AT&T stated, the concern ''that the courts would generally not be able to render sound judgments on settlements because they would not be aware of all the relevant facts ... is of relatively little relevance here, for this Court has already heard what probably amounts to well over ninety percent of the parties'' evidence both quantitatively and qualitatively, as well as all of their legal arguments[, and the reviewing court] is thus in a far better position than are the courts in the usual consent decree cases to evaluate the specific details of the settlement.'' [20] Once liability has survived appellate scrutiny, as in the case at bar, the need for deference to the DOJ's understanding of the public interest almost completely vanishes since the only consideration left in determining the public interest is whether the consent order does in fact remedy the defendant's violation of the law.

The DOJ argues for a cursory review, limited to the allegations contained in the complaint.[21] The DOJ's argument, however, relies on cases such as the 1995 Microsoft consent decree case (''Microsoft/''),[22] where the case settled prior to a trial. Microsoft I, however, was expressly concerned with the entry of a consent decree where ''there are no findings that the defendant has actually engaged in illegal practices.'' [23] While Microsoft I was correct in stating that it would be ''inappropriate for the judge to measure the remedies in the [pretrial settlement] decree as if they were fashioned after trial,'' [24] in the case at bar, there has in fact been a trial, a finding of liability and an affirmance of that finding on appeal. The DOJ also relies on selected passages from AT&T while ignoring the passages quoted here. Simply put, the law does not compel the court to ignore the record developed at trial and affirmed on appeal as the DOJ asserts.

The Court in this case faces an unprecedented situation. Although almost all Tunney Act proceedings have involved cases where the litigation has not started, in this case the facts and law have been fully argued. There are findings of liability by both a District Court and Court of Appeals.[25] The public has expended large amounts of money and time in establishing the facts and the specific nature of a substantial violation of the antitrust laws. The only thing remaining in this historic, massive and protracted case, before the PFJ was signed, was the remedy proceeding.

We have not located another case in which the settlement occurred this late in a proceeding. In prior Tunney Act proceedings there were few, if any facts established through the legal process and the Court's knowledge of the facts was admittedly limited.[26] Here, all of the trial court's Findings of Fact were affirmed by the Court of Appeals.[27] It also agreed with Judge Jackson that Microsoft had violated the antitrust laws.[28]

These unique circumstances require that this Court should carefully follow the instructions of the Court of Appeals as to what constitutes an appropriate remedy.[29] As was held by the Court of Appeals: the remedy must (a) restore competition to the illegally monopolized market,[30] (b) deprive the violator of the ''fruits'' of its illegal acts,[31] and (c) prevent the violator from engaging in similar behavior in the future.[32]

In a case that has proceeded as far as this one, this Court should use its substantial discretion to see that the views of the Court of Appeals as to what constitutes appropriate relief is implemented. Accordingly, this Court is only under a limited obligation to give deference to the DOJ as to whether the Court of Appeals requirements have been satisfied. Indeed, at this stage of the proceedings, the very nature of this task is more of a judicial function than a prosecutorial function. Accordingly, a settlement at this stage will be in the ''public interest'' only if these three requirements of a remedy are strictly achieved. This Court has an obligation to the Court of Appeals to ensure that this occurs.

B. Especially Careful Review Is Warranted By the Importance of this Case to the Economy

All cases are of great importance to the litigants, but few cases have far reaching economic consequences on their own. From this point of view, it is no exaggeration to say that this Court is reviewing the most important consent order since the break up of AT&T a generation ago. The words of the court in A T& T apply with equal force to the case at bar: This is not an ordinary antitrust case. The American Telephone and Telegraph Company, with its various components and affiliates, is the largest corporation in the world by any reckoning, and the proposed decree, if approved, would have significant consequences for an unusually large number of ratepayers, shareholders, bondholders, creditors, employees, and competitors .... [the decree would have] a potential for substantial private advantage at the expense of the public interest. In view of these considerations, and of the potential impact of the proposed decree on a vast and crucial sector of the economy and on such general public interests as the cost and availability of local telephone service, the technological development of a vital part of the national economy, national defense, and foreign trade, the Court would be derelict in its duty if it adopted a narrow approach to its public interest review responsibilities.[33]

Virtually the same thing could be said with respect to the position of Microsoft within

compromise would be destroyed. The consent decree would thus as a practical matter be eliminated as an antitrust enforcement tool, despite Congress'' directive that it be preserved. See S.Rep. No. 93–298, supra, at 6; H.R.Rep. No. 93-1463, supra, at 6.'')

[17] ''It follows that [where no evidence has been taken and no liability has been found] a lower standard of review must be applied in assessing proposed consent decrees than would be appropriate in other circumstances. H.R.Rep. No. 93–1463, supra, at 12. For these reasons, it has been said by some courts that a proposed decree must be approved even if it falls short of the remedy the court would impose on its own, as long as it falls within the range of acceptability or is ''within the reaches of public interest.'' United States v. AT&T, 552 F. Supp. 131, 151 (1982)

[18] United States v. AT&T, 552 F. Supp. 131,151 (1982), aff'd sub nom. Maryland v. United States, 460 U.S. 1001 (1983).

[1] At pretrial stage, ''[r]emedies which appear less than vigorous may well reflect an underlying weakness in the government's case, and for the district judge to assume that the allegation in the complaint have been formally made out is quite unwarranted.'' United States v. Microsoft Corp., 56 F.3d 1448, 1461 (DC Cir. 1995) (''Microsoft I'').

[20] us v. A T & T, 552 F. Supp. 131,152 (D.DC 1982).

[21] CIS, pp. 65–68.

[22] United States v. Microsoft Corp., 56 F.3d 1448 (DC Cir. 1995) (''Microsoft I'').

[23] Id. at 1460–61.

[24] Id. at 1461.

[25] United States v. Microsoft Corp., 87 F. Supp. 2d 30 (D.DC 2000) (''Conclusions of Law''), United States v. Microsoft Corp., 253 F.3d 34, 117 (DC Cir. 2001) (''Microsoft III'')

[26] The closest example was the AT&T settlement, US v. A T & T, 552 F. Supp. 131 (D.DC 1982), aff'd sub nom. Maryland v. United States, 460 U.S. 1001 (1983). The Settlement was agreed upon during the trial, before the Court had issued its decision.

[27] United States v. Microsoft Corp., 253 F.3d 34, 117 (DC Cir. 2001).

[28] Id., 60–80.

[29] See, Jonathan B. Baker and Andrew I. Gavil, Ill-Gotten Gains, Toothless Settlement Lets Microsoft Keep Rewards of Monopolization, The Legal Times, Nov. 12, 2001, available at. http://www.antitrustinstitute.org/recent/152.cfm. (''When the settlement follows trial and appeal, judicial concerns about encroaching on prosecutorial power to decide what charges to bring and congressional concerns about uninformed courts venturing into the realm of prosecutorial discretion—both of which underlie the narrow role allotted the District Court in the usual Tunney Act review—are mooted. Once the nature and scope of the violations have been determined, as they have here, all that is left is to set the appropriate remedy—a peculiarly judicial task, concerning which the executive branch may advise but not encroach'')

[30] The Court of Appeals explained: ''The Supreme Court has explained that a remedies decree in an antitrust case must seek to ''unfetter a market from anticompetitive conduct,'' United States v. Microsoft Corp., 253 F.3d 34, 103 (DC Cir. 2001).

[31] Quoting the Supreme Court, the goal is to ''terminate the illegal monopoly, deny to the defendant the fruits of its statutory violation...'' Id.

[32] ''[E]nsure that there remain no practices likely to result in monopolization in the future,'' United States v. United Shoe Mach. Corp., 391 U.S. 244, 250, 20 L. Ed. 2d 562, 88 S. Ct. 1496 (1968), quoted in United States v. Microsoft Corp., 253 F.3d 34, 103 (DC Cir. 2001).

[33] United States v. A T & T, 552 F. Supp. 131,151 (D.DC 1982) (emphasis added).

the personal computer and Internet industry. The personal computer industry and the Internet now reach into almost every facet of the economy. Consumers of personal computers, just like consumers of telecommunications services a generation ago, have an enormous stake in ending the monopoly and enjoying the choices of new technologies and other benefits from a newly competitive marketplace. With so much at stake, any court would be derelict in its duty under the Tunney Act if it did not carefully review the PFJ to ensure that its entry is in fact in the public interest.

C. Especially Careful Review Is Warranted Because the PFJ Is Ambiguous, Difficult to Implement and Enforce, and Will Harm Consumers and Other Third parties

Under the Tunney Act, even when courts review consent orders entered into before a trial, they are charged with providing an especially close review to those portions of the consent order that: (a) are ambiguous (i.e., the reviewing judge ''should pay special attention to the decree's clarity'' [34] since it will be very difficult for the Court to administer unclear provisions); (b) relate to compliance mechanisms (if the judge ''can foresee difficulties in implementation we would expect the court to insist that these matters be attended to'') [35] and (c) affect third parties detrimentally (''certainly, if third parties contend that they would be positively injured by the decree, a district judge might well hesitate before assuming that the decree is appropriate.'') [36]

Every key provision in the PFJ is ambiguous and therefore unlikely to effectively achieve its desired result, will be extraordinarily difficult if not impossible effectively to implement, and will have direct and substantial detrimental effect on a number of third parties, including consumers.

These are three additional reasons why this Court should scrutinize the PFJ especially closely. Section II of this Discussion also will show that this scrutiny will reveal to the Court that the PFJ is not in the ''public interest.'' Section II of this discussion will demonstrate why this Court should reject the PFJ because: (a) key terms are so ambiguous or riddled with loopholes that they will not achieve any of the objectives of the relief portion of this litigation; and (b) difficulties in implementation, including the ineffective and cumbersome enforcement mechanism, will similarly serve to render the PFJ toothless. These two problems will exacerbate other features of the PFJ, which will cause significant injury to many third parties, including in particular consumers.

D. Especially Close Review Is Warranted Because the PFJ Is a ''Mockery of Judicial Power''

Finally, under the Tunney Act a reviewing court should not ''rubber stamp'' a proposed Consent Order that makes a ''mockery of judicial power.'' [37] The PFJ does exactly this.

Although a prompt, certain and effective remedy is often better than a perfect remedy achieved after extended litigation, virtually any remedy that this Court would order after litigation would be better than the PFJ. Section II of this discussion will demonstrate that the PFJ is neither prompt, certain, nor effective.

If the Court of Appeals'' three requirements for an adequate remedy are not satisfied, the public's investment in this case will be wasted and the public interest will not be served. Worse, future monopolists will be sent a signal that they will not be made to account for their illegal behavior, and so many might conclude that the entire Microsoft proceeding has been a mockery of judicial power.

E. The Court Should Not Make its Tunney Act Determination Until It Has Heard The Nonsettling States'' Evidence As To Which Remedy Is In The Public Interest Not only is this case unique in that the consent order has been submitted after a finding of liability has been made and upheld on appeal, it is also unique in that the Court continues to have a responsibility to fashion a remedy independent of whether it accepts the PFJ in its current or in modified form. This is because nine of the Plaintiff states did not accept the terms of the PFJ.

Clearly, these non-settling Plaintiff states in the Microsoft case believe that the PFJ is an unsatisfactory remedy for Microsoft's illegal conduct.[38] They believe that only much more stringent remedies would constitute an effective remedy.[39] They have asked for, and are entitled to, a hearing on their proposed remedy, and this remedy hearing is scheduled to start on March 11.[40]

The peculiar situation of this ''two track'' proceeding requires that the Court hold off its decision under the Tunney Act until after it has heard the arguments to be presented by the nine non-settling States. These plaintiffs have a constitutional right to completion of the trial, and this includes the right to a Hearing before a Court that not only is unbiased, but also a Court that appears to be unbiased. However, if this Court rules under the Tunney Act that the PFJ is in the ''public interest'' prior to the completion of the non-settling States'' hearing, this Court will appear to be biased. It will appear that, even before this Court has heard the evidence that the plaintiff states produce during the March 11 hearing, this Court already had determined the appropriate remedy in the Microsoft case.

To avoid even the appearance that this Court has prejudged the plaintiff-states'' case, this Court should receive and carefully review the public comments on the PFJ, and receive and carefully review the Justice Department's responses. But then this Court should hold off making a Tunney Act determination until the plaintiff-states'' hearing is completed.

This is especially true in light of the overall purpose of the Tunney Act. The Tunney Act granted authority to the Court to take additional evidence in order to ascertain whether the remedy is in the ''public interest.'' It sets deadlines for the DO J, the defendant and the public, but it does not prevent this Court from waiting until the remaining parties have presented their evidence.

Moreover, this delay will not cause any hardship to Microsoft, which has sought to delay the remedial proceedings in this case on numerous occasions. Since not postponing of the Court's Tunney Act determination would harm the remaining plaintiffs by depriving them of their right to a remedy determination that appears to be unbiased, and will not adversely affect Microsoft, a balancing of the equities (as would be done in a preliminary injunction proceeding) clearly suggests that the Court should not make a Tunney Act ''public interest'' determination until all of the evidence concerning the appropriate remedy is before this Court.

It is important to stress the need for further evidence and argumentation with respect to the remedy in this complicated case. As commentators under the Tunney Act, we are asked to rely on the Competitive Impact Statement (''CIS'') filed by the Department of Justice. The CIS mentions that the Department considered a variety of alternative remedies, but it fails utterly to analyze them, saying in less than one page, conclusorily and in disregard of its obligation to help the public comment on the case, that it has rejected all alternatives. Without the detailed explanation by the Government of why various alternatives (including many that were proposed by the American Antitrust Institute) were rejected, it is impossible for the public commentors to play their proper role under the Tunney Act in providing the Court with advice as to the implications of the PFJ. Because of this shortcoming, it is especially appropriate for the Court to hear the evidence in support of alternative remedies that will be promulgated by the non-settling States before judging what is in the public interest.

II. Substantive Failings of the Proposed Final Judgment

As noted in the previous section, the Court is not to ''rubber stamp'' whatever settlement the DOJ puts forward. The degree of deference given the DOJ depends on the stage of the proceeding.

Where, as here, the issues of liability been fully litigated and the remedial goals clearly established, the Court is obligated to ensure that any consent order fulfills those goals. Under this standard, the Court should reject the PFJ as a mockery of judicial power. But

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[34] United States V. Microsoft Corp., 56 F.3d 1448, 1463 (1995).

[35] Id. at 1462.

[36] Id.

[37] United States v. ABA, 118 F.3d 776, 783 (DC Cir. 1997) (''The district court must examine the decree in light of the violations charged in the complaint and should withhold approval only if any of the terms appear ambiguous, if the enforcement mechanism is inadequate, if third parties will be positively injured, or if the decree otherwise makes ''a mockery of judicial power''); See also, United States v. Central Parking Corp., 2000 U.S. Dist. LEXIS 6226 (D. DC 2000) (It appears, upon examination in light of the violations charged in the complaint, that the terms of the decree are not ambiguous, that the proposed enforcement mechanism is adequate, that third parties will not be ''positively injured,'' and that the decree does not make a mockery of judicial power);United States v. Microsoft Corp., 56 F.3d 1448, 1462 (DC Cir. 1995).

[38] These states filed their own proposal with the Court on December 7, 2001.

[39] Id.

[40] See Scheduling Order filed October 2, 2001.

even under the more deferential standards used to review pretrial consent orders, the Court should reject the PFJon grounds that it is ambiguous, unenforceable, injures consumers and other third parties.

A. The PFJ Constitutes a Mockery of Judicial Power

This case presents unique circumstances in that the issues of liability have been fully litigated and affirmed by the Court of Appeals in an unanimous en banc decision. Consequently, the Court must strictly follow the standard for a proper remedy established by the Court of Appeals: ''a remedies decree in an antitrust case must seek to [1] ''unfetter a market from anticompetitive conduct,'' [2] ''terminate the illegal monopoly, deny to the defendant the fruits of its statutory violation, and [3] ensure that there remain no practices likely to result in monopolization in the future.'' [41] The PFJ fails to prohibit the most pernicious anticompetitive conduct identified by the Court of Appeals and does nothing to inhibit Microsoft's power to continue to use these tactics to maintain its operating system (''OS'') monopoly or to expand that monopoly into other markets. Not only does the PFJ do absolutely nothing to deprive Microsoft of the fruits of its monopoly, the Competitive Impact Statement (''CIS'') filed by the DOJ does not even mention this remedial goal mandated by the Court of Appeals. A proposal which completely ignores critical holdings of the Court of Appeals consitutes a mockery of judicial power.

1. Failure to Prohibit Anticompetitive Integration of Middleware and the Operating System

The PFJ fails to restrict, let alone prohibit, the most egregious types of illegal activity identified by the Court of the Appeals, Microsoft's integration of its products into the Operating System. As with many of the deficiencies in the PFJ, Microsoft's continuing and unfettered ability to integrate products into the operating system transgresses all three remedial goals established by the Court, for it is not only the most important tool used by Microsoft to maintain its current monopoly and create new ones, the exclusive power to integrate software into the operating system is a fruit of Microsoft's illegally maintained monopoly.

While the DOJ completely ignores the Court of Appeals mandate to deprive Microsoft of the fruits of illegal monopoly, the CIS concedes that appropriate relief should, among other things, ''end the unlawful conduct.'' [42] The Court of Appeals unanimously and squarely held that Microsoft's integration of the browser middleware and the operating system ''constitute exclusionary conduct, in violation of § 2'' of the Sherman Act.[43] More specifically, the Court of Appeals found that Microsoft violated the law by commingling software code and by failing to create a way to remove the commingled code from the operating system.[44] Not only does the PFJ fail to end this unlawful conduct by requiring Microsoft either to stop the commingling or to provide a way to remove the commingled code, the PFJ actually endorses such anticompetitive integration by giving ''Microsoft in its sole discretion'' the right to determine the ''the software code that compromises a Windows Operating System Product.'' [45] It is hard to imagine anything that could more readily constitute a mockery of judicial power than to authorize the defendant to engage in conduct which the court has specifically found to be illegal. Yet that is precisely what the PFJ does.

The importance of integration to Microsoft's ability to maintain and extend its monopoly can hardly be understated. It is Microsoft's weapon of mass destruction against competition. Network effects assure that middleware distributed with every new PC will dominate the market and drive out even superior products simply because the middleware is distributed with every new PC. In markets characterized by network effects, ubiquity beats quality. Microsoft can achieve this universal distribution without resort to threats of retaliation or contractual restrictions simply by commingling its middleware code with the operating system software code. As the Court of Appeals found, Microsoft can and has used this type of integration to snuff out middleware that threatened the applications barrier to entry which protects Microsoft's operating system monopoly. So important is this weapon to Microsoft that it sought a rehearing on this matter, despite the fact that the Court had unanimously found that the conduct violated Section 2 of the Sherman Act. Not surprisingly, the Court of Appeals refused to rehear the issue.[46]

The Court of Appeals identified two types of illegal integration, commingling the browser middleware code with the operating system and excluding the browser middleware code from the Add/Remove programs utility. Yet the PFJ neither prohibits commingling nor mandates a method of removing commingled code. Section III.H of the allows OEMs and end users to hide Microsoft middleware products, but Microsoft can force the OEMs to install Microsoft middleware products as part of the operating system. OEMs and consumers can remove the icons for Microsoft middleware products, but neither OEMs nor consumers remove the middleware product itself. It is simply untrue to say that OEMs will have ''freedom to make middleware decisions'' [47] when Microsoft ''in its sole discretion'' can force OEMs to distribute and consumers to accept Microsoft's middleware product as part of the operating system.[48]

Similarly, OEMs and end users can change the settings so that, for example, the PC will launch RealPlayer instead of Microsoft's Windows Media Player middleware to play certain types of music, but neither the OEM nor the end user can really turn off the Windows Media Player. Windows Media Player will still play the music whenever ''necessary for valid technical reasons to supply the end user with functionality consistent with a Windows Operating System Product.'' [49]

Given the existence of network effects, this inability to turn off, let alone remove, Microsoft middleware will ensure that Microsoft defeat rivals offering cross platform alternatives. Consider the music example. RealPlayer does not play music streamed in Microsoft's proprietary format and Windows Media Player does not play music streamed in RealNetworks proprietary format.

Consequently, whenever consumer wants to hear music streamed in Microsoft's format, the PC will automatically play the music using Windows Media Player even though the consumer or the OEM has installed RealPlayer. But the situation is not reciprocal. If the consumer or OEM has not installed RealPlayer and chosen it as the option to play music, when the consumer attempts to listen music streamed in RealNetwork's format the PC will not automatically invoke RealPlayer.

Instead, the PC will display an error message, probably leading the consumer to believe that the content provider's products are defective. Now consider the position of content provider. She can stream her music in RealNetwork's format, which may provide superior features, but which can only be listened to on a subset of PCs. Alternatively, she can stream her music in Microsoft's format and have it play on all PCs, even PCs where the OEM or end user has attempted to disable Windows Media Player. Of course, she will choose to stream in Microsoft's format and as more and more content providers reach the same obvious conclusion, demand for RealPlayer will evaporate regardless of which format provides the better quality music or lower prices. (Note that price is an issue. Even if Microsoft does not charge a separate price for Windows Media Player, Microsoft does sell the server software, encoding tools, etc., to content providers.)

Realistically, ISVs cannot avoid the implications of integration by purchasing installations from OEMs. The obstacles to successful implementation of such a strategy are overwhelming. First, network effects dictate that an ISV will have to purchase installation from every OEM or it will fail to achieve the universal distribution necessary to have a fighting chance against Microsoft.

The price for universal distribution will not be cheap. Again, consider the plight of RealNetworks. Since an OEM cannot remove Windows Media Player, Real Networks would have to compensate the OEM for the additional testing, support and hardware costs of having two media players installed on the PC.[50] OEMs will demand payment because the universal distribution needed by RealNetworks to survive will also mean that an OEM cannot achieve a competitive advantage over its rivals by installing RealPlayer, e.g., IBM cannot differentiate its PCs from Dell's by installing RealPlayer when Dell also installs RealPlayer, and if

[41] Microsoft III, 253 F.3d at 103 (citations omitted).

[42] CIS, p. 24.

[43] United States v. Microsoft Corp., 253 F.3d 34, 67 (DC Cir. 2001); CIS, pp.3 and 7.

[44] Id. at 66–67

[45] PFJ, sec. VI.U.

[46] United States v. Microsoft 2001 U.S. App. LEXIS 17137 (DC Cir.)

[47] CIS, p.3.

[48] 48 PFJ, sec. VIM.

[49] PFJ, sec. III.H.

[50] Microsoft III, 253 F.3d at 64.

RealPlayer is not installed on both IBM and Dell PCs, RealNetworks cannot reasonably hope to survive against Microsoft in this middleware market. The cost to RealNetworks is compounded by the fact that Microsoft not only does not have to compensate the OEM for the cost of installation, Microsoft also gets paid by the OEM for installation of Windows Media Player as part of the overall royalty for Windows. Consequently, every PC shipped would represent an expense to RealNetworks and income to Microsoft. In short, any ISV who seeks to challenge Microsoft in a middleware market will do so at an enormous and probably insurmountable cost disadvantage.

The PFJ contains provisions which further discourage ISVs from challenging Microsoft's integrated middleware and diminish their chances of success if they do. For example, the PFJ gives Microsoft the right to have Windows automatically request the end user to change back to Microsoft middleware fourteen days after the PC's first use.[51] Assume that RealNetworks convinces an OEM to install RealPlayer and to configure the PC to use RealPlayer instead of Windows Media Player for music. Two weeks after the consumer purchases her new PC, she may be confronted with a pop up window asking her to switch to Windows Media Player every time she tries to listen to music. Microsoft is free to make it impossible to turn off these incessant requests except by agreeing to turn off RealPlayer and turn on Windows Media Player. Just to get rid of the annoying message, at least some consumers will agree to switch to Windows Media Player. In other words, RealNetworks cannot really purchase more than fourteen days worth of installation on a PC. Microsoft, however, will Windows Media Player permanently installed as part of the operating system.

Microsoft also has an unrestricted right to automatically override the consumer's or OEM's configuration whenever the consumer installs ''a new version of a Windows Operating System Product.'' [52] There are no restrictions on Microsoft's power to issue ''new versions'' of Windows. Nor is there any restriction on Microsoft's ability to update a consumer's PC to these new versions automatically when the consumer connects to the Internet. Microsoft is free to issue automatic updates to new versions of Windows which do little more than sweep away the configuration. So even among consumers who refuse Microsoft's repeated requests to switch to Windows Media Player, the RealPlayer installation may last only until Microsoft issues its next operating system update.

At best, therefore, all an ISV can purchase from an OEM will be a temporary presence on many PCs. Not only will this discourage ISVs from entering the market with competitive middleware products, those who do will find that a temporary presence creates the same problems as lack of universal distribution due to network effects. Why should someone stream audio, write applications, etc., for a non-Microsoft middleware product that is available on a hit or miss basis when Microsoft middleware is universally present on a permanent basis?

There are two effective tools to deal with the issue of anticompetitive integration: (1) prohibit integration by Microsoft or (2) require Microsoft to include competitive middleware with the operating system. The PFJ contains neither tool. Given a unanimous en banc decision of the Court of Appeals holding that Microsoft illegally commingled middleware code with the operating system, the failure of the PFJ to provide either tool constitutes a mockery of judicial power.

2. Microsoft Remains Free to Withhold Vital Information

Without disclosure of the operating system's APIs and related information, IHVs, IAPs, ICPs, OEMs, and perhaps most importantly ISVs cannot develop functional products that will work on Windows. Microsoft used selective disclosure of this information as a reward/retaliation mechanism in order to obtain compliance from third parties in its effort to eliminate competition from cross platform middleware products. Furthermore, by withholding information from ISVs that is available to Microsoft's own developers or by disclosing the information to ISVs later than the information is made available to Microsoft's own developers, Microsoft can retard an ISV's ability to develop competitive products, including middleware.

In a competitive market for operating systems, Microsoft would fully disclose all APIs and related information in order to attract support from third parties and to make sure that their products worked as well as they possibly could with the Windows operating system. But Microsoft does not operate in a competitive marketplace, and Microsoft has an incentive to engage in selective, incomplete and delayed disclosures in order to prevent the development of cross platform middleware products.

Rather than simply compel Microsoft to make the complete and timely disclosures that would ordinarily be required by a competitive marketplace, the PFJ puts into place a regime which seems designed to preserve Microsoft's unbridled ability to exploit its monopoly power through selective disclosure. For example, the PFJ does not require disclosure of all APIs but only the subset of ''the APIs and related documentation that are used by Microsoft Middleware to interoperate with a Windows Operating System Product.'' [53] There are a number of problems with this restricted set of mandatory disclosures. First, ISVs may want to use APIs in Windows that Microsoft does not happen to use for its own middleware. While a certain API or set of APIs may be the best way for Microsoft to implement its middleware on Windows, a different set of APIs may prove better for a competitor's middleware. Under the terms of the PFJ, however, Microsoft only has to disclose the APIs used by its own middleware. In other words, and contrary to the CIS, competitiors do not have access to the same APIs as Microsoft's own middleware developers. Rather, they have access only to those APIs used by Microsoft's middleware developers.

Second, Microsoft has complete discretion over which APIs fall into this subset of mandatory disclosures. Under the PFJ, an API is limited to the interfaces ''that Microsoft Middleware running on a Windows Operating System Product uses to call upon that Windows Operating System Product in order to obtain any services from that Windows Operating System Product.'' [54] The PFJ also gives Microsoft complete control over what constitutes the ''Windows Operating System Product.'' [55] The repeated references to ''Windows Operating System Product'' in the definition of APIs make clear that Microsoft can refuse to disclose APIs simply by exercising its unfettered discretion under the PFJ to remove those APIs from the ''Windows Operating System Product.''

Third, the APIs used by important Micorosoft Middleware Products such as Windows Media Player may not be subject to mandatory disclosure. The PFJ does not require disclosure of the APIs used by ''Microsoft Middleware Products.'' Instead, the PFJ requires disclosure of the APIs used by ''Microsoft Middleware.'' [56] The definition of ''Microsoft Middleware Products'' expressly includes not only Windows Media Player, but also other important middleware such as Microsoft Internet Explorer.[57] However, these products are not expressly included in the definition of ''Microsoft Middleware.'' [58] Not all software which provides ''the same or substantially similar functionality as a Microsoft Middleware Product'' [59] falls within the definition of ''Microsoft Middleware.'' It must also be ''distribute[d] separately separately from a Windows Operating System Product to update that Windows Operating System Product.'' [60] If, for example, Microsoft ceases to distribute Internet Explorer and Windows Media Player separately from Windows or if Microsoft no longer treats these separate distributions of Internet Explorer and Windows Media Player as Windows updates, then Internet Explorer no longer constitutes ''Microsoft Middleware'' and Microsoft no longer has an obligation to disclose the APIs used by Internet Explorer.[61]

Whether a product falls within the definition of ''Microsoft Middleware,'' and hence whether the APIs it uses must be disclosed, also depends on whether the product is trademarked.[62] Under PFJ section VI.T, a product is ''Trademarked'' if Microsoft claims a trademark in the product, separate from its trademark claims for ''Microsoft??'' and ''Windows??,'' by, for example, marking the name with the ??

[51] PFJ, sec. III.H.3

[52] PFJ, sec. III.H.3.

[53] PFJ, sec. III.D.

[54] PFJ, sec. VI.A.

[55] PFJ, sec. VI.U.

[56] PFJ, sec. III.D and VI.A

[57] PFJ, sec. V.K

[58] PFJ, sec. VI.J

[59] PFJ, see. VI.J.3.

[60] PFJ, sec. VI.J. 1.

[61] Note that Microsoft's current distribution of these products for the Macintosh platform will not constitute the required separate distribution because the Macintosh versions cannot be updates to Windows.

[62] PFJ, sec. VI.J.2.

character. But a product is not Trademarked if its name is ''comprised of the Microsoft ?? or Windows?? trademarks together with descriptive or generic terms.'' In other words, Microsoft Internet Explorer?? and Windows Media Player?? would be Trademarked and the APIs used by those products would be subject to disclosure. But Microsoft?? Internet Explorer and Windows?? Media Player would not be Trademarked and the APIs used by those products would not be subject to any mandatory disclosure. Under PFJ Section VI.T, Microsoft ''disclaims any trademark rights in such descriptive or generic terms.''

Consequently, if the Court enters the PFJ, Microsoft Internet Explorer?? and Windows Media Player?? will automatically become Microsoft?? Internet Explorer and Windows?? Media Player and the APIs used by those products will fall outside the scope the PFJ's mandatory disclosure provisions.

Fourth, the number of APIs subject to mandatory disclosure is further reduced by PFJ section III.J.1 (a) which allows Microsoft to refuse disclosure of APIs ''which would compromise the security of a particular installation or group of installations of anti-piracy, anti-virus, software licensing, digital rights management, encryption or authentication systems.'' The importance of the APIs for these functions can be seen from the fact that anyone who wishes to play music distributed by the PressPlay joint venture created by two of the five major record labels will need access to the digital rights management APIs. The CIS asserts that ''the APIs ... for the Secure Audio Path digital rights management service ... must be disclosed.'' [63] Unfortunately, the CIS is wrong. Section III.J.1(a) of the PFJ states: ''No provision of the Final Judgment shall ... [r]equire Microsoft to ... disclose ... portions of APIs ... which would compromise the security of a particular installation or group of installations of ... digital rights management.'' The CIS appears to assume that ''installation'' refers to an ''end-user installation,'' [64] when, in fact, the the term ''end-user installation limitation'' is not stated anywhere in Section III.J.1.a. Installation could just as easily mean Microsoft particular installation of this technology in Windows generally as it could an consumer's particular installation on his own PC. Indeed, the former interpretation is more probable, at least with respect to APIs, since it is hard to conceive of a Windows API installed only on the PC of one particular consumer.

Fifth, not only are ISVs limited to an artificially and anticompetitively limited subset of the APIs, ISVs do not get access to those APIs until the ''last major beta test release'' of the Microsoft Middleware. In other words, ISVs can never hope to catch up with Microsoft's own developers. While Microsoft's developers presumably have access to new APIs as soon as they are created, ISVs do not get access to new APIs until Microsoft releases a beta version of the revised operating system to 150,000 or more beta testers.[65] It is not clear that Microsoft has ever had 150,000 beta testers in any of its beta testing programs.

Sixth, the PFJ delays the initial disclosure of the APIs for a year.[66] There is no need for this delay. Microsoft already discloses the APIs it wants to disclose through the Microsoft Developer Network mechanism utilized by the PFJ. The CIS restates the one year delay, but provides no justification for it. Consequently, it is a mockery of judicial power to allow Microsoft to continue this anticompetitive conduct for another year.

Finally, PFJ section J.2 empowers Microsoft to exclude Open Source developers from access to many, if not all, APIs. The most important source of competition for Microsoft may well come not from commercial ISVs but the Open Source movement, i.e., the creators of Linux, Apache, etc. While the Open Source movement has significant potential for creating competition, the Open Source movement does not constitute a for profit business or even a traditional nonprofit business. Section III.J.2(b), however, gives Microsoft the right to condition access to many APIs on proof of ''a reasonable business need for the API'' and section III.J.2(c) allows Microsoft to limit access to those who meet ''reasonable, objective standards established by Microsoft for certifying the authenticity and viability of its business.'' Participants in the Open Source movement will have difficulty establishing that they are a business with business needs under many tests, but it will certainly be impossible to meet the standards established by Microsoft given that Microsoft has already attacked the Open Source model as ''unhealthy'' and doomed to failure.[67] Indeed, Microsoft has even branded all Open Source software as ''a virus.'' [68]

The CIS is simply wrong when it states that ''Subsection III.J.2, by it explict terms, applies only to licenses for a small subset of the APIs and Communications Protocols that Microsoft will have to disclose.'' [69] In reality, Section III.J.2, ''by its explicit terms,'' covers APIs and other information ''related to anti-piracy systems, anti-virus technologies, license enforcement mechanisms, authentication/authorization security, [and] third party intellectual property protection mechanisms.'' Virtually all APIs fall into this category, depending on how one defines ''related to'' and Microsoft will have no incentive to define the phrase narrowly. But even under a narrow interpretation of section III.J.2, participants in the Open Source movement may still be excluded from disclosures of APIs and other critical information on grounds that they are not ISVs because they do not constitute an entity. Sec. Vii.

The District Court found, and the Court of Appeals affirmed, that Microsoft illegally maintained its monopoly by engaging in selective and delayed disclosures of APIs. The PFJ allows this practice to continue virtually unabated. Consequently, the PFJ is a mockery of judicial power.

3. Failure to Prohibit Anticompetitive Corruption of Cross-Platform/Open Standards

Microsoft's assault on middleware threats to its Operating System monopoly has not been limited to integration. Java represented a perhaps even greater threat to Microsoft's Operating System than Netscape's web browser, and unlike the Netscape web browser, Java continues to be a viable product. Created by Sun, Java is at its essence a technology that allows programmers to write applications that will run on any operating system with a Java Virtual Machine installed.

Microsoft licensed Java from Sun and began to market programming tools for ISVs to use in writing Java applications. Microsoft also created its own version of the Java middleware for Windows. Microsoft, however, secretly altered its implementation of Java so that applications written using Microsoft's programming tools would not run correctly under any operating system other than Windows. The Court of Appeals condemned Microsoft's use of these tactics as part of an ''embrace and extend'' strategy—Microsoft embraced an open/cross-platform and then extended it with Windows-only proprietary technology—as a violation section 2 of the Sherman Act. Use of the ''embrace and extend'' strategy, whether done openly or in secret, effectively renders any cross-platform technology useless as a means of breaking down the applications barrier to entry.[70]

While the PFJ does purport to contain language which restricts—but does not eliminate—Microsoft's use of exclusive dealing agreements and threats of retaliation for using competing middleware products, including, presumably, Sun's Java Virtual Machine, nothing in the PFJ restricts Microsoft's ability to subvert an open standard by engaging in a surreptitious embrace and extend strategy. If, as the CIS asserts, ''[c]ompetition was in this case principally because Microsoft's illegal conduct maintained the applications barrier to entry into the personal computer operating system market by thwarting the success of middleware that would have assisted competing operating systems in gaining access to applications and other needed complement,'' then Microsoft must be prohibited from polluting the open standards on which cross-platform middleware relies. The failure of the PFJ to do so constitutes a mockery of judicial power.

[63] 63 CIS, p. 35.

[64] Page 51 of the CIS states that Section III.J.1.a is ''limited to specific end-user implementations of security items.''

[65] PFJ, sec.III.D and. VI.R.

[66] More specifically, the PFJ section III.D states that the mandatory disclosures will begin ''[s]tarting a the earlier of the release of Service Pack 1 for Windows XP or 12 months after submission of the [Proposed] Final Judgment for to the Court.''

[67] See, Prepared Text of Remarks by Craig Mundie, Microsoft Senior Vice President The Commercial Software Model The New York University Stern School of Business May 3, 2001 <http://www.microsoft.com/presspass/exec/craig/05–03sharedsource.asp>

[68] See, e.g., Stephen Shankland,'' Microsoft license spurns open source'' CNet News.com, June 22, 2001 <http://news.com.com/2100–1001–268889.html?legacy=cnet>

[69] 69 CIS, p. 53.

[70] Microsoft III, 253 F.3d at 74–78.

4. Microsoft Remains Free to Retaliate Against Those Who Favor Competitive Products

Section III.A of the PFJ initially purports to prohibit retaliation against OEMs who distribute competitive middleware products. Yet section III.A then renders this prohibition meaningless by giving Microsoft the right to provide ''Consideration ....commensurate with the absolute level or amount of that OEM's development, distribution, promotion, or licensing of that Microsoft product or service.'' Consideration includes both ''monetary payment'' and ''the provision of preferential licensing terms.'' [71] So Microsoft may reward OEMs who distribute, promote or license Microsoft products to the exclusion of competitive middleware products. Of course, those OEMs who favor competitive middleware products will not receive ''Consideration'' from Microsoft. It does not matter that this use of Consideration is limited to ''absolute'' versus ''relative'' levels of distribution. The additional support costs of installing two products which provide the same functionality will deter most OEMs from installing competitive product when they are already installing the Microsoft product. By any reasonable standard, therefore, Microsoft's ability to give consideration to OEMs for the distributing, promoting and licensing of Microsoft's products amounts to an unrestricted right to retaliate against OEMs who distribute, promote or license non-Microsoft products.

Similarly, Section III.G.1 purports to prohibit Microsoft from offering ''Consideration'' to OEMs as well as IAPs, ICPs, ISVs, and IHVs in exchange for their distribution of Microsoft Platform software in a fixed percentage, but the section goes on to state Microsoft may enter such agreements whenever ''Microsoft in good faith obtains a representation that is commercially practicable for the entity to provide equal or greater distribution, promotion, use or support for software that competes with Microsoft Platform Software.'' Note that the OEMs and others are not required to distribute any competitive product, only to represent that they could distribute competitive products. The CIS points out that Microsoft could grant an ISV preferential marketing, technical and other support ''on the condition that the ISV ship the Windows Media Player along with 70% of the ISV's products'' so long as ''the ISV affirmatively states that it is commercially practicable for it also to ship competing media players with at least the same (or greater) number of shipments.'' [72] Commercial practicability is not defined in the PFJ, and it is difficult to imagine that an ISV (or OEM, IAP, etc.) would refuse to make such a representation in exchange for preferential treatment from Microsoft. At the same time, it is difficult to believe that an ISV would distribute two products that perform the same function. As with OEMs, the additional distribution costs may be small, but the additional support costs to help consumers sort out which product to use are likely to be prohibitive.

Section III.F.2 also purports to prohibit Microsoft from giving an ISV Consideration in exchange for the ISV's agreement to refrain from ''developing, using, distributing, or promoting any software'' that competes a Microsoft or runs on a competing platform. Yet the very same section gives Microsoft the right to enter into these exclusive agreements as part of a ''bona fide contractual obligation of the ISV to use, distribute or promote any Microsoft software.'' All ISVs who write software for Windows must use Windows, even if only to test whether products will run under Windows. Consequently, Microsoft is relatively free to offer Consideration, including preferential developer support, to any ISV as part of the ISV's other contractual obligations with Microsoft. Section III.F.2 does, to be sure, require that the restrictions be connected to ''bona fide contractual obligations'' and limits the permissible restrictions to those that are ''of reasonable scope and duration.'' But these are all undefined terms, so challenges to conduct under this section as unreasonable in scope or duration may require years of litigation. Since the Technical Committee (''TC'') cannot issue binding decisions, nor can its members testify, nor can its work product be used in any enforcement proceeding, the TC will add a layer of delay rather than expedite resolution of these disputes.

B. Consumers and Other Third Parties Will Be Injured

Independently of whether the PFJ consitutes a mockery of judicial power, the Court can and should refuse to a consent order which poses a high risk of injury to consumers or other third parties. The PFJ contains provisions which will affirmatively make matters worse in at least four important ways. First, the PFJ contains language which Microsoft may be able use to require competitors to license their intellectual property to Microsoft. This would take away the rights of third parties to negotiate with Microsoft over whether and on what terms Microsoft may use their property. Second, the Court of Appeals modified the standard for tying from ''illegal per se'' to ''rule of reason,'' but the PFJ purports to immunize Microsoft from tying claims altogether. This poses an unacceptable risk that the third party victims of Microsoft's tying may lose some or all their rights to challenge this conduct. Third, whereas Microsoft now makes it possible to remove certain middleware such as Windows Messenger from middleware, the PFJ will limit Original Equipment Manufacturers (''OEMs'') and consumers to deleting icons. Finally, the PFJ enables Microsoft to retaliate with legal immunity against OEMs and others in a variety of ways.

1. The PFJ Requires Cross-Licensing of Third Party Intellectual Property to Microsoft.

Currently, ISVs and other third parties are at least theoretically free to license their intellectual property to Microsoft or not as they see fit. The extent to which third parties actually have the power to exercise this legal right may remain in doubt due to Microsoft's monopoly power, but the PFJ, with no consideration for the possible anticompetitive effects of cross licensing with a monopolist in networked markets, appears to sweep away the intellectual property rights of third parties who deal with Microsoft.

The loss of the legal right to refuse to cross license intellectual property with Microsoft is found in section III.I.5 which provides:

an ISV, IHV, IAP, ICP, or OEM may be required to grant to Microsoft on reasonable and nondiscriminatory terms a license to any intellectual property rights it may have relating to the exercise of their options or alternatives provided by this [Proposed] Final Judgment; the scope of such license shall be no broader than necessary to insure that Microsoft can provide such options or alternatives.

The scope of this provision and its potential impact on third parties is astonishing. Assume, for example, that an OEM wishes to enable dual booting, i.e., to allow the end user to choose between using Linux (or some other OS) and Windows when she turns on her PC. Can Microsoft insist that it receive a license from the OEM for the software that makes the choice possible? The answer would seem to be yes. After all, the OEM would be attempting to take advantage of ''options or alternatives provided'' by the PFJ and Section III.I.5 does say that Microsoft may require the OEM to grant Microsoft ''a license to any intellectual property rights it may have relating to the exercise of [its] options or alternatives.'' Expanding Microsoft's ability to insist on cross-licensing will likely have two types of negative effects. In some cases, it will raise the price of dealing with Microsoft too high for the other company, in which case the company will be disadvantaged in the marketplace. In other cases, the cross-licensing will occur and Microsoft may gain important intellectual property that will give it a competitive advantage over its competitors. In either instance, the incentives for other companies to produce new intellectual property will be reduced and consumers will suffer.

2. The PFJ May Immunize Microsoft From Tying Claims.

One of the more remarkable phenomena in this case has been Microsoft's success at escaping liability for tying under Section 1 of the Sherman Act. When the lawsuit began, Microsoft, like everyone else, was subject to the rule that tying is illegal per se. The Court of Appeals ignored at least a half century of Supreme Court precedent and held that the rule of reason analysis should apply to Section 1 claims of tying against Microsoft.[73] (Note that the Court of Appeals already found that this conduct violated the rule of reason standard under Section 2 of the Sherman Act.) Section VI.U of the PFJ, however, dispenses with even the rule of reason analysis and tries to immunize Microsoft from tying claims altogether when it states that the ''software code that comprises a Windows Operating System Product shall be determined by Microsoft in its sole discretion.'' Even the failed 1995 Consent Decree required Microsoft to offer at least a plausible procompetitive reason for its tying of software to the Operating System.[74] It is

[71] PFJ, sec. VI.C.

[72] CIS, pp. 42–43.

[73] Microsoft Ill, 253 F.3d at 89–95.

[74] See United States v. Microsoft Corp., 147 F.3d 935 (DC Cir. 1998).

difficult even to conceive of a greater victory for a convicted abusive monopolist who is already in the process of tying new products to its core operating system monopoly. This provision of the PFJ alone makes a mockery of the entire case, but it also could mean that the victims of tying, whether it be consumers forced to purchase products they do not want or ISVs whose products are excluded from the OEM channel of distribution, may also be left without remedy. Clearly, the PFJ gives consumers and other third parties no legally enforceable rights.[75] The PFJ also presents an unacceptably high risk of depriving them of their existing rights. Such a consent order is not in the public interest.

3. The PFJ Delays Changes in Microsoft's Conduct which Should Already Be in Place. Section III.H allows OEMs and consumers to hide certain Microsoft middleware by deleting the icons for the Microsoft products and replacing them with icons for competitive products beginning ''at the earlier of the release of Service Pack 1 for Windows XP or 12 months after submission of this [Proposed] Final Judgment to the Court.'' In the rapidly changing middleware markets affected by this provision, a year may provide Microsoft more than enough time to eliminate viable competitors by excluding them from access to consumers, and there is no justification for giving Microsoft a year to implement this provision. On July 11,2001, Microsoft issued a press release stating these changes would be incorporated into Windows XP when it shipped in October 2001.[76] If Microsoft could implement this flexibility in October 2001, why must competition take a battering for another full 12 months? The delay can only serve to entrench Microsoft's efforts to eliminate competition in the middleware markets covered by Section III.H of the PFJ.

4. The PFJ Enables Microsoft to Retaliate Against OEMs and Others. As noted in our comments on justice and ambiguity, Microsoft may in fact remain free to retaliate against OEMs, Independent Software Vendors (''ISVs'') and others who do not favor Microsoft middleware products. While the other comments focus on Microsoft's ability to take advantage of loopholes and vague and ambiguous provisions within the PFJ, perhaps it is as important to note that the PFJ covers only a small number of Microsoft products. Programming tools and Application Programming Interfaces (''APIs'') not used by Microsoft are critically important to ISVs and others. Similarly, Microsoft Office's commanding market share makes it an indispensible product to OEMs. The Court of Appeals noted the willingness of Microsoft to use these products in its illegal efforts to maintain the Windows monopoly, yet the PFJ leaves Microsoft free to retaliate against ISVs, OEMs and others by discriminating on price and other terms of access to these products. Without realistic protections against retaliation, the record of this case indicates strongly that many remedial portions of the PFJ will be ineffective. C. The Proposed Final Judgment Is Ambiguous ''A district judge pondering a proposed consent decree understandably would and should pay special attention to the decree's clarity.'' [77] The PFJ fails to set forth specific and precise remedies for the antitrust concerns identified by the Court of Appeals. There are no clear prohibitions on Microsoft's conduct in the Proposed Final Judgment. Many of the putative restrictions on Microsoft are vague and all are riddled with exceptions and qualifications. As the experience over the 1995 Consent Decree shows, Microsoft and the government may have enormous differences of opinion as to the meaning of the terms. This lack of clarity will almost certainly compound the delay already present in the Proposed Final Judgment since the inevitable differences of opinion cannot be resolved without extended litigation to determine the ''intent'' of the parties according to the rules of contract law.

1. Unclear Whether Microsoft Can Retaliate Against OEMs Who Favor Competitive Products A critical issue in Microsoft's illegal maintenance of its monopoly has been its ability to retaliate against those who stand in its way, especially OEMs. OEMs provide an extraordinarily important distribution channel for software, including any cross-platform middleware that could serve to break down the applications barrier to entry. Unlike Microsoft, OEMs face intense competition and operate on razor thin profit margins. Consequently, they are especially vulnerable to retaliation from Microsoft. Seemingly small differences in the price charged for Windows can account for the success of one OEM and the demise of another. Nor is retaliation limited to price differences for Windows. If Microsoft can retaliate through the prices it charges for other products, such as Microsoft Office, and through the level of support that Microsoft gives an OEM. Since OEMs currently have no viable alternative to Windows, they simply cannot afford incur Microsoft's disfavor.

Section III.A. 1 appears to prohibit Microsoft retaliating against OEMs who favor rival products: Microsoft shall not retaliate against an OEM by altering Microsoft's commercial relations with that OEM, or by withholding newly introduced forms of non-monetary Consideration ... from that OEM, because it is known to Microsoft that the OEM is or is contemplating ... developing, distributing, promoting, using, selling, or licensing any software that competes with Microsoft Platform Software ...

Now assume that an OEM wants to develop, distribute and promote a new type of software that will compete with JAVA as a tool for creating applications that will run on multiple Operating Systems. As such, this technology threatens to erode the Applications Barrier to Entry that protects Microsoft's monopoly. Can Microsoft retaliate against the OEM for doing this? No one can tell from the language of the PFJ. First, there is the question of whether this new technology competes with a ''Microsoft Platform Product.'' Microsoft Middleware products are included within the PFJ's definition of a ''Microsoft Platform Product.'' [78] It is still unclear, however, whether this new OEM middleware would compete with ''Microsoft Platform Software.'' The PFJ narrowly defines ''Microsoft Middleware Products.'' [79] Microsoft's ''Java Virtual Machine'' is included in the definition of Microsoft Middleware Products,[80] but the OEM is not offering a different ''Java Virtual Machine,'' The OEM is offering an alternative to using Java. True, this technology threatens Microsoft's monopoly in the same way as Java does, but it remains unclear whether this new technology competes with any Microsoft Middleware Products. Therefore, it remains unclear whether the new technology competes with Microsoft Platform Software. Therefore, it remains unclear whether Microsoft may retaliate against the OEM for offering this technology. Consider another example where an OEM seeks to distribute the Netscape web browser, and the OEM promotes its use of Netscape in advertising, etc. Presumably this presents a clearer case since the definition of Microsoft Middleware Products expressly includes the Internet Explorer web browser and, therefore, it would seem almost certain that the Netscape web browser competes with Microsoft Platform Software. May Microsoft retaliate against the OEM for distributing the Netscape web browser? Again, the answer is unclear. As previously noted, section III.A. 1 does state that Microsoft cannot condition any Consideration that it gives an OEM based on whether the OEM distributes or promotes software that competes with Microsoft Platform Software. But Section III.A also states that ''[n]othing in this provision shall prohibit Microsoft from providing Consideration to any OEM with respect to any Microsoft product or service where that Consideration is commensurate with the absolute level or amount of that OEM's development, distribution, promotion, or licensing of that Microsoft product or service.'' In other words, Microsoft cannot withhold Consideration for promoting Netscape, but Microsoft can withhold Consideration for failing to promote Internet Explorer. OEMs have limited resources to devote to the distribution and promotion of software, and if an OEM devotes its marketing budget to Netscape, the OEM cannot also spend those funds distributing and promoting Internet Explorer. Consequently, the OEM's distribution and promotion of Netscape may mean that the OEM has not given the required level of distribution or promotion to Internet Explorer, thereby entitling Microsoft to withhold the Consideration that Microsoft gives to competing OEMs who do not distribute and promote Netscape. This contradiction recreates the same type of ambiguity found the 1995 Consent Decree which prohibited Microsoft from tying products to Windows, but expressly allowed Microsoft to integrate products into Windows.

2. Unclear Whether Non-Microsoft Middleware and Non-Microsoft MiddleWare Products as Defined by the PFJ Could Ever Exist

[75] PFJ, see. VIII.

[76] See Microsoft Press Release.

[77] United States v. Microsoft, 56 F.3d 1448, 1461(DC Cir. 1995).

[78] PFJ, sec. VI.L(ii).

[79] PFJ, sec. VI.K

[80] PFJ, Sec. VI.K.1

Some of the most important provisions of the PFJ concern the rights of OEMs, consumers, and others to use Non-Microsoft Middleware and Non-Microsoft Middleware Products. Section III.H, for example, allows an OEM or end user to hide Microsoft Middleware Products and install Non-Microsoft Middleware Products as the default mechanism to perform the same functions. Thus, it would seem that an OEM could remove the icon for Internet Explorer and replace it with an icon for Netscape's web browser, but in reality this will depend on whether Netscape's web browser constitutes a Non-Microsoft Middleware Product. To constitute a Non-Microsoft Middleware Product, Netscape's web browser must, among other things, expose ''a range of functionality to ISVs through published APIs.'' [81] Generally speaking, APIs are the special codes that an application uses to communicate with Middleware or the Operating System. Indeed, Middleware constitutes a competitive threat to Microsoft's Operating System monopoly because Middleware contains its own set of APIs so that an application does not have to communicate directly with the Operating System. As long as the PC contains the appropriate Middleware, the application will run regardless of whether the PC uses Windows or some other Operating System. This is not to say that the Operating System APIs are irrelevant. The Middleware still uses the Operating System's APIs, but the applications use the Middleware APIs. Netscape's web browser does expose APIs as that term is commonly used.

The PFJ, however, contains a much narrower definition of APIs than that commonly used. Under PFJ section VI.A, only ''the interfaces ... that Microsoft Middleware running on a Windows Operating System Product uses to call upon that Windows Operating System Product in order to obtain any services from that Windows Operating System Product'' constitute APIs. In other words, APIs that exist outside the Windows Operating System do not appear to constitute APIs at all. These APIs are, of course, Microsoft's intellectual property.

So, for an OEM to have the right to install Netscape as the default web browser the question is not whether Netscape exposes Netscape APIs, but whether Netscape exposes Windows APIs. This makes no sense since it could easily mean that there is no such thing as Non-Microsoft Middleware Product, thereby rendering a significant portion of the PFJ meaningless. But this interpretation is more than plausible given the express language of the PFJ. Ultimately, the Court may reject this interpretation and refuse to use the PFJ's definition of APIs for purposes of determining what constitutes a Non-Microsoft Middleware Product. Then again, the Court might not. Either way, the PFJ is ambiguous on this fundamental point.

3. Unclear Whether Microsoft May Retaliate Against ISVs Who Favor Competitive Products Just as Section III.A. 1 initially appeared to limit Microsoft's ability to retaliate against OEMs, so too Section III.F.1 provides that ''Microsoft shall not retaliate against any ISV ... because of that ISV's ... developing, using distributing, promoting or supporting any software that competes with Microsoft Platform Software or any software that runs on any software that competes with Microsoft Platform Software'' and Section III.F.2 states that ''Microsoft shall not enter into any agreement relating to a Windows Operating System Product that conditions the grant of any Consideration on an ISVs refraining from developing, using, distributing, or promoting any software that competes with Microsoft Platform Software or any software that runs on any software that competes with Microsoft Platform Software.'' As with the prohibition against OEM retaliation, whatever clarity these provisions might otherwise have vanishes upon careful examination.

Assume that an ISV plans to develop a game that will make use of some RealPlayer's multimedia functionalities. Does the PFJ allow Microsoft to punish the ISV for not using RealPlayer instead of Windows Media Player? Could Microsoft, for example, refuse to provide the ISV with technical support in retaliation? The answer is far from clear. RealPlayer competes with Windows Media Player, which is included in the definition of Microsoft Middleware Products and, therefore, within the definition of Microsoft Platform Product which would seem to invoke Section III.F's ban on retaliation. But Section III.F.2 contains an exception to the general rule against withholding Consideration in retaliation for the use of competing software: Microsoft may enter into agreements that place limitations on an ISV's development, use, distribution or promotion or any such software if those limitations are reasonably necessary to and of reasonable scope and duration in relation to a bona fide contractual obligation of the ISV to use, distribute or promote any Microsoft software ... The PFJ does not define or give any guidance as to how to define what is ''reasonably necessary,'' ''reasonable scope and duration,'' or ''a bona fide contractual obligation.'' If Microsoft wants to retaliate, Microsoft would simply argue that it offered Consideration only as part of a contract to promote Windows Media Player and that the ISV who uses RealPlayer either did not enter into such a contract or breached the contract by using RealPlayer. Such an interpretation of the exception would render the main prohibition meaningless and the Court might interpret the exception more narrowly, but then again the Court might accept the broad interpretation of the exception. Either way, the provisions that relating to retaliation against ISVs who favor non-Microsoft products are ambiguous.

4. Unclear Whether Microsoft Must Make Any Disclosures to Third Parties.

The PFJ contains language which standing on its own might require Microsoft to make certain disclosures of APIs, Communications Protocols, and related documentation that enable ISVs and others to write software capable of running on Windows. These comments have already pointed out that the loopholes contained in the API provisions allow Microsoft almost complete discretion to continue to withhold APIs. The ambiguities surrounding the mandatory disclosure provisions for Communications Protocols allow Microsoft to withhold critical information. PFJ section III.E states that ''Microsoft shall make available for use by third parties ... any Communications Protocol that is ... (1) implemented in a Windows Operating System Product ... and (ii) used to interoperate natively ... with a Microsoft server operating system product.'' There are three critical terms in determining what Microsoft must disclose: ''Communications Protocol,'' ''Windows Operating System Product,'' and ''Microsoft operating system product.'' The PFJ defines ''Communications Protocol'' as:

[T]he set of rules for information exchange to accomplish predefined tasks between a Windows Operating System Product and a server operating system connected via a network, including, but not limited to, a local area network, a wide area network or the Internet. These rules govern the format, semantics, timing, sequencing, and error control of messages exchanged over a network.[82]

The incorporation of ''Windows Operating System Product'' and ''server operating system'' into the definition of ''Communications Protocol'' makes the definition of these terms especially important in understanding what Microsoft must disclose. The PFJ definition of ''Windows Operating System Product'' expressly allows Microsoft to include whatever it wants and by implication to exclude whatever it does not want from the ''Windows Operating System Product.'' [83]

The definition of ''Windows Operating System Product'' and its incorporation into the definition of ''Communications Protocol'' makes Microsoft's obligation to disclose ''Communications Protocol'' a moving target. But the third critical term, ''server operating system product,'' is not defined at all. Nor does the PFJ define server operating system. The CIS, perhaps in belated recognition of this issue, purports to define the term,[84] but there is no reason to believe that Microsoft agrees with the CIS definition. Thus, exactly what Microsoft must disclose as under the Communications Protocol provision remains ambigous.

Microsoft's obligations to disclose Communications Protocols are also subject to the same exceptions in PFJ section III.J that apply to the API disclosure provisions. Just as PFJ section III.J. 1 threatens to remove a broad set of APIs from disclosure, so too it may exempt many if not most of the Communications Protocols that Microsoft would otherwise have to disclose. Similarly, PJF section III.J.2 may well mean that Microsoft can deny disclosure of Communications Protocols to competitors, including the Open Source movement, just as it does for APIs.

5. Unclear Whether Open Source Developers Are ISVs.

The Open Source Movement presents one of the biggest threats to Microsoft. Linux is undoubtedly the most famous Open Source

[81] PFJ, see. VI.N.

[82] PFJ, see. VI.B

[83] PFJ, sec. VI.U

[84] CIS, p. 37

project, but a wide variety of Open Source Projects are underway. Although some commercial enterprises bundle Open Source software with additional proprietary software, documentation or services, e.g., Red Hat, the Open Source software itself is distributed without charge. A number of references in the PFJ suggest that its protections may not apply to Open Source developers despite their unusual potential for creating competition against Microsoft.

For example, section III.J.2(c) specifically states that Microsoft can refuse to license ''any API, Documentation or Communcations Protocol related to anti-piracy systems, anti-virus technologies, license enforcement mechanisms, authentication/authorization security, or third party intellectual property protection mechanism of any Microsoft product'' to any one who fails to meet ''reasonable, objective standards established by Microsoft for certifying the authenticity and viability of its business.'' Ambiguity exists on two levels here. First, Microsoft could argue that virtually all of its APIs, etc., are in some way ''related to'' this wide range of key technologies. Second, Microsoft would seem to have almost carte blanche to refuse access to anyone on grounds that they do not meet Microsoft's standards for ''authenticity and viability.'' What constitutes ''reasonable, objective standards'' is anyone's guess, but even if this language sufficiently protects commercial enterprises, Microsoft may still be able to refuse to grant access to Open Source developers since, by definition, they do not even charge for their software, let alone make a profit.

More fundamentally, the PFJ defines an ISV as ''an entity other than Microsoft that is engaged in the development or marketing of software products.'' [85] Much of the Open Source community remains a loose collection of individuals who post changes to software code on an ad hoc basis in a variety of sometimes shifting locations on the Internet. Whether these communites constitutes ''entities'' is unclear.

6. Additional Ambiguities

Trying to pin down what Microsoft may or may not do is like trying to hold water in your hand. Virtually every provision raises questions. The preceding discussion identifies the most important ambiguities, but there are more. Fore example: When does an OEM installed ''shortcut'' for Non-Microsoft Middleware ''impair the functionality of the user interface''?[86] What constitutes ''a user interface of similar size and shape to the user interface displayed by the corresponding Microsoft Middleware Product?[87] What constitutes ''commercially practicable''?[88] . What constitutes a ''bona fide joint venture'' or a ''joint development or joint services arrangement''?[89] What constitutes ''a reasonable technical requirement'' or ''valid technical reasons''? PFJ, sec. III.H. What constitutes a ''bona fide join venture''?[90] What constitutes ''a reasonable period of time'' ? [91]

D. The Enforcement Mechanism Is Inadequate

The PFJ cannot possibly achieve its purported goals without an enforcement mechanism adequate to deter violations by Microsoft or bring about compliance when violations occur. For this to occur, the line between permissible and impermissible conduct must be clearly drawn. Unfortunately, most of the ''prohibitions'' contained in Section III of the PFJ are riddled with exceptions and undefined terms. Consequently, even under the best of circumstances, fairly extensive litigation would be necessary to determine the exact parameters of permissible conduct. But the Microsoft case does not present the best of circumstances. The delay inevitably caused by disputes over the interpretation of vague language and complex exceptions inevitably play to Microsoft's advantage. The PFJ lasts at most seven years. PFJ, sec. V. Consider the issue of Microsoft's ''integration'' of middleware with the operating system. This issue appeared to be settled with the consent decree that Microsoft agreed to in 1994 and which the Court entered in 1995. Microsoft never accepted the government's interpretation of the 1995 Consent Decree or the law on that issue. This dispute ultimately led to the current litigation. Microsoft eventually lost the dispute in 2001 when the Court of Appeals held that Microsoft's integration of the browser middleware with the operating system violated Section 2 of the Sherman Act (a decision which will effectively be reversed if the Court enters the PFJ in 2002). In the meantime, Microsoft has effectively eliminated all competition in the browser middleware market largely by integrating its browser into the operating system.

The rapidly changing nature of the software markets compounds the necessity of a swift and certain enforcement mechanism. ''By the time a court can assess liability, firms, products, and the marketplace are likely to have changed dramatically.'' [92] Despite the pressing need of swift and sure enforcement, the PFJ seems designed to enable and to reward delay.

1. The Enforcement Mechanism Lacks Appropriate Penalties.

An effective enforcement mechanism must contain a penalty sufcient to deter misconduct by the defendant. Ideally, the enforcement mechanism would reward the defendant for extending itself to accomplish the remedial goals, but at the very least the mechanism should severely punish a pattern of willful misconduct. The PFJ, however, does neither. The PFJ provides no incentives for Microsoft to cooperate in the effort to break down its Operating System monopoly. Worse, the PFJ does not punish Microsoft for deliberate and repeated violations of the PFJ's restrictions. Microsoft's only stated penalty for ''engag[ing] in a pattern of willful and systematic violations'' of the restrictions is ''a one-time extension of this [Proposed] Final Judgment of up to two years.'' PFJ, sec.V.B. The base period of the PFJ is five years. If Microsoft has repeatedly violated the PFJ for five years, why should it care if the PFJ is extended to seven years.'? If Microsoft can get away with ignoring the restrictions for five years, surely it will not pose any problem for Microsoft to ignore the restrictions for another two years.

2. The Technical Committee Will Only Delay Enforcement.

The Technical Committee can only serve to delay resolution of complaints about Microsoft's failure to comply with the restrictions contained in the PFJ. The Technical Committee cannot resolve disputes, but only ''advise'' Microsoft and the government of its conclusions. The Proposed Final Judgment's ''gag orders'' prohibiting both testimony from Committee members and use of their work product in enforcement proceedings will cause further delay since enforcement will always require the government to duplicate of the Committee's work in amassing evidence.

Assume, for example, that Microsoft refuses to disclose an API to an ISV in retaliation for the ISV's use of RealPlayer technology. This denial immediately places the OEM at a significant disadvantage over ISVs who comply with Microsoft's wishes that they only use Windows Media Player. Assume further that the ISV immediately contacts the TC with its complaint alleging violations of sections III.D and F of the PFJ. The TC must then begin the investigation. While it is impossible to know how long such an investigation would take, the powers and duties of the TC outlined in section IV.B.8.b enable the TC to undertake a truly exhaustive investigation: The TC may, on reasonable notice to Microsoft:

(i) interview, either informally or on the record, any Microsoft personnel, who may have counsel present; any such interview to be subject to the reasonable convenience of such personnel and without restraint or interference by Microsoft;

(ii) inspect and copy any document in the possession, custody or control of Microsoft personnel;

(iii) obtain reasonable access to any systems or equipment to which Microsoft personnel have access;

(iv) obtain access to, and inspect, any physical facility, building or other premises to which Microsoft personnel have access; and

(v) require Microsoft personnel to provide compilations of documents, data and other information, and to submit reports to the TC containing such material, in such form as the TC may reasonably direct.

While such expansive investigatory powers are laudable in many respects, they do represent a tradeoff in favor of accuracy over speed. After such a thorough investigation, however, the TC may only conclude whether the ''complaint is meritorious,'' and if so, ''it shall advise Microsoft and the Plaintiffs of its conclusion and its proposal for cure.'' PFJ, sec. IV.D.4.c. Assuming that the TC finds merit in the ISV's complaint, it is not clear whether the TC may inform the ISV of its findings. PFJ section IV.B.8 states that ''TC members may communicate with non-parties

[85] PFJ, see. VI.I

[86] 86 PFJ, sec. III.C.2.

[87] PFJ, see. III.C.3.

[88] PFJ, sec. III.G.1

[89] PFJ, sec. III G.

[90] PFJ, sec. III.I.

[91] PFJ, sec. III.I.

[92] Microsoft III, 253 F.3d at 49.

about how their complaints ... might be resolved with Microsoft,'' but whether communication ''about how their complaints might be resolved'' includes the TC's findings and recommendations remains unclear. PFJ section IV.D.4.c authorizes the TC to communicate its findings only to Microsoft and the Plaintiffs. PFJ section IV.B.9 provides that ''any report and recommendations prepared by the TC ... shall not be disclosed to any person other than Microsoft and the Plaintiffs.'' It is certainly possible to construe these provisions as prohibiting the TC from informing the complaining ISV of anything other than a range of possible outcomes. What happens if, after extensive investigation, the TC finds merit in the ISV's claim and recommends that Microsoft disclose the APIs to the ISV? If Microsoft resists the decision, whether to proceed against Microsoft rests not with the OEM victim or the TC, but with the Plaintiffs. Section IV.A.1 of the PFJ gives the Plaintiffs ''exclusive authority'' to enforce the restrictions. Any one of the Plaintiff's may now take up the ISV's complaint, but if the Plaintiff who is willing to pursue the OEM's complaint is one of the settling states, it must first consult with ''with the United States and with the plaintiff States'' enforcement committee.'' PFJ, sec. IV.A.1. After consulting with the United States and the plaintiff States'' enforcement committee, the enforcing state must then ''afford Microsoft a reasonable opportunity to cure'' the alleged violation. PFJ, sec. IV.A.4. Note that this is a second opportunity for Microsoft to cure the violation, since the first opportunity was given with the TC's decision. If the United States decides to take up the ISVs complaint, then it apparently avoids the delay of consulting with the enforcement committee, but the United States must still give Microsoft an opportunity to cure. The ''consultation'' and ''reasonable opportunity to cure'' delays are merely the tip of this iceberg. Although the TC has conducted an extensive investigation and gathered much, perhaps even all of the relevant evidence, neither an enforcing state nor the United States use the evidence accumulated by the TC and the TC members are prohibited from testifying. Section IV.D.4.d specifically provides:

No work product, findings or recomendations by the TC may be admitted in any enforcement proceeding before the Court for any purpose, and no member of the TC shall testify by deposition, in court or before any tribunal regarding any matter related to this [Proposed] Final Judgment.

In other words, the United States or the enforcing state will needlessly duplicate the discovery work of the TC and the Court will have to conduct a de novo review of the evidence without the benefit of the TC's insights and expertise.

3. The Court Will Be Denied Access to the Insights and Expertise of the Technical Committee. Despite the fact that the Technical Committee cannot render enforceable decisions, the TC will be in an excellent position to evaluate both Microsoft's overall conduct and the appropriateness of various alternative remedies for specific complaints and problems. The TC members will have expertise ''in software design and programing.'' PFJ, see. IV.B.2. The TC will have considerable access to Microsoft documents and personnel. PFJ, sec. IV.B.8.b. In addition to its own experience with complaints, the TC will apparently receive reports from Microsoft advising the TC of the nature and disposition of complaints filed with Microsoft's compliance officer. PFJ, sec. IV.D.3.c. The TC, in short, has an exceptional vantage point from which to ''monitor Microsoft's compliance with its obligations under [the Proposed] [F]inal [J]udgment.'' PFJ, sec. IV.B.8.a. Despite the exceptional value of the TC to the Court as both expert witnesses on technical issues and as eye witnesses to larger issues, including whether Microsoft ''engaged in a pattern of willful and systematic violations,'' PFJ, sec. V.B, section IV.D.4.d expressly prohibits members of the TC from testifying ''by deposition, in court or before any other tribunal.'' By denying the Court access to witnesses with critical information and expertise, the PFJ ensures that the Court will have to make rulings without regard to some of the most important evidence on the issues that will inevitability arise under the ambiguous provisions of the PFJ.

Conclusion

The acid test of the PFJ must be whether it would have protected Netscape as it tried to launch a middleware challenge to Microsoft's operating system monopoly in 1994. Sadly, even a cursory reading of the PFJ reveals that the answer is no. Since Microsoft did not have comparable middleware, there would, even under the most favorable interpretations of the API disclosure provisions in PFJ section III.D, have been nothing to prevent Microsoft from engaging in selective disclosures to Netscape. Microsoft would have been free to deny Netscape access to many, if not all, of the Communications Protocols necessary for any Internet middleware to work on Windows since the new, untested company would certainly have failed to meet Microsoft's test of a viable business under PFJ section III.J.2(c). Most importantly, nothing in the PFJ could change the economics of the OEM industry which make it unprofitable to install two web browsers and therefore, in what can only be called a mockery of judicial power, PFJ VI.U would expressly allow Microsoft to choke off Netscape's acess to the crucial OEM distribution channel by declaring Internet Explorer to be a part of the Windows Operating System Product. For the foregoing reasons, we urge the Court to reject the Proposed Final Judgment.

Respectfully submitted on behalf of the American Antitrust Institute by:——
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Albert A. Foer?? President, American Antitrust Institute————
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_____

Robert H. Lande, University of Baltimore Law School, Secretary and Senior Research Scholar of the American Antitrust Institute————————————
_____
_____
_____

Norman W. Hawker, Western Michigan University, Research Fellow of the American Antitrust Institute——
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_____
_____
_____

Oded Pincas, Research Fellow of the American Antitrust Institute

MTC–00030601

BEFORE THE UNITED STATES DEPARTMENT OF JUSTICE ANTITRUST DIVISION COMMENTS OF THE WASHINGTON LEGAL FOUNDATION SUPPORTING THE PROPOSED JUDGMENT IN UNITED STATES v. MICROSOFT

Robert A. McTamaney, Daniel J. Popeo, Carter, Ledyard & Milburn, Paul D. Kamenar,

2 Wall Street Washington Legal Foundation New York, New York 10005 2009 Massachusetts Ave., NW (212) 238–8711 Washington, DC 20036 (202) 588–0302

Date: January 25, 2002

COMMENTS OF THE WASHINGTON LEGAL FOUNDATIONIN SUPPORT OF THE PROPOSED JUDGMENT IN UNITED STATES v. MICROSOFT

Introduction and Summary. The Washington Legal Foundation (WLF), pursuant to the Tunney Act (Antitrust Procedures and Penalties Act, 15 U.S.C. § 16), hereby submits these comments in support of tee settlement reflected in the Revised Proposed Final Judgment dated November 6, 2001 in United States v. Microsoft Corp., Civil No. 98–1232.[1]

WLF is the nation's preeminent center for public interest law and policy, advocating free-enterprise principles, responsible government, property fights, a strong national security and defense, and a balanced civil and criminal justice system. WLF devotes substantial resources to these issues through litigation, by publishing through its Legal Studies Division, and by educating the public through its Civic Communications Program. With respect to antitrust law, and the Microsoft case m particular, WLF filed a brief in the United States Supreme Court supporting the petition for writ of certiorari filed by Microsoft to review the judgment of the court of appeals that left intact the district court's findings of fact and conclusions of law, despite the flagrant judicial misconduct of the trial court in giving interviews to the press expressing his bias and hostility to Microsoft and Bill Gates. Microsoft Corporation v. United States, 122 S.Ct. 350 (2001). WLF's Legal Studies Division has also published studies and other materials on antitrust issues and the Microsoft case. See Antonio F. Perez, U.S. v. Microsoft: DOJ's ''New'' Antitrust Paradigm

[1] The case is on remand from the Court of Appeals which vacated the Final Judgment, affirmed in part the market maintenance claims, ordered reconsideration of the Section 1 tying claim, reversed the browser market attempted monopolization claim, and ordered new remedy proceedings. U.S. v. Microsoft Corp., 253 F.3d 34 (DC Cir. 2001).

Resurrects Outdated Economics (WLF Legal Backgrounder, Feb. 4, 2000); Robert A. McTamaney, Microsoft On Appeal: ''Monopolies'' In A Complex Society (WLF Working Paper Feb. 2001). WLF supports the Proposed Judgment (the result of intense negotiations with the assistance of two of the nation's top mediators) as a rational resolution to a case formally initiated in May 1998, but effectively tracing its roots to an FTC investigation begun more than a decade ago, therefore now rivaling in time and burden the IBM antitrust litigation of the 1980's. The matter is overly ripe for resolution, and the States which have declined to join the settlement should in our judgment be urged by the Department and the Court to reconsider and adopt it. The Standard for Entry. The Tunney Act contemplates that the Court will evaluate the relief set forth in the Proposed Judgment and enter the judgment if the settlement is within the reaches of the public interest and within the government's rather broad discretion, considering (1) the competitive impact and adequacy of the judgment and (2) the impact on the public generally, and on affected individuals, and the benefit, if any, of an eventual trial determination. The Court reviews the Proposed Judgment in light of the Complaint's allegations, and withholds approval only if there is ambiguity, art inadequate enforcement mechanism, if third parties would be positively injured, or if the decree somehow makes a 'mockery'' of judicial power.[2] The belief that other remedies might be preferable does not warrant rejection of the Proposed Judgment; the Tunney Act does not authorize the imposition of different terms or permit de novo review of the settlement.[3]

The Complaint Versus the Proposed Judgment. Under the Tunney Act, whether the public interest is served by entry of the judgment is first tested by comparing the allegations of the Complaint with the Proposed Judgment. As will be demonstrated, the comparison is more than a favorable one.

The Complaint is dated May 18, 1998. There are 141 numbered paragraphs in the Complaint, of which, read fairly, 128 paragraphs relate to Microsoft's browser technology, including its Interact Explorer (IE) in Windows 98, and the promotion and distribution of that technology to Windows 98 users. The principal responsible author of the Complaint described the case as an extremely limited, discrete, ''surgical strike'' directed solely against the Company's integration of browser technology with its operating system.[4]

On June 23, 1998, the U.S. Court of Appeals for the District of Columbia Circuit held that the IE Browser was not a product separate from Windows for purposes of the 1995 consent decree that had resolved the Department's 1994 case, and the related European Commission (EC) case, against Microsoft.[5] While the Court reserved its position on any future market power allegations, most observers believed that the May 18 Complaint had been rendered moot, since any arguably illicit tie requires, by definition, two products.

The trial judge disagreed, and permitted the case to proceed, and premised his eventual breakup order, in effect, on the sparse references in the Complaint to the alleged market dominance of Windows in a narrowly-defined market of Intel-powered personal PCs.[6] In its reversal and remand of the trial judge's conclusions and remedies, the Court of Appeals specifically reversed the conclusion that Microsoft attempted to monopolize a browser market, and remanded the issue of an illegal tie for reconsideration under the Rule of Reason.[7] In recognition of the rigors of this test, and in light of the demonstrated insistence of consumers on a browser-operating system combination, the Department determined not to pursue this claim.

To the extent therefore that the Tunney Act dictates measuring the judgment against the Complaint,[8] the Proposed Judgment is a remarkable result. The judgment exacts dramatic conduct remedies and imposes massive costs on a defendant, when the essential allegations of the Complaint were first deflated by the Court of Appeals, then carefully either selected or avoided by the Department and the State plaintiffs, then momentarily revived by the trial judge, only to be excised again by the Court of Appeals, which set a standard for resolution that the Department itself has decided unilaterally could never be met.

Certainty of the Proposed Judgment. The Tunney Act as interpreted next suggests that the Judgment should be examined for ambiguities. Ambiguity is measured by the trial judge interested in the reasonably manageable enforcement of the judgment, rather than by competitors who might parse every comma to suggest ambiguities where none fairly exist. And of course ambiguity is anathema to the defendant, since it is the party most at risk from an overly broad interpretation urged by its competitors or others. In that respect, the Proposed Judgment is a strikingly plain-worded document, difficult (for anyone versed or educated in the field) to misinterpret mad even more difficult, it would seem, to avoid. The Proposed Judgment is accompanied by a thorough and convincing Competitive Impact Statement that explains the theory underlying each section of the Proposed Judgment, how it addresses and cures the conduct found wanting by the Court of Appeals, and how it would operate in practice. The Competitive Impact Statement itself would surely assist in, if not dictate, the resolution of may arguable ambiguity.

The Proposed Judgment broadly prohibits any retaliation against OEMs that distribute competitive middleware or operating systems (Section III.A), requires uniform licensing terms (which cannot include exclusive or percentage promotion of Microsoft middleware) to the significant universe of OEMs (Section III.B), and leaves most desktop decisions to the OEMs'' discretion. (Section III.C). This all seems very plain. The Proposed Judgment permits OEMs to install icons or shortcuts to access products that provide particular types of functionality, even if they compete with Microsoft's own installed versions (Section III.C.1), so long as they do not impair the user interface. Basically, the Original Equipment Manufacturers (OEM) can add an icon to access, for example, a competing photo program, provided that shortcut works without unseating Windows itself. Surely there is little room for ambiguity here.

Under the Proposed Judgment, Microsoft can override a competing product only if that product ''fails to implement a reasonable technical requirement.'' Basically, Microsoft can provide the consumer with its own product if the competitor's doesn't work, and even then the failing product's proponent is given the right to remedy the problem. Competitors have objected to the use of the word 'reasonable,'' which is obviously a standard the Courts have dealt with successfully since the outset of the common law. There is no ambiguity apparent here. Next, the Judgment requires Microsoft to disclose the Application Programming Interfaces (API) for new products to makers of interoperable products, whether they make hardware or software or are Internet carriers, unless the disclosure would compromise security or anti-privacy safeguards (Section III.D). No ambiguity exists here, and the burden would certainly be on Microsoft to demonstrate that the API disclosure would impair security or privacy, which should in any event be a primary goal of the competitor as well.[9] And the API disclosure must be made timely and in good faith, again well-recognized standards in the courthouse. Microsoft also agrees not to automatically alter competitors'' icons or shortcuts placed on the desktop by OEMs (Section III.H.3). It can offer its own alternatives to consumers, but they can accept or decline as they see fit,

[2] E.g., U,S. v. Microsoft Corp., 56 F.3d 1448 (DC Cir, 1995)

[3] ''The court should therefore reject the [judgment] only if 'it has exceptional confidence that adverse antitrust consequences will result...''' U.S. v. Enova Corp., 107 F. Supp. 10, 27 (D.DC 2000); accord, U.S. v. Central Parking Corp., 2000 U.S. Dist, Lexis 6226 (D.DC 2000). Applying these legal standards, the Proposed Judgment should be entered.

[4] In its 1994 maintenance case against Microsoft, the Department did not contend that the company's obtaining of its market position was illegal, but rather that it was the fortuitous result of IBM's choice of Microsoft's MSDOS for IBM's PCs. In that ease the government's economic witness said that only artificial barriers such as restrictive license provisions should be prohibited since the company's market position was entirely natural and not the result of anticompetitive behavior. Id.

[5] U.S. v. Microsoft Corp., 147 F. 3d 935 (DC Cir. 1998),

[6] Compare U.S. v. Microsoft, supra note 2 (''The government... urges us to flatly reject the district judge's efforts to reach beyond the complaint to evaluate claims that the government did not make ...'').

[7] The Court of Appeals dismissed 4 of the 5 principal claims against Microsoft, and alas dismissed 23 of the 35 acts found wrong by the trial judge.

[8] E.g., U.S. v. Alcoa, 152 F.Supp. 2d 37, 44 (D.DC 2001) (''[T]he court is confined to the factors alleged in the government's complaint.'').

[9] This has been a goal for Microsoft, which has just announced a company-wide suspension of development while security concerns are assessed and resolved. The New York Times, January 17, 2002.

and many a court has said in other contexts that there's no harm in asking.

Under the judgment, OEMs can even include a competing operating system as easy to access as Windows, arid even give it preference in the boot sequence. Again, this seems to be as clear as it reads.

In short, the Proposed Judgment is plainly worded and devoid of apparent ambiguity. One competitor has suggested that Microsoft improperly seized on art ambiguity to avoid the 1995 Consent Decree to the extent that the decree prohibited the integration of the IE browser with Windows. This is an intriguing fallacy, but a fallacy nonetheless. Microsoft certainty did seek to integrate IE with Windows, but this was consistent in its judgment with the 1995 Decree; and the Court of Appeals agreed that it was entirely legal for Microsoft to do so, under the plain wording of that document. Impact Upon Third Parties. The Proposed Judgment goes far beyond the prohibition of the handful of specific and isolated instances of conduct found wanting by the Court of Appeals, to generic relief which presumably will benefit all those to which it is directed and all others within its ambit. Will consumers be satisfied? Presumably they will vote with their pocketbooks. Will competitors be satisfied? Presumably never, but the correct test is whether the proposed decree would positively injure third parties, not whether some competitor claims that it could be better treated.[10]

For example, California and the other States dissenting thus far from the settlement have proposed instead that the Company completely redesign Windows (and then presumably maintain, update, and support it) to offer a version stripped even of the browser, then force open-source licensing of the browser, require Java (a competitive operating system of sons), to be included in Windows, and require licensing of the Office Suite to third parties like Apple (although Apple now already has it). A new 60-day version of Hart Scott Rodino Act would also be imposed on Microsoft acquisitions, another and entirely new commercial burden on a company never even accused of growth through acquisition. Conduct specifically upheld by the Court of Appeals would be specifically baited. We submit that this is a wish list for competitors, not consumers, and has nothing to do with fostering competition as anticipated by the U.S. antitrust laws.[11] To the extent that alternative remedy proposals were put forward by all parties, including the competitors intent on imposing their own punitive schadenfreude on Microsoft, they were considered by the Department in formulating the Proposed Judgment, including specifically the very remedies now proposed again by the dissenting States.[12] ''The United States has ultimately concluded that the requirements and prohibitions set forth in the [Proposed Judgment] provided the most effective and certain relief in the most timely manner.'' [13]

The Enforcement Mechanism. The final substantive prong of the Tunney test is whether the Proposed Judgment is readily enforceable. In this respect, the Proposed Judgment contemplates contempt sanctions and other relief if violated. Microsoft has agreed to appoint an Internal Compliance Officer [14] to supervise an internal compliance program, and has also agreed to the extraordinary remedy of an onsite, court-approved Technical Committee, experienced in software design and programming, with virtually unfettered access, for at least five years, to the Company's design and business planning and implementation, for the purpose of ongoing and constant oversight regarding the Company's compliance.[15] In this respect, as well as in the breadth of the conduct remedies which will be supervised, the Proposed Judgment vastly exceeds the typical constraints imposed upon a settling defendant. Courts are most reluctant to impose sanctions which require the ongoing observations of a defendant's commercial activities. Here, to the contrary, the oversight established by the onsite observers will give the Court, and interested outsiders as well, more assurance than could reasonably be ever expected regarding the Company's ongoing good faith adherence.

Adequacy of the Remedy. First, the Proposed Judgment should be considered in light of the remedies one might expect to have been imposed after further evidentiary hearings, briefs, arguments, conclusions, and the inevitable appeals. In this respect, one searches in vain for precedents as broad and inhibiting as the Proposed Judgment in a case where all claims except isolated, specific findings of market position maintenance have been dismissed or unilaterally discarded by the principal prosecutors. We submit that judicial remedies might well be expected to be far more 'surgical'' and conduct-specific than the broad and thoroughgoing conduct requirements imposed by the Proposed Judgment, not the least of which is the ongoing oversight to assure good faith compliance.

Certainly office Remedy: Second, there is no assurance that an eventual judicial remedy would survive appeal, since the case is presently proceeding on remand on the basis of findings of fact and, in part, on conclusions of law [16] expressed by a trial judge with deepseated, privately expressed, actively concealed, personal bias against the company and its president reflected by the drastic remedies ordered after the briefest of further proceedings.[17] The Supreme Court has deferred consideration of this issue, and so observers in the meantime must accept the illogic of an appellate court finding that the District Judge had repeatedly violated law and the judicial canons, but nonetheless feeling constrained to accord his findings of tact and law the same presumptions of correctness usually reserved for judges with no appearance of impartiality.[18]

If the case proceeds to judicial remedies, with the inevitable appeals, there is more than a fair likelihood that the Supreme Court would refuse to accept any of the former trial judge's findings under the circumstances; rather, the Court would likely remand the case to begin again before an unbiased jurist. The Proposed Judgment obviates that possibility to some extent, and would avoid it completely if it were joined by the thus far dissenting States, and thereby achieve a final resolution.

The Remedy and Innovation. In 1998, when the then Assistant Attorney General made his often-quoted 'surgical strike'' comments, his purpose was to allay concern in the computer industry that the Government was opening a broadside attack on Microsoft, which is, sadly, exactly what the ease then became. His purpose was to assure innovators that they could continue to innovate without governmental interruption or interference, provided that they stayed within the principal antitrust boundaries.

Microsoft has been reported publicly as saying that innovation, at least its own, will not be impeded by the Proposed Judgment. We submit that is a critically important issue for the Court in considering the public interest overall.

For example, Windows XP, Microsoft's latest rendition of the operating system, presents users, according to its reviewers, with improvements in reliability, performance, and system security, and also facilitates multi-use end user customization, workplace enhancements, and marked file improvements. It continues to integrate IE, and adds instant messaging (a favorite feature of AOL), digital photography and movie making, and other media features to the new design. Industry reaction has been fascinating. Some competitors have reportedly been encouraging the Department and certain of the States to resurrect the original IE integration ease, arguing that the Company should make the various components of its integrated design (some of which have been part of Windows for many

[10] U.S. v. Microsoft, 56 P.3d 1448, 1461 n.9.

[11] Netscape, the competitor whose objections set off the 1998 case, has objected that it never would haw corn, into being if the Proposed Judgment had been in place when Netscape's own monopoly was created in 1994. Dow Jones Newswires Dec. 12, 2001. If this is to be believed, then presumably Netscape's multi-billion dollar combination with AOL also would have been avoided.

[12] Competitive Impact Statement, p. 35

[13] Id. at 36.

[14] Microsoft on December 13, 2001 announced the appointment of its internal compliance officer as contemplated by the Proposed Judgment. He is a former enforcement lawyer with the Federal Trade Commission. The Public Interest. Overall, the Tunney Act contemplates an affirmative finding that the settlement is in the public interest, There are several other factors relevant to this consideration, beyond the specific traditional tenets of approval discussed above.

[15] By Stipulation, Microsoft began complying with the Proposed Judgment effective December 16, 2001.

[16] U.S. v. Microsoft Corp., 84 F. Supp. 2d 9 (D.DC 1999); U.S. v. Microsoft Corp., 87 F. Supp. 2d 30 (D.DC 2000).

[17] U.S. v. Microsoft Corp., 97 F. Supp. 2d 59 (D.DC 2000).

[18] According to the Court of Appeals, the District Judge's violations of the Code of Conduct for United States Judges and Section 455(a) of the Judicial Code by speaking to reporters about the case while it was pending were ''deliberate, repeated, egregious, and flagrant.'' 253 F.3d 34, 107 (DC Cir. 2001). The judge's insistence to the reporters to embargo his comments until the trial was over implied full knowledge of the improprieties. This arrangement made it impossible for Microsoft to have objected sooner, an objection that the appellate court said would have succeeded by the removal of the trial judge from the case.

years) available separately. Others, notably Apple, have instead decided to compete where competition belongs—in the marketplace instead of the courthouse. Apple is scheduled to begin shipping the elegant and affordable ''iMac,'' which will incorporate ''iDVD,'' a DVD recording software, ''iPhoto,'' a photo organizer and processor, ''iTunes,'' a CD and internet music player and converter, and ''iMovie,'' which enables easy home-movie production, and other features, all on a 15-inch fiat panel display connected to a computer half the size of a basketball at a very competitive price.

Would Apple have created this incredible device had Microsoft not raised the bar with Windows XP? Perhaps, but far less likely. We submit therefore that an important component of the Court's Tunney Act determination is to ensure that any proposed judgment does not stifle the very innovation the antitrust laws were enacted to promote. Otherwise, such a judgment could surely serve the private interests of competitors rather than the public interest of competition and consumers, and thereby make a mockery of the very process which the Tunney legislation cautions against and condemns.

Conclusion. The United States has said it best: ''[T]he [Proposed Judgment], once implemented by the Court, will achieve the purposes of stopping Microsoft's unlawful conduct, preventing its reoccurrence, and restoring competitive conditions in the personal computer operating system market, while avoiding the time, expense and uncertainty of a litigated remedy.'' [19] We support the Proposed Judgment. The matter is long overdue for resolution, and the States that have declined to join the settlement should, in our judgment, be urged by the Department and the Court to reconsider and adopt it.

Respectfully submitted,

Robert A. McTamaney, Daniel J. Popeo,
Carter, Ledyard & Milburn, Paul D. Kamenar
2 Wall Street Washington Legal
Foundation
New York, New York 10005 2009
Massachusetts Ave., NW
(212) 238–8711 Washington, DC 20036
(202) 588–0302

Date: January 25, 2002

MTC–00030602

Fax Cover Sheet
To: Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
From: Rebecca Henderson
5 Kitson Park Drive
Lexington MA 02421
Re: Tunney Act Submission
Comments on the proposed United States v. Microsoft Settlement
Date: January 26, 2002
Tunney Act Submission United States v. Microsoft
Rebecca Henderson,
Eastman Kodak LFM Professor of Management
MIT Sloan School
January 2002

Introduction

My name is Rebecca Henderson. I am the Eastman Kodak LFM Professor of Management at the MIT Sloan School of Management, where I have been teaching since 1988. I am also a Research Associate at the National Bureau of Economic Research. My C.V. is attached.[1]

I write to express my deep concern with the terms of the proposed settlement between the United States and the Microsoft Corporation. In my view it does almost nothing to remedy the harm caused by Microsoft's prior illegal conduct, and the provisions that it includes in an attempt to forestall future anticompetitive conduct fall short on a number of important dimensions, Moreover it creates incentives for Microsoft to engage in behavior that has the potential to create significant harm for consumers.

1. A failure to remedy the harm caused by prior illegal conduct. As the Court found and the Appeals Court maintained, Microsoft engaged in a systematic pattern of illegal conduct in an attempt to undermine Netscape's position in the browser market. Microsoft came to believe that the Netscape Browser had the potential to develop into ''cross-platform middleware,'' since it potentially enabled the development of full-featured PC applications on a range of platforms. Microsoft viewed this possibility as a potent threat to its monopoly and moved against Netscape with devastating effect. Microsoft's predatory conduct crushed the possibility that Netscape might emerge as a viable alternative platform for full-featured applications development.

Microsoft's success in preventing the emergence of browser-based alternative platforms that would threaten the applications barrier to entry, along with its current overwhelming and increasing share of browser usage, puts the firm in an extraordinarily strong position to prevent the emergence of other threats to its desktop monopoly. The proposed settlement does almost nothing to attempt to redress this harm.

A world in which Netscape had succeeded in building a dominant share of the browser market would have been one that was significantly more conducive to competition (and significantly more threatening to the Microsoft monopoly). A successful independent browser would not only have been potentially important cross platform middleware in its own right: it would also have been of enormous assistance to the further development of additional independent middleware. Both would have greatly increased the possibility that Microsoft's desktop monopoly would have faced significant competition. Had Netscape succeeded the world would probably be different in three important respects. First, the Netscape browser might have become an ideal platform for web-centric and network-centric applications cross-platform applications. Second, if there had been a widely-distributed browser outside Microsoft's control, new middleware initiatives such as Java, that involve software running on the client would certainly have been able to achieve widespread distribution without Microsoft's sufferance. Third, the existence of such a browser would have given Microsoft much less control over the evolution of important Internet interfaces, increasing the possibility that new types of middleware running on the server might emerge to facilitate challenges to the Windows monopoly.

(i) The Netscape Browser might have become a platform for applications development An independent browser might have become an ideal platform for web-centric and network-centric cross-platform applications. An independent browser enables developers to write cross-platform applications without additional porting costs. As the Court found, ''for at least the next few years, the overwhelming majority of consumers accessing server-based applications will do so using an Intel-compatible PC system and a browser,'' (FOF 27) and a ''browser product is particularly well positioned to serve as a platform for network-centric applications that run in association with Web pages.'' (FOF 69). Or as Microsoft's Ballmer expressed it: ''the browser is as much a platform for what people will want to do in the Internet over the next several years as DOS was the platform for what people would want to do on personal computers.'' (RX 21, at 4). Microsoft's illegal actions ensured that Netscape did not have the opportunity to develop into this kind of cross platform middleware, and the proposed settlement does nothing to reverse this.

(ii) A successful Netscape Browser would have developed into a distribution vehicle for additional non Microsoft cross platform middleware As both the Court and the Appeals Court found, one of the goals of Microsoft's illegal conduct was the suppression of platform independent Java. An independent, widely distributed Netscape Browser would have become an ideal vehicle for the distribution of this kind of platform independent middleware. Microsoft, in contrast, has very little incentive to distribute client based middleware that might facilitate the development of cross platform applications. Netscape's defeat in the browser war means not only that the browser itself is not available as a platform for applications development but also that the Java virtual machine, and other middleware technologies like it, are much less likely to be widely available on the PC. The proposed settlement attempts to make the distribution of alternative middleware possible, but its provisions are incomplete and are likely to be ineffective.

(iii) Microsoft's control of the browser gives it enormous influence over the future

[19] Competitive Impact Statement, p. 34.

[1] In 1999 1 was retained by the Department of Justice as an expert witness in connection with the remedies phase of the Microsoft trial. The declaration that I filed in the spring of 2000 as a result of this work is available on the Department of Justice's web site. While I do not believe that anything in this document is inconsistent with the opinions that I would have expressed in court had I been called as a witness, the opinions expressed here are entirely my own. Nothing in this document draws in any way on confidential information to which I was given access in the course of my work with the Justice Department.

development of the Internet, allowing it to ensure that server based technologies that might lower the applications barrier to entry and facilitate threats to the OS monopoly are unlikely to emerge. Owning the dominant browser gives Microsoft great influence over the evolution of the Internet, and in particular over the evolution of important Internet interfaces. As Paul Maritz recognized, ''By controlling the client, you also control the servers.'' GX 498, at MS980168614. This set of interfaces goes beyond the browser APIs to which developers can directly write applications, to include the set of interfaces that constitute the communications protocols between the browser and the network. For information to be received and viewed in Internet Explorer, the developer has to follow these interfaces, and so has to conform to Microsoft standards. The importance of browser interfaces is widely acknowledged. Ron Rasmussen, an executive with operating system supplier Santa Cruz Operation, testified: ''if there is one person or one company who controlled the browser and its look and feel and how it presented applications, it could severely enhance or detract from the application functionality of ... the server.'' Rasmussen Dep., 12/15/98am, at 67:14—68:3. Similarly Brian Croll of Sun testified that ''having a degree of control over the browser'' is ''critical'' because the browser is ''linked very closely to whether a server is useful or not.'' Because the ''two sides need to talk to each other,'' Sun cannot sell servers if the browser ''can't talk to the server.'' Croll Dep., 12/15/98pm, at 60:22—61:16. Control over the browser thus gives Microsoft significant control over the software running on the server, and this in turn makes it significantly less likely that software running on servers will develop into potentially powerful ''cross platform middleware'', facilitating competition to the Microsoft Windows OS. Just as a platform independent browser might have become an attractive platform for cross platform applications development, so a server operating system that could be accessed through Microsoft independent standards by an independent browser might have become an attractive platform for applications development, greatly increasing the probability that serious competition to the Windows OS might emerge.

Microsoft's control of the browser greatly reduces the probability that this will happen. Developers and content providers will generally choose to write to the interfaces that will enable them to reach the broadest possible audience (FOF 361). This led Microsoft, when it had a low market share in browsers, to pledge to write Internet Explorer to conform to some of the public interfaces promulgated by the World Wide Web Consortium (W3C). RX 15 (Microsoft Press Release, 7/8/97). In fact, Microsoft itself had difficulty when its market share was only 30% in convincing its own Office developers to take advantage of IE 4 features. GX 514, at MS7 0075706.

Given IE's dominant position today, web developers have an incentive to write to IE's interfaces first and foremost, and now that it has a dominant share, Microsoft has stated that it may not always choose to support public interfaces. RX 16 (MSDN Online 2/7/00). To the extent that Microsoft is able to impose Microsoft-specific interfaces on the Internet, the capabilities of users of non-Microsoft browsers to view content may be degraded or eliminated. Cf. FOF 322 (Microsoft contracts requiring that content providers offer content viewable only with IE or ''with acceptable degradation when used with other browsers''), and the ability of server based software to develop into cross platform middleware will be severely curtailed. The ability to influence the development of web-based applications is a highly valuable tool for future anticompetitive campaigns should Microsoft choose to mount them. As web-based applications grow in importance, so does Microsoft's ability to steer them towards being IE-centric, and, given its control over the browser-to-operating system interface, Windows-centric as well. The proposed settlement does nothing to address this issue.

(iv) Conclusion

In summary, the proposed settlement does little or nothing to redress the harm caused by Microsoft's destruction of the browser threat. Microsoft's victory leaves it in control of all browser interfaces, without the need to accommodate an independent browser that might have served as an important platform for cross platform applications, and without any real threat that a Java virtual machine (or other comparable cross platform middleware) might be widely distributed.

Prevention of Future Harm

The proposed settlement instead attempts to ensure that Microsoft will not act against future middleware threats as it acted against Netscape. Unfortunately its provisions in this respect are insufficient to prevent the harm they seek to guard against.

(i) The definition of Middleware

Many of the most important provisions of the proposed settlement refer to actions that Microsoft must take in regard to ''Middleware'' products. For example, in section III D, Microsoft is required to ''disclose to ISVs, IHVs etc... the APIs and related Documentation that are used by Microsoft Middleware to interoperate with a Windows Operating System Product.'' Similarly section III H requires that Microsoft allow end users and OEMs to make a number of choices with respect to the nature of the Middleware that is installed and invoked on the end user's PC. In both cases the definitions of ''Middleware'' are overly restrictive, and omit both current software that might well be considered ''middleware'' in the terms of the original case and new software that might emerge to take on the characteristics of middleware. In the case of section III D, Middleware is defined in section VI, point K as:

1. the functionality provided by Internet Explorer, Microsoft's Java Virtual Machine, Windows Media Player, Windows Messenger, Outlook Express and their successors in a Windows Operating System Product and

2. for any functionality that is first licensed, distributed or sold by Microsoft after the entry of this Final Judgment and that is part of any Windows Operating System Product

a. Internet browser, email client software, networked audio/video client software, instant messaging software or

b. functionality provided by Microsoft software that—-

i. is, or in the year preceding the commercial release of any new Windows Operating System Product was distributed separately by Microsoft (or by an entity acquired by Microsoft) from a Windows Operating System Product;

ii. is similar to the functionality provided by a Non-Microsoft Middleware Product; and

iii. is Trademarked

There are two problems with this definition. The first is that it omits a number of types of software that might reasonably be considered potentially platform independent middleware. For example it omits Handheld Computing Device synchronization software. Handheld computers are probably currently complements to the PC: their use encourages PC use and vice versa. But if the power and speed of these devices increases sufficiently, and if a significant number of important applications become available over the web via server hosting and other kinds of services, one can imagine a world in which the existence of Handheld Computing Devices might greatly facilitate the development of substitutes for Windows. Thus software that enables a PC to synchronize with a Handheld Computing Device is arguably ''Middleware'' in the sense of the case. Other types of software that might plausibly develop into ''Middleware'' in the sense of the case but that are omitted from the settlements definition include voice recognition software, and directory and directory service support software.

The second problem with this definition is that it is inherently static. In focusing on a subset of current Middleware products it omits, by definition, any future middleware products that might emerge. The path of technological progress in an industry as dynamic as the computer industry is impossible to predict. In focusing on current Middleware products rather than on the more general question of which classes are software are likely to facilitate competition to the Windows monopoly, the settlement makes it unlikely that entirely new Middleware—the kinds of products that are perhaps most likely to facilitate challenges to Windows—will be covered by any of the provisions of the settlement.

This static focus is particularly evident in the definition of ''Middleware'' in operation in the case of Section III H. Here ''Middleware'' is defined by the statement: Microsoft's obligations under this Section 111.H as to any new Windows Operating System Product shall be determined based on the Microsoft Middleware Products which exist seven months prior to the last beta test version Notice that this means that these obligations apply only to those Middleware Products for which Microsoft has produced a product of its own. They would not cover, for example, the first editions of the Netscape browser! More generally, if new forms of Middleware emerge, the settlement gives Microsoft strong incentives to bind them to the operating system immediately. If Microsoft never issue the Middleware as a

separate product, by the terms of this clause it is never ''Middleware'', and Microsoft never has to meet its obligations under Section III H. (ii) Giving Microsoft control over the pace and shape of technological development The agreement as currently written is also flawed in that much of the assistance it purports to offer to potentially important competitive Middleware is not only very slow, but is also technically limited in important ways.

The provisions of Section III.D, for example, require Microsoft to release key information about the ways in which Middleware can interoperate with the Windows Operating system ''no later than the last major beta release of that Microsoft Middleware.'' The timing of a beta release varies by product, but in most cases the availability of a beta release signals that the hard work of new product development has been done, and the product is more or less ready for sale. Delaying the release of key technical information to third party suppliers until the time of a beta release puts third party suppliers under a very significant handicap, since it forces them to enter the market significantly after Microsoft.

In the case of Netscape, for example, denying them access to key interface information until after the beta release of Microsoft's first browser product would have forced them to delay their entry to the marketplace very significantly and would have deprived them of the early entry, ''first mover'' advantage that is often the one of the most advantages that third party suppliers can offer consumers. Competition thrives where new, innovative firms can enter a market quickly with dramatically new offerings. This provision would serve to slow competition to the speed at which Microsoft wishes to compete.

The provisions of Section III.D. are also flawed in that they restrict the release of critical technical information to ''the APIs and related Documentation that are used by Microsoft Middleware to interoperate with a Windows Operating System Product.'' This effectively forces potentially competitive Middleware to use the same interfaces as Microsoft's middleware. Clearly some information is better than none. But to the degree that the purpose of competition is precisely to encourage the generation of alternatives that do not mirror Microsoft's offerings, forcing competitive software to use the same kinds of interfaces as Microsoft's own offerings leaves tremendous control over the direction of technological development in Microsoft's hands. Those competitive offerings that wish to interoperate with the operating system in different ways will get no help from this provision.

(iii) Who counts?

Section J.2. of the proposed settlement allows Microsoft to condition the license of ''any API, Documentation or Communication Protocol related to anti-piracy systems, antivirus technologies, license enforcement mechanisms, authentication/authorization security...'' to persons or entities that: ''meets reasonable, objective standards established by Microsoft (my emphasis) for certifying the authenticity and viability of its business.'' I read this provision as suggesting that Microsoft can refuse to release key information—information that is increasingly critical to the development of any third party Middleware—to any firm that Microsoft deems ''inauthentic'' or ''not viable.'' Would Microsoft have deemed Netscape viable, in its early days? Will the company believe that firms whose business model is based on the exploitation of Linux are viable? This provision allows Microsoft to deny critical information to precisely those kinds of firms that are most likely to provide significant competition in the marketplace—those firms that may be too small or too new or too unconventional to be ''viable.''

(iv) Forced Licensing

Section I. 5 provides that: ''an ISV, IHV, IAP, ICP or OEM may be required to grant to Microsoft on reasonable and nondiscriminatory terms a license to any intellectual property rights it may have relating to the exercise of their options or alternatives provided by this Final Judgment; the scope of such license shah be no broader than is necessary to insure that Microsoft can provide such options or alternatives.''

I find this wording ambiguous and potentially troubling. First, I wonder why any third party should be required to license anything to Microsoft. Microsoft's obligations extend to the provision of technical information about interfaces and to offering to OEMs and to end consumers the ability to remove Microsoft supplied Middleware. It is not at all clear to me why Microsoft should need to know anything about third party software in order to meet these obligations. Second, I am troubled by a possible interpretation of this language. One interpretation is that it forces third parties to license their software to Microsoft in order that Microsoft should be able to offer the same options and alternatives as the third party supplier. Would this language not have forced Netscape to license their browser to Microsoft so that Microsoft could provide the Netscape browser as an alternative? If an OEM chooses to install Real Player as the default media player, does this language imply that Microsoft has the right to license Real Player so that Microsoft also has the option to offer Real Player as the default media player? Surely this kind of forced licensing can only suppress competition?

(v) Second guessing consumer choice:

Although the current agreement purports to make it much easier for OEMs to install alternative Middleware and thus to offer end users a real choice of systems, the agreement severely restricts this choice in two important respects. In the first place, Section C.3. allows for the installation of third party Middleware provided that ''any such Non-Microsoft Middleware displays on the desktop no user interface or a user interface of a similar size and shape to the user interface displayed by the corresponding Microsoft Middleware Product.''

Just as section III.D. restricts the design of competitive Middleware by limiting competitive knowledge of key interfaces to knowledge of only those technical interfaces used by equivalent Microsoft authored Middleware, so this provision restricts the presentation of potentially competitive Middleware to a ''look and feel'' roughly similar to Microsoft Middleware. How can this restriction increase consumer welfare? If OEMs believe that end users would welcome Middleware that uses a very different kind of user interface for their alternative Middleware, should they not be allowed to install it?

In the second place, Section H.3. permits Microsoft to offer end users the choice to install Microsoft middleware as default software 14 days after the first boot of their system. While this provision may seem innocuous, its real effect will be to remove choice from the OEM. As the trial established, OEMs cannot afford the costs of widespread consumer confusion. Imagine a world in which consumers face every day—or every hour (!)—a screen saying something like ''are you sure you want to use Product ABC? Why not use Microsoft XXX, a product designed to work seamlessly with the operating system?'' Many consumers may be effectively forced into switching products in the face of what may well be perceived as an implicit threat. Real competition cannot thrive under such circumstances. OEMs should have the power to configure systems in the ways they wish. Competition in the market place can decide if these configurations create value for end users.

Microsoft incentives from this agreement.

Lastly, the agreement is flawed in that it creates incentives for Microsoft to take actions that may significantly reduce consumer choice. Framed as it is, the current agreement creates very strong incentives for Microsoft never to release another piece of separate ''Middleware''! Releasing Middleware will incur obligations—Microsoft will need to release technical information and to permit OEMs to remove the Microsoft authored product. These obligations can be easily evaded by immediately bolting new applications to the operating system. This will create two kinds of harm. In the first place, it will lead inevitably to increasingly ''bloated'' code, Consumers that might have preferred to purchase a ''slimmer'' Operating System will be unable to do so. Indeed in the worst case Microsoft might actively invest in the generation of ''spaghetti code''—systems in which the code necessary to provide the new functionality and the code necessary to run the operating system are deliberately commingled. Such commingling may significantly lower the overall performance of the operating system. In the second place, such immediate ''bolting'' will defeat the intention oft he settlement: potential third party suppliers of such Middleware will not have access to the key technical information that would enable them to seamlessly interoperate with the operating systems, nor will OEMs have the opportunity to install them in place of the Microsoft Middleware. It is possible, of course, that the fully integrated Microsoft solution that this agreement gives Microsoft strong incentives to provide may be a technologically superior solution. But this solution will be imposed on consumers without the process of competition that has historically proven to be such a source of consumer benefit.

Conclusion

The proposed settlement falls short in two critically important respects. Not only does it

do almost nothing to redress the harm caused by Microsoft's illegal conduct with respect to Netscape, leaving Microsoft with all the fruits of its illegal victory, but the provisions that it includes in an attempt to prevent a repetition of Microsoft's conduct in the browser case are limited and incomplete.

Suppose a Middleware threat with the potential impact of the Netscape browser were to emerge next year, or two years from now. The terms of the proposed settlement do little to ensure that Microsoft could not engage in an anticompetitive campaign to successfully crush it. Unless Microsoft chooses to recognize it as ''Middleware'' by producing a competing product, as opposed to simply copying the functionality and immediately bolting it to the operating system, it would not be covered by the terms of this settlement. Even if Microsoft were to choose to recognize it (and they would have strong incentives to avoid so doing), the current settlement would allow Microsoft to decide that the firm producing it did not have a ''viable'' business: to delay releasing critical technical information until after the release of its own beta product; to insist that its user interface be of ''similar size and shape'' to Microsoft's own product and, 14 days after first boot up, to bombard consumers with the option to switch to the Microsoft alternative.

Microsoft's victory in the browser war leaves it in a significantly stronger position to protect its operating systems monopoly and to block threats from any competition that might emerge to challenge it. The settlement does very little to remedy this situation and is instead rife with the potential for significant consumer harm.

Curriculum Vitae

Name: Rebecca Henderon Department: BPS, Sloan School

Birth Date: Oct 29, 1960 Place of Birth: London

Citizenship: US Citizen

Education

Harvard University Ph.D. 1983–1988

Doctorate in Business Economics. Thesis: The Failure of Established Firms in the Face of Technological Change: A Study of Photolithographic Alignment Equipment.

Massachusetts Institute of Technology S.B. 1978–1981

Mechanical Engineering.

Academic Employment:

Eastman Kodak LFM Professor, MIT Sloan School, 1999-

Tenured Associate Professor, MIT Sloan School, 1995–1999

Research Associate, National Bureau of Economic Research, 1995-

Thomas Henry Carroll Foundation Visiting Professor of Management, Harvard Business School. 1996–1997

Robert Noyce Associate Professor, MIT Sloan School, 1993–1995

Research Fellow, National Bureau of Economic Research, 1990–1995

Visiting Assistant Professor, Stanford Graduate School of Business, 1992–1993.

Assistant Professor, MIT Sloan School, 1988–1992

Non Academic Employment:

McKinsey and Company Summer associate. Summer 1986

Harvard University Research assistant, K Clark. Summer 1985

General Electric Analyst, strategic planning. Summer 1984

McKinsey and Company Analyst. 1981–1983

Honors and Awards:

ASQ Awa??d for Scholarly Contribution 1996

Teacher of the Year 2001

Runner-up, Teacher of the Year 1990, 1991, 1992, 1993, 1995, 1996, 1998, 1999

Dively Award for best thesis proposal, H.B.S 1988

Alumane Award, (outstanding female graduate) MIT. 1981

Elected to Phi Beta Kappa 1981

Boards and Advisory Panels

Boards

The Whitehead Institute for Biomedical Research, Cambridge, MA. 1999—

Linbeck Construction Corporation, Houston Texas. 2000—

The Ember Corporation, Cambridge MA 2001—

Advisory Panels

The Department of Social and Decision Sciences, Carneige Mellon 1995—

ThePlatform, Inc 2000-

Anti-Trust Experience

Retained by the Department of Justice as an expert witness in connection with the remedies phase of the Microsoft trial. Summer 1999—Spring 2000. Declaration available on line at: www.usdoj.gov/atr/cases/ms—remediespapers.htm

Editorial Responsibilities

Department Head, Strategy, Management Science 1995—2000

Member, Editorial Board:

Administrative Science Quarterly 1994—

The Strategic Management Journal 1994—

Economics of Innovation and New Technology 1995—

Research Policy 1998—

Management Science 2000—

Publications

Journal Articles (Refereed).

''Putting Patents in Context: Exploring Knowledge Transfer from MIT'' Jointly with Ajay Agrawal, forthcoming in Management Science

''Discontinuities and Senior Management: Assessing the Role of Recognition in Pharmaceutical Firm Response to Biotechnology'' Jointly with with Sarah Kaplan, Fiona Murray, forthcoming in Industrial and Corporate Change.

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''Measuring Competence? Exploring Firm Effects in Drug Discovery'' Jointly with Iain Cockburn. Chapter 6 in The Nature and Dynamics of Organizational Capabilities, Edited by Giovanni Dosi, Richard R. Nelson and Sidney G. Winter, 2000 by Oxford University Press, Oxford, UK.

''The Economics of Drug Discovery'' Jointly with Iain Cockburn, Chapter 5 in Pharmaceutical Innovation, edited by Ralph Landau, Basil Achilladelis and Alexander Scriabine, Chemical Heritage Press, Philadelphia PA 1999, pp 308–331.

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''The Pharmaceutical Industry and the Revolution in Molecular Biology: Interactions Among Scientific, Institutional and Organizational Change.'' Jointly with Luigi Orsenigo and Gary Pisano. Chapter 7 in The Sources of Industrial Leadership, Cambridge University Press, David Mowery and Richard Nelson, Editors, Cambridge University Press, 1999, pp 267–311.

''On the Dynamics of Forecasting in Technologically Complex Environments: The Unexpectedly Long Old Age of Optical Lithography'' In Technological Innovation: Oversights and Foresights, Raghu Garud, Pravenn Nayyar and Zur Shapira, Editors, Cambridge University Press, New York, 1997.

''Trends in University Patenting 1965–1992,'' (Jointly with Adam Jaffe and Manuel Trajtenberg.) Forthcoming in the Center for Economic Policy Research conference volume: University Goals, Institutional Mechanisms and the ''Industrial Transferability'' of Research.

''The Determinants of Research Productivity in Ethical Drug Discovery.'' (Jointly with Iain Cockburn) In The American Enterprise Institute Conference Volume: Competitive Strategies in the Pharmaceutical Industry, Robert B Helms, Ed. Washington DC, 1996.

''Maintaining Leadership across Product Generations: The Case of Canon in Photolithographic Alignment Equipment'' in Managing Product Development, Toshihiro Nishiguchi, Ed. Oxford University Press, 1996. (This book was awarded the 1996 Shingo Prize for Excellence in Manufacturing research.)

''Technological Change and The Management of Architectural Knowledge.'' In Transforming Organizations, Edited by T. Kochan and M. Useem. Oxford University Press, Oxford, U.K., 1992. Reprinted in Organizational Learning, edited by Michael D. Cohen and Lee S. Sproull, Sage Publications Inc, CA, 1996. Conference Proceedings.

''Public-private interaction in pharmaceutical research'' (Jointly with Iain Cockburn) in the Proceedings of the National Academy of Sciences 93/23 (November 12, 116) p. 12725–12730

''Controlling Variability of Sub-micron Gate Lithography in a GaAs MMIC Manufacturing Environment.'' (Jointly with Peter Moran, Jesus del Alamo, Nell Wylie and Scott Elliott.) Presented at the SEMI Advanced Semiconductor Manufacturing Conference, pp136a-g. September 1990, Danvers, MA.

''Workload Regulating Wafer Release in a GaAs Fab Facility.'' International Semiconductor Manufacturing Science Symposium, May 1990, San Francisco, CA. (Jointly with James Lawton, Al Drake, Lawrence Wein, Ron Whitney, and Dick Zuanich) Working Papers.

''A Behavioral Analysis of Learning Curve Strategy'' With Eric Beinhocker, Lee Newman and John Sterman.

''Balancing Incentives: The Tension between Basic and Applied Research'' Jointly with Iain Cockburn and Scott Stern.

MTC–00030603

January 28, 2002
VIA FACSIMILE (202) 307–1454
The Honorable Charles James
Assistant Attorney General for Antitrust
c/o Renata Hesse, Antitrust Division
U.S. Department of Justice
601 D Street, N-W, Suite 1200
Washington, DC 20530–0001

Dear Assistant Attorney General James: The proposed Final Judgment submitted in U.S. v. Microsoft Corporation, mad State of New York et al. v. Microsoft Corporation, triggers obligations by you under the Antitrust Procedures and Penalties Act (the ''Tunney Act''), set forth at 15 U.S.C. § 16. Under the Act, you are designated to ''receive and consider any written comments relating to the proposal for [a] consent judgment submitted under... this section.'' i5 U.S.C. § 16(d). On November 8, 2001, Judge Colleen Kollar-Kotelly ordered ''that members of the public may submit written comments concerning the proposed Final Judgment to [the Justice Department.]'' This letter is sent to you pursuant to this statute and court order.

As Chairman of the Subcommittee on Antitrust, Business Rights, and Competition of the Senate Committee on the Judiciary, I have studied the proposed settlement of the government's antitrust lawsuit against Microsoft very closely, and I write to express my concern about whether the settlement is in fact ''in the public interest.'' 15 U.S.C. § 16(e). Accordingly, I respectfully ask that you address the issues raised in this letter when you file with the district court your mandatory ''response'' to these comments. See 15 U.S.C. § 16(d). This settlement affects vast and important segments of the U.S. economy, and thus, its significance cannot be overstated. As a result, I believe it should only be approved if it can truly be shown that the settlement is ''is m the public interest,'' Such a determination will require the court to assess ''the competitive impact of such judgment, including termination of alleged violations, provisions for enforcement and modification, duration of relief sought, [and] anticipated effects of alternative remedies actually considered.'' 15 U.S.C. § 16(e)(1). These comments and questions are designed to inform this inquiry.

(1) Does the proposed settlement contain significant loopholes that render it largely ineffective to cure the damage to competition caused by Microsoft's illegal behavior? The unanimous District of Columbia Circuit Court of Appeals held that Microsoft violated section 2 of the Sherman Act by illegal conduct designed to maintain its monopoly on personal computer operating systems. The proposed settlement is designed to ''provide a prompt, certain and effective remedy for consumers'' arid ''halt continuance mad prevent recurrence of the violations of the Sherman Act by Microsoft... and restore competitive condition, s to the market.'' Competitive Impact Statement at 2.

However, it appears that, in many respects, the Revised Proposed Final Judgment (''PFJ''), contains so many loopholes, exceptions, qualifications, and definitional limitations that Microsoft can easily avoid its requirements. I have serious concerns that these loopholes and qualifications in the proposed settlement render it inadequate to accomplish its task of remedying Microsoft's illegal conduct and restoring competition in the computer software market. I will list a few examples below, but this list is not exhaustive.

(a) Million software copy limitation—Under the proposed consent decree, competitive access to the computer desktop has to be provided for certain types of firs.1 software application makers. More specifically, Microsoft must permit computer manufacturers and computer users to replace the icons, short-cuts, or menu entries for Microsoft Middleware Products on the desktop or start menu with Non-Microsoft Middleware Products. See PFJ ¶III.H.1. But the proposed consent decree contains a loophole in the definition of Non-Microsoft Middleware Products that denies that protection unless, in the prior year, ''at least one million copies [of that rival software] were distributed m the United States.'' Id. ¶VI.N. Thus, many start-up software companies with promising yet unproven technology in the pipe]me—precisely the companies most in need of protection from exercise of market power by a monopolist—will be left unprotected by the settlement. This could have a negative impact on the flow of venture capital and investment to technology start-ups—precisely the engine that drove the economic expansion of the late 1990s and a key to further expansion of our all-important technology sector. Requiring the distribution of a million copies in the United States in a year seems a very high threshhold. Why was this limitation written into the settlement? Why was the one million number chosen? In this era of internet downloads, how can a software maker prove that a million copies were distributed in the United States? What purpose does this limitation serve? Should the consent decree be modified to close that loophole and foster

new investments and growth by protecting those investments from monopoly practices?

In answering this inquiry I would request that you conduct a survey of a representative sample of non-Microsoft middleware product manufacturers to determine how long it took them to distribute one million copies of their software in the United States (if in fact they have done so). For example, it would be fruitful to determine how long it took products such as Kodak photofinishing software or the Palm OS to reach this threshhold, even though they might not qualify as non-Microsoft middleware products under the decree.

(b) Definitional limits on API disclosures—A cornerstone of the proposed settlement is the requirement that Microsoft disclose certain Application Programming Interfaces (''APIs'') that are used by Microsoft Middleware to interoperate with a Windows Operating System Product. See ¶III.D. Yet the definition of Microsoft Middleware is limited in such a way that raises doubts about the true extent of the requirement of API disclosure. Microsoft Middleware must be distributed seperately from a Windows Operating System Product and must be trademarked. Id. ¶VI.J. And any product comprised of the Microsoft or Windows trademark together with descriptive or generic terms are not considered to be trademarked. Id ¶VI.T. It appears that these definitional limitations will make it easy for Microsoft to avoid having to disclose APIs. Why can Microsoft simply decide not to trademark software and thereby have it fall outside this definition? Why does the definition of trademark exclude products identified by the Microsoft or Windows trademark plus a generic term?

In addition, Microsoft need not release any API to a software maker unless Microsoft determines that the software maker ''has a reasonable business need for the API'' and ''meets reasonable, objective standards established by Microsoft for certifying the authenticity and viability of its business.'' Id. ¶III.J. Many are concerned that permitting Microsoft to determine the ''business need'' and ''viability'' of potential competitors will be another way Microsoft can avoid the API disclosure requirements.

Another limit on API disclosure applies to new versions of Windows Operating Systems Products. With respect to new versions, disclosures of APIs need only be made in a Timely Manner. Id. ¶III.D. Timely Manner is defined to mean when Microsoft releases a test version of a Windows Operating System Product to 150,000 beta testers. Id. ¶VI.R. Microsoft could avoid this provision by simply having the new version—and the obligation to release APIs tested by less than 150,000 beta testers. What assurance is there that Microsoft will not avoid the API disclosure limitation in the future in this manner? There are many other definitional limits and qualifications found throughout the proposed consent decree. Beyond their specific provisions, these limitations raise the broader—and fundamental—question: is the proposed settlement is strong enough to make sure that Microsoft cannot use its monopoly power to squelch competition and innovation?

(2) Is the scope of the settlement's protection of middleware adequate to promote competition ? Before even running the gauntlet of the decree's restrictions outlined above, software must qualify as non-Microsoft middleware under the restrictive definitions of middleware used in the decree, see PFJ ¶¶VI.J, VI.K, VI.M, VI.N. The decree's protections are largely limited to competitors of ''Microsoft Middleware Products.'' But the definition of what is (or is not) a Microsoft Middleware Product remains somewhat ambiguous. Windows Messenger is covered, but MSN Messenger does not appear to be. Internet Explorer is covered, but MSN Explorer seems to be missing. Popular products such as software for personal digital assistants and photofinishing are excluded. What accounts for these gaps? And why did the Department of Justice and Microsoft abandon the definition of middleware that had been employed by, the District Court and affirmed unanimously on appeal? These definitions lie at the core of the consent decree's potential effectiveness. The heart of the Court of Appeals'' ruling was that Microsoft's acts of illegal monopoly maintenance blocked the ability of competitors to develop middleware which could effectively become an alternative platform to compete with the Windows operating system. The goal of the consent decree therefore must be to encourage and protect innovation in the middleware field. Yet the more restrictive and unclear the definitions are, the more they introduce uncertainty into this field and the more ineffective the consent decree will be. If potential innovators believe that Microsoft can avoid the ambit of the decree, then hopes for spurring innovation and competition among middleware products will be lost.

(3) Why is Microsoft ever allowed to retaliate against the computer makers? The settlement rests on the computer makers'' ability to promote competition on the desktop and in the industry generally. A key provision of the consent decree bans Microsoft from retaliating by agreement for a computer makers loading certain types of non-Microsoft software on its computers. See PFJ ¶III.A. Yet, the ban on Microsoft retaliation against computer makers is limited: the decree only bans retaliation in commercial agreements (not other forms of retaliation); only bans retaliation for removing specifically named ''Microsoft Middleware Products'' (not other Microsoft products); and only bans retaliation, for promoting specific competitive products (and not other products that could challenge Microsoft's desktop dominance). Will these loopholes ''swallow the rule'' that Microsoft should be banned from retaliating against computer makers? Would it not be far simpler to ban all Microsoft retaliation against the computer makers?

(4) Will Microsoft be able to accomplish through incentives what it could not accomplish by retaliation.? The ban on retaliation in no way prevents Microsoft from paying incentives to computer makers to strongly prefer—or install exclusively—Microsoft software products. Indeed, the proposed consent decree expressly provides that nothing ''shall prohibit Microsoft from providing Consideration to any OEM with respect to any Microsoft product or service where that Consideration is commensurate with the absolute level of that OEM's development, distribution, promotion, or licensing of that Microsoft product or service.'' PFJ ¶III.A. Given Microsoft's market power and financial resources, what will prevent Microsoft from using its financial resources, what will prevent Microsoft from paying bounties to computer manufacturers to ''voluntarily'' exclusively install or at least to prefer, Microsoft products, thereby accomplishing through incentive payments what it could not achieve by retaliation?

(5) Why does the settlement abandon the ban on commingling that the Court of Appeals found to be illegal? Nothing in the agreement prohibits Microsoft from commingling code or binding of its middleware to the Operating System (OS), even though the Court of Appeals specifically found Microsoft's commingling of browser and OS code to be anti-competitive and rejected a Microsoft petition for rehearing that centered on this issue. Computer manufacturers are likely to be discouraged from installing competing middleware products to those commingled with OS code, as these are likely to slow down the computer's speed and performance. Why should the proposed settlement permit this commingling to continue in the face of an explicit finding of illegality from the Court of Appeals?

(6) Is the five year term of the settlement sufficient to restore competition? The proposed consent decree has a five year term (extendable for two years only if the Court finds Microsoft has engaged in willful and systematic violations of the decree). PFJ ¶V. This is an unusually short time for an antitrust consent decree, which is typically ten years in length. Many wonder if this term is sufficient to remedy Microsoft's illegal conduct and restore competition. Why was the term of the decree limited to five years? How can we be sure that five years will be sufficient to restore competition?

In addition, under the decree, Microsoft has up to a year after submission of the decree before implementing several of its provisions, including the crucial API disclosure requirements and the provisions granting computer manufacturers and users the right to modify the start-up menus and icons with competing products. See PFJ ¶¶III.D, III.H. Thus the effective time that Microsoft must live under these restrictions is substantially shorter than the five year term of the agreement. And yet, this summer, when Microsoft made some very, minor changes to Windows to respond to the Court of Appeals ruling, it took just three weeks to make the changes. Given Microsoft's proven ability to make rapid changes, would it not be in the public interest to require Microsoft to live by the consent decree immediately and not wait another year?

(7) Is the enforcement mechanism sufficient? The proposed Final Judgment does not set forth vigorous enforcement mechanisms to keep Microsoft within the framework of this settlement. The proposed consent decree requirements the appointment of a ''Technical Committee'' to

monitor compliance with the decree, but its findings are entirely advisory and not binding on Microsoft. PFJ ¶IV.B. The only true enforcement mechanism would be for the Justice Department to go to Court in art enforcement action. In such an enforcement action, no work product findings or recommendations of the Technical Committee can be admitted as evidence in court. Id. ¶IV.D.4.d. ''While Microsoft is required to ''be reasonable'' in its conduct: violations of such ''be reasonable'' provisions can only be remedied through proceedings that will become, in essence, mini-retrials of U.S. v. Microsoft itself. Are these provisions sufficient to ensure that the settlement can be enforced properly? Without an iron-clad enforcement mechanism, how can the public take solace in the ''promise'' that Microsoft will ''be reasonable'' given the history of litigation in this case, and earlier antitrust lawsuits against Microsoft?

(8) What will the settlement's effect be on Microsoft's future conduct? Microsoft is has dubbed its aggressive Internet strategy .NET or ''Hailstorm''—a strategy to give consumers a one-stop shop on the Internet. How will the consent decree foster competition for these future ''platforms?'' If the purpose of this case was to check Microsoft's monopoly power, how will the Justice Department ensure that this monopoly dominance is not extended from the desktop to the Internet? And why are critical new technologies, such as digital rights management and identity-authentication, exempted from the proposed settlement's disclosure provisions? In closing, we today stand on the threshold of writing the rules for competition in the digital age, and we have two choices. One option involves one dominant company controlling the computer desktop, facing minor restraints that expire in five years, but acting as a gatekeeper to 95% of all personal computer users. The other model is the flowering of innovation and new products that resulted from the ending of the AT&T telephone monopoly nearly twenty, years ago. From cell phones to faxes, from long distance price wars to the development of the Interact itself, the end of the telephone monopoly brought an explosion of new technologies and services that benefit millions of consumers every day. We should resist on nothing less from this proposed settlement. In sum, any settlement in this case should make the market for computer software at least as competitive as the market for computer hardware is today. We should insist on a settlement that has an immediate, substantial, and permanent impact on restoring competition in this industry. I recognize the extraordinary effort that the Justice Department has expended in the litigation of this case, and I thank you and your staff for the vigor with which you have pursued this challenging case. I believe that answers to the questions and issues posed above are essential for determining whether the proposed settlement is in the public interest. Thank you for your attention to this matter.

Sincerely,

HERB KOHL

Chairman

Subcommittee on Antitrust, Business Rights and Competition

MTC–00030604

BLUMENFELD & COHEN

—Technology Law Group—

1625 Massachusetts Avenue, NW

Suite 300

Washington, DC 20036

202–955–6300

202–955–6460 FAX

Facsimile Cover Sheet

FROM: Patrick O'Connor DATE: January 28, 2002

TO: Renata B. Hesse FAX: (202) 307–1454 TEL:

CC: Audrie Krause, NetAction (415) 673–3813

Dear Ms. Hesse: The attached are the Comments of NetAction and Computer Professionals for Social Responsibility on the Proposed Final Judgment in United States v. Microsoft. A copy has already been provided to you via E-mail.

Please feel free to contact me at 202–955–6300 with any questions or concerns.

Regards,

Patrick O'Connor

Counsel to NetAction and Computer Professionals for Social Responsibility

Comments of NetAction and Computer Professionals for Social Responsibility On the Proposed

Final Judgment

INTRODUCTION

The Government's Competitive Impact Statement claims that ''[t]he relief contained in the Proposed Final Judgment provides prompt, certain and effective remedies for consumers.'' [1] However, any potential relief is far from ''certain'' or ''effective'' for the average (non-corporate) consumer, and relief certainly will not be ''prompt'' since it will arrive, if at all, only as Microsoft rolls out later versions of its Windows Operating System.

Unfortunately, the Proposed Final Judgment does not offer consumers any hope of relief in the market for the non-middleware software applications on which they rely, such as word processing and spreadsheets. Nor does the Proposed Final Judgment attempt to offer any hope of relief to consumers using Windows 95, Windows 98, Windows NT, or Windows 2000. By its terms, the Proposed Final Judgment only applies to Microsoft's dealings with third pasty developers for Windows 2000 Professional, Windows XP, and later Windows versions. Thus, to achieve even the uncertain benefits of the Proposed Final Judgment, consumers will have to pay a high price for new software and, as explained below, new hardware, including new computers. For these reasons, the Proposed Final Judgment is suspect in terms of both the public interest and the goals of antitrust relief described by the Government.[2]

Moreover, the Proposed Final Judgment must be rejected because the record does not permit the Court to determine, with any reasonable degree of comfort or certainty, exactly what relief the Proposed Final Judgment provides. The language of the Proposed Final Judgment, in combination with the numerous exceptions to its prescriptions, necessarily leaves the Court and the public at a loss to confidently predict what conduct is prohibited and what conduct is permitted. Indeed, in a number of specific instances, the exceptions provided for in the Proposed Final Judgment appear to enable Microsoft to escape large portions or even all of its obligations. As the Court is fully aware, the Government's current lawsuit-now approaching its fourth anniversary-was triggered by Microsoft conduct that the Government thought it had prohibited in a previous consent decree. Only when it attempted to enforce the decree against that conduct did the Government discover that the language of the decree-language perhaps inserted by Microsoft and ''protecting'' its rights to innovate-could be interpreted to permit Microsoft to require that customers purchase its browser as a component of Microsoft's Windows Operating System, the exact conduct that the earlier decree ostensibly would have prevented.[3] The very. same sorts of ambiguity are evident in the Proposed Final Judgment. If it is approved, Microsoft and the Government will find themselves back in this Court yet again, arguing over interpretation, while non-corporate consumers are forced to endure yet another round of anticompetitive effects.

Because the Court has no power under the Tunney Act to modify the terms proposed by the parties, the Court must either reject the Proposed Finn Judgment as inconsistent with the public interest, or order additional proceedings to clarify its terms.[4] Such additional proceedings should provide the parties to the Proposed Final Judgment with an opportunity to prove that there has been an actual ''meeting of the minds'' with regard to the terms of the agreement. Only where that has occurred should the Court consider approving the Proposed Final Judgment; otherwise, rejection is the Court's only recourse.

DISCUSSION

NetAction is a national nonprofit organization dedicated to promoting use of the Internet for effective grassroots citizen action campaigns, and to educating the public, policymakers, and the media about technology policy issues. Among other projects, NetAction manages the Consumer Choice Campaign to focus public attention on Microsoft's growing monopolization of the Internet.

Computer Professionals for Social Responsibility (''CPSR'') is a public-interest alliance of computer scientists and other interested individuals concerned about the impact of computer technology on society. CPSR provides the public and policymakers with realistic assessments of the power, promise, and limitations of computer technology and directs public attention to critical choices concerning the applications of computing and how those choices affect society.

I. A Large Segment of the Consumer Market Will Be Unable to Avail Themselves of the

[1] Competitive Impact Statement § I

[2] See 15 U.S.C. § 16(e), Competitive Impact Statement § I

[3] See U.S. v. Microsoft, 56 F.3d 1448, 1461–62 (DCCir. 1995); see infro. § II.A.

[4] See 15 U.S.C. 16(b) et seq.

Limited and Uncertain Benefits of the Proposed Final Judgment Unless They Invest Substantial Sums in Hardware and Software Upgrades

A. The Proposed Final Judgment Would Do Nothing to Increase Competition for Software Applications

Despite Microsoft's substantial dominance in the market for software applications-such as email, word processing, and spreadsheets-the Proposed Final Judgment limits its modest proposed remedies co the market for ''middleware.'' The Government's loftiest description of its anemic proposed remedy promises only to ''restore the competitive threat that middleware products posed prior to Microsoft's unlawful undertakings.'' [5] The ''bulleted'' enumeration of those benefits offered by the Government further clarifies that only the market for middleware is targeted for relief.[6]

It is certainly true, as the Government points out, that middleware poses-or perhaps more accurately ''posed'' when the case was filed nearly four years ago-a significant threat to the dominance of Microsoft's Windows Operating System. By exposing its own ''APIs,'' middleware allows software developers to write applications that will run on multiple operating system platforms, thus decreasing the importance of any particular operating system.[7] And the middleware category is particularly important as computing evolves towards a model in which users go outside their desktop/laptop hardware not only for their data-as Internet has taught them to do-but also for applications by which to interact with that data.

While the Government certainly was correct to make middleware an important focus of its case, the Government certainly is not correct to make middleware the sole focus of its proposed remedy. It is one thing to say that the existence of a competitive market for middleware could undercut Microsoft's monopoly of operating system software if computing moves away from a desktop/server environment to a Net-based environment. It is quite another to say, as the Proposed Final Judgment does, that the public interest is satisfied when consumers can achieve some benefits of competition only if computing moves away from a desktop/server environment to a Net-based environment.

It is simply not in the public interest-certainly not in the non-corporate consumers'' interest-to conclude what by now is nearly a decade of Government antitrust litigation by providing for some uncertain possibility of middleware competition while ignoring file monopoly position that Microsoft has built in the applications market over that same period.

B. Consumers Will Be Forced to Buy Software and Expensive New Hardware To Get Any Benefits From the Proposed Final Judgment

Even assuming that the Proposed Final Judgment has the potential, over time, to create a more competitive market in the narrow middleware product line which is its sole aim, consumers will have to buy a very expensive ''admission ticket'' to obtain any of those benefits.

The Government acknowledges that relief should, at a minimum, end the unlawful conduct, prevent its recurrence, and ''undo its anticompetitive consequences.'' [8] Curiously, despite this acknowledgement, the Proposed Final Judgment is purely prospective: by its terms it would apply only to the conduct of Microsoft and the opportunities of third party software and hardware vendors in relation to Windows 2000 Professional, Windows XP, and later generations of Microsoft's Windows Operating System.[9] While not evident on the face of the Proposed Final Judgment, this result flows from the interplay among the Proposed Final Judgment's operative provisions and definitions. All of Microsoft's proposed obligations would be limited to conduct relating to a ''Windows Operating System Product'' which is defined as the ''software code ... distributed ... by Microsoft ... as Windows 2000 Professional Windows XP Home, Windows XP Professional, and successors[.]'' [10]

Thus, by its terms the Proposed Final Judgment would not even attempt to ''undo [the] anticompetitive consequences'' of Microsoft's conduct for consumers who continue to use earlier versions of Windows, including Windows 95, Windows 98, and even Windows Me. Perversely, consumers will have to fill Microsoft's coffers by purchasing upgraded operating system software in order to obtain relief. Under the Proposed Final Judgment, only those consumers who upgrade to Windows 2000 Professional or a later version of the Windows Operating System would see any of the benefits of increased competition in the range of software choices available to them.[11]

And the cost of admission to the realm of greater choice is not just the price of the new software product. As anyone who has attempted a system upgrade on his or her own can attest, it is an endeavor best left to professionals. The process is enormously complex, takes hours of time, requires the user to make numerous decisions, often without adequate information, and is prone to crashing the computer, requiring professional help for recovery.[12] Even the IS departments in corporate America are wary of upgrading their entire user community before they have thoroughly tested both the new operating system and the process of upgrading to it. And outside corporate America-that is, for the average (non-corporate) consumer-the task is so difficult that most consumers avoid it, continuing to use the operating system that came with their computers, and changing operating systems only if and when they buy a new computer.

To compound the problem and increase the price of admission even further, each new generation of operating system is significantly more resource-intensive than the last, as clearly indicated by the ''minimum system requirements'' notice Microsoft includes on its packaging and on its web site. The ''minimum system requirements'' for random access memory (RAM) have doubled with each succeeding consumer version of Windows. Windows Me required 32 megabytes (MB) of RAM; Windows 2000 Professional required a minimum of 64 MB; Windows XP recommends at least 128 MB.[13] The ''minimum'' CPU and hard disk requirements have accelerated even more rapidly.[14] And as every computer user knows, the ''minimum'' hardware requirements rarely provide adequate performance under the new operating system. So consumers are forced to buy enhancements to their existing computers, such as more memory and larger hard drives, to ''catch up'' with the demands of the new operating system. Even the consumer who upgrades her computer faces significant performance limitations stemming from the processor and bus architecture of existing systems. This history of Microsoft operating system evolution is that a

[5] Competitive Impact Statement § 1 <http://www.usdoj.gov/atr/cases/f9500/9549.htm>.

[6] Id.; see also Competitive Impact Statement § III, IV <http://www.usdoj.gov/atr/cases/19500/9549.htm>.

[7] This would be true so long as several conditions obtain: (1) those applications depend only on the middleware's APIs, and not on the APIs of the underlying operating system, (2) the middleware runs equally effectively on multiple operating system platforms, and (3) all of every user's applications run on middleware.

[8] Competitive Impact Statement § IV.B <http://www.usdoj.gov/atr/cases/f9500/9549.htm>.

[9] Proposed Final Judgment § VI.U <http://www.usdoj.gov/atr/cases/f9400/9495.htm>.

[10] Proposed Final Judgment §§ III.A–I VI.U <http://www.usdoj.gov/atr/cases/f9400/9495.htm>; Competitive Impact Statement § I (bullet points) <http://www.usdoj.gov/atr/cases/19500/9549.htm>.

[11] A massive migration to later Windows operating system products carries additional problems for consumers, Indeed, another of the hidden costs to consumers of both Microsoft's anticompetitive conduct and the Proposed Final Judgment is the cost in network security. The continued dominance of the Windows Operating System and related applications means that Microsoft is a target for hackers and all those who would compromise the privacy and security of network systems. Elinor Mills Abreu, Hack this! Microsoft and its critics dispute software security issues, but users make the final call, InfoWorld (Sept. 27, 1999) <http://iwsun3.infoworld.com/??qibin/displayStory,p12/features/990927haek.htm>. Thus, a breach of privacy or security in a given Microsoft product will be visited upon millions of consumers worldwide. Absent continued anticompetitive conduct, leading to continued dominance in operating system, browser and office applications, such costs would be significantly decreased as the risk of breach would be more dispersed among several operating systems. See Letter from the Electronic Privacy Information Center to United States Senator Patrick Leahy, Senate Judiciary Committee (Dec. 11, 2001), <http://msdn.microsoft.com/msdnews/2001/July/hess/prior.as??>.

[12] 12 See, e.g. Mark Hammond, Hidden upgrade woes found in Windows 98, eWEEK (June 25, 1998) http://zdnet.com.com/2102–11–510242.html, A. Kandra, Consumer Watch: Avoiding the Upgrade From Hell, PC World (August 2001) <http://www.??cworld.com/features/article/0,aid,52348,00.as??>.

[13] Compare <http://www.microsoft.com/catalog/display.asp'site=10451&subid=22&??=3> (Windows Me); <http://www.microsoft.com/catalog/display.asp'site=657&subid=22&p??=3> (Windows 2000 Professional); and <http://www.microsoft.com/catalog/display,asp'site=11052&subid=22&pg=3> (WindowsXP).

[14] 14 Id.

consumer will, as a practical matter, need to buy a new computer to make effective use of a new operating system.

The reality, then, is that even if the Proposed Final Judgment would allow the development of a more competitive market for middleware, consumers would have to purchase new software and new computers (or spend almost as much to upgrade their existing systems) to obtain any benefits. As a result, a large percentage of consumers would simply be unable to afford the price of admission in their homes, or in their schools, or in their libraries. No proposed antitrust remedy can be in the public interest when it excludes the most vulnerable members of the public from any potential benefits.

II. Important Provisions of the Proposed Final Judgment Will Not Accomplish Their Intended Purposes

The Proposed Final Judgment is vague or subject to evasion by Microsoft to such an extent that it is not in the public interest as it currently stands. In Tunney Act proceedings—particularly where the litigation was required by a failure of precision in a prior settlement decree—a court should insist on precision in the proposed decree, so that the task of enforcing the decree does not become unmanageable.[15] As discussed below, however, the Proposed Final Judgment is fiddled with provisions that make its interpretation and enforceability highly problematic.

A. Microsoft I Illustrates the Importance of Eliminating Ambiguities and Loopholes from the Proposed Final Judgment

In assessing the Proposed Final Judgment, there are important lessons to be learned from past dealings between the Government and Microsoft, in particular the unfortunate history of the first Microsoft consent decree. That decree provided, among other things, that Microsoft can not require OEMs, as a condition of a license to an operating system, to license another Microsoft product.[16] Soon after that decree was approved, however, Microsoft integrated its web browser code into the Windows Operating System, causing the Government to seek an injunction. The decree, however, contained an exception that doomed its very object: it could not be ''construed to prohibit Microsoft from developing integrated products.'' [17] Because the appellate court found that the Government was unlikely to prevail on this question of integration, Microsoft was free to integrate its web browser into the operating system.[18]

It was only last year, after extensive litigation, that Microsoft's integration of the browser code into the Windows Operating System was finally found to be illegal as an improper effort to prevent entry by rival browsers.[19] By that time, however, Netscape Navigator, the browser at which Microsoft had directed many of its tactics, was no longer a threat to Microsoft's monopoly. In a very real sense, the presence of a vague exception for ''integration'' in the first Microsoft decree, and Microsoft's ability to exploit that exception, made. possible the monopolistic behavior and anticompetitive distortion that was at issue in Microsoft II.[20] It is crucial that that scenario not be repeated here, and that the Proposed Final Judgment be cleansed of similar opportunities for Microsoft to ''design around'' the decree's restrictions. Regrettably, there are many aspects of the Proposed Final Judgment that require such cleansing.

B. The Proposed Final Judgment Will Allow Microsoft To ''Design Around'' Its Obligations Despite the fact that ambiguous language is exactly the reason this case was initiated, the Proposed Final Judgment suffers chronically from the same defect. Loose language and a plethora of exceptions would permit Microsoft to ''design around'' the restrictions that are currently being proposed by the Government:

First, the Proposed Final Judgment would allow Microsoft alone to determine the definition of its Windows Operating System. Combined with loose language in the definition of Microsoft Middleware, this provision raises the possibility that Microsoft would be able to escape its API disclosure obligations by incorporating middleware products into future versions of its operating system. If such is the case, contrary to the intent of the Proposed Final Judgment, Microsoft could thereby prevent competition in middleware;

Second, under the Proposed Final Judgment, Microsoft alone would be able to determine when its disclosure obligations arise, as it would determine what constitutes a ''major version'' release under the definition of Microsoft Middleware. By releasing updates, as opposed to ''major versions,'' Microsoft could continue to advance the development of Microsoft Middleware, while precluding competition from other middleware producers;

Third, when a major version is released by Microsoft, the terms of the Proposed Final Judgment regarding the release of information on APIs would permit Microsoft a perpetual advantage in the relevant markets: by the time Microsoft was obligated to release information on APIs, it would already have developed its next major version for release. Thus, under the terms of the Proposed Final Judgment, competitors will always remain at least one step behind Microsoft;

Fourth, Microsoft would unilaterally control whether the user can designate a competitive middleware product by determining the technical compatibility of such products with the Windows Operating System. By continually establishing new (and potentially irrelevant) technical requirements, Microsoft can ensure that consumers are forced to use Microsoft products for an increasing number of applications;

Fifth, and finally, Microsoft would be able to escape all of its disclosure obligations under the Proposed Final Judgment where it would be able to determine that a particular product threatens the ''security'' of any number of integrated systems. In the current environment where applications are increasingly tied to both the operating system and other programs, such claims are easy to make and difficult to disprove. By invoking this exception, Microsoft would be free to preclude competition altogether;

Each of these shortcomings is discussed in further detail below. Given the ambiguities and exceptions, consumers have no reason to expect that the Proposed Final Judgment would effectively prevent the Microsoft monopoly from expanding beyond the operating system and browser markets into every facet of digital life. For these reasons, the Proposed Final Judgment should be rejected or additional proceedings ordered by this Court.

Under Section VI.U of the Proposed Final Judgment, ''It]he software code that comprises a Windows Operating System Product shall be determined by Microsoft in its sole discretion.'' This overarching provision would permit Microsoft to unilaterally alter one of the bedrock terms of the Proposed Final Judgment and, thus, to alter the terms of the agreement. As in 1995, the actual implications of this provision of the decree are unclear (except, perhaps, to Microsoft). Nevertheless, it is not difficult to imagine instances in which Microsoft would attempt to, for example, integrate potential Microsoft Middleware Products into its Windows Operating System in order to escape its disclosure obligations (a possibility discussed further below).[21] The provision would also allow Microsoft to implement code designed to make competing middleware products incompatible with the Windows Operating System and thus prevent consumers from using that product as is ostensibly permitted under Section III.H. Indeed, the overarching problem with this provision for both competitors and consumers is its ambiguity and the uncertainty that is associated with it. At a minimum, definitional control of the Proposed Final Judgment should reside first with the agreement itself and, next, with the Court; it certainly should not reside with Microsoft. There is hardly any point in a decree that gives the defendant the right to determine its meaning.

Similarly, under Section III.D of the Proposed Final Judgment, Microsoft must disclose to competitors any and all APIs used by Microsoft Middleware to function effectively on the Windows Operating System. However, because the definition of Microsoft Middleware appears to be limited to ''software code that Microsoft distributes separately from a Windows Operating System

[15] 15 U.S. v. Microsoft, 56 F.3d 1448, 1461–62 (DCCir. 1995).

[16] 16 U.S. v. Microsoft, 147 F.3d 935,939 (DCCir. 1998) (''Microsoft I'').

[17] 17 Id. at 939.

[18] 18 Id. at 955.

[19] U.S. v. Microsoft, 253 F.3d 34 (DCCir. 2001) (''Microsoft II'').

[20] 20 Id.

[21] ''A monopoly in operating system software is a platform for unprecedented control over the flow of information to consumers. Control over this software can be leveraged to near total control over the computer screen, Dominating the screen means controlling ... what [consumers] see and when they see it.'' The Project to Promote Competition & Innovation in the Digital Age. At the Crossroads of Choice, <http://procompetition.org/researchlcrossroads/crossexec.htm>.

Product,'' [22] the possibility arises that Microsoft could avoid the required disclosure of its APIs simply by integrating potential Microsoft Middleware into the operating system.[23] Integration would have the same effect upon potential competitors as nondisclosure; the applications barrier to entry would remain impenetrable and innovation by anyone other than Microsoft would be prevented. Moreover, further integration of middleware products would permit Microsoft to extend its monopoly power into adjacent markets.'' [24]

Moreover, assuming that Microsoft determines to release future Microsoft Middleware, Section VI.J would egregiously permit it to determine when or even if its API disclosure obligations are triggered. Specifically, this provision would allow Microsoft to unilaterally determine which releases are ''updates'' to existing Microsoft Middleware and which are ''new major version[s]'' of such.[25] Microsoft would avoid disclosure (triggered by release of a new major version) simply by denominating the release anything other than ''a whole number or ... a number with just a single digit to the right of the decimal point.'' [26] The implications of this type of control on the part of Microsoft make the API disclosure provisions of the Proposed Final Judgment effectively meaningless.

Even where disclosure of APIs to competitors was to occur under Section III.D, it would not be required until ''the last major beta test release'' of the relevant Microsoft Middleware.[27] Microsoft would thus have two incentives with regard to the release of the updated version: (1) to push the date of release of its last beta test as close as possible to the release of a commercial product, and (2) to use the interval until the last beta test to plan a subsequent and improved version of the same software to be released once competition with the updated version is threatened. After release, potential competitors would hurriedly attempt to implement the APIs to enable their products to interoperate with the Windows Operating System. Meanwhile, Microsoft's product would have been commercially re]eased and gaining market share. Thus, before competitors would have been able to convince consumers of the value of their products, Microsoft would have developed a subsequent and improved version of the product, effectively foreclosing competition. The timing of competitors'' access to APIs is crucial for compettion to have any chance of developing. But the timing provided for in the Proposed Final Judgment does not accomplish its purpose.

Section III.H ostensibly ''ensures that OEMs will be able to choose to offer and promote, and consumers will be able to choose to use, Non-Microsoft Middleware Products[.]'' [28] However, the same section would provide Microsoft with yet another exception that effectively swallows the obligation: Microsoft would be permitted explicitly to override a consumer's default choice of middleware product with its own Microsoft Middleware Product where the non-Microsoft product ''fails to implement a reasonable technical requirement ... that is necessary for technical reasons to supply the end user with functionality consistent with a Windows Operating System Product[.]'' [29] Even a superior middleware product could be preempted where it did not conform to Windows Operating System Product code, over which Microsoft would have exclusive control (described above). It is not difficult to imagine Microsoft creating a series of ''technical requirement'' obstacles that would need to be navigated by competitors and consumers in order to permit them choice in middleware products. Granting Microsoft such control over this important provision would permit Microsoft to avoid its impact entirely, continuing the exact anticompetitive conduct this provision was ostensibly designed to prevent.

Finally, the Proposed Final Judgment would grant Microsoft an overarching exception to all of its disclosure obligations where, in Microsoft's determination, ''the disclosure ... would compromise the security of a particular installation or group of installations of anti-piracy, anti-virus, software licensing, digital rights management, encryption or authentication systems, including without limitation, keys, authorization tokens or enforcement criteria[.]'' [30] In an environment where each and every piece of software is increasingly integrated with both the underlying operating system and companion programs, each piece of software could be interpreted by the platform provider as a vehicle for potential interference with vital systems. This is a common argument of monopolists, for it is designed to delay or prevent competition in network services. Given this amount of discretion, Microsoft would be able to effectively prevent competitors from introducing products based upon Microsoft's ''determination'' that such products would be ''dangerous'' to the platform or other components.

The litany of ambiguities described in the preceding paragraphs are not a complete listing of the faults of the Proposed Final Judgment; rather, they are indicative of a systematic failure to consider the machinations of Microsoft and the extent to which even the smallest exception will undoubtedly be employed to preclude competition. Ultimately, consumers will suffer the most from these anticompetitive tactics because, with few alternative resources, they will be forced to buy what the incumbent has to offer, without the benefits of innovation and competition. For these reasons, the Court should reject the Proposed Final Judgment or order additional proceedings as described below.

III. The Court Should Either Reject the Decree As It Currently Stands or Order Additional Proceedings to Eliminate Evident Ambiguities

Unfortunately, under the Tunney Act, the Court has no power to modify the terms agreed to by the parties to the Proposed Final Judgment.[31] This leaves the Court with the difficult decision of whether to accept or reject the Proposed Final Judgment in its entirety. NetAction and CPSR respectfully recommend that the Court not shy away from rejection of the Proposed Final Judgment where it is apparent that ambiguous provisions, described above, will not ameliorate the extant competitive situation for consumers. Such approval would not be in the public interest as required by statute.[32] As an alternative to outright rejection, the Court should consider instituting additional proceedings to assure itself of a ''meeting of the minds'' among all parties to the agreement.

Microsoft, the Government, and the state parties to the Proposed Final Judgment will undoubtedly argue that the expenditures in time and resources necessary to come to a workable agreement justify approval of the Proposed Final Judgment at this time. On the contrary, however, the time and energy spent upon formulating a solution to a competitive problem that has plagued competitors and consumers for the better part of a decade argues for, and not against, an agreement that is stable, workable and not subject to multiple interpretations. The Court should nor rush to approve an agreement that will return to its docket in the near future as a result of ambiguities.

Instead, the Court must be careful to define the terms of the Proposed Final Judgment such that it neither inadvertently accepts an agreement that will not solve the problem nor rejects an agreement that would successfully ameliorate the problem and benefit consumers in the marketplace. Such terms have not yet been defined with respect to the Proposed Final Judgment. Fortunately, under the Tunney Act, the Court has broad powers to order further proceedings to ensure that the public interest is served.[33] In aid of its enforcement authority, then, the Court should order additional proceedings in this

[22] Proposed Final Judgment § VI.J <http://www.usdoj.gov/atr/cases/f9400/9495.htm>.

[23] Comments of Robert Litan, Roger Knoll and William Nordhaus on the Revised Proposed Final Judgment (filed Jan. 17, 2002); see also Jonathan Krim, Wording of Microsoft Deal Too Loose, Analyses Say. The Washington Post, E1, E10 (Jan. 18, 2002).

[24] The list of markets into which Microsoft is attempting to expand its dominance is growing. Consumer Federation of America and Consumers Union recently published a report, which describes Microsoft's current bundling strategy, which includes integrating email, instant messaging, calendars and contact lists, audio and video media players, digital photography, digital rights management, and identity verification. Dr. Mark N. Cooper. Consumer Federation of America. and Christopher Murray, Consumers Union, Windows XP/.NET: Microsoft's Expanding Monopoly, How It Can Harm Consumers and What the Courts Must Do to Preserve Competition (Sept. 26, 2001) <http://www.consumcrfed.org/WINXP anticompetitive study.pdf>.

[25] Proposed Final Judgment § IIT J <http://www.usdoj.gov/atr/cases/f9400/9495.htm>.

[26] Id.

[27] Proposed Final Judgment § III,D <http://www.usdoj.gov/atr/cases/f9400/9495.htm>.

[28] Competitive Impact Statement § IV.B.8 <http://www.usdoj.gov/atr/cases/f9500/9549.htm>.

[29] Proposed Final Judgment § III.H <http://www.usdoj.gov/atr/cases/f9400/9495.htm>.

[30] Proposed Final Judgment § III.J.I <http://www.usdoj.sov/atr/cases/9400/9495.htm.>.

[31] 15 U.S.C. § 16(b) et seq.

[32] 15 U.S.C. § 16(e).

[33] 33 Id.

case to ''pin down'' the meaning of the various provisions of the Proposed Final Judgment that appear to be subject to dispute.

In order to assure itself that Microsoft, the Government, and the state parties have reached an actual ''meeting of the minds,'' the Court should permit participants to the Tunney Act process to submit written questions to each of the three parties to the Proposed Final Judgment. Such questions should only cover what is or what is not permissible under the provisions of the Proposed Final Judgment, Each of the three parties should answer separately, with no consultation among them, as to whether the action in question is permissible. In order to prevent any ''backsliding'' in interpretation, each party should be required to submit an affidavit agreeing to be bound by its answers in any additional proceedings. If the three separate answers are in agreement as to the questions posed, the Court should recognize that a ''meeting of the minds'' has occurred and approve the Proposed Final Judgment forthwith. If the answers are not in agreement, the Court should reject the Proposed Final Judgment until such a ''meeting of the minds'' is reached and conclusively proven.

CONCLUSION

The Proposed Final Judgment, as it currently stands, does not offer consumers any hope of relief in the market for non-middleware software applications. Nor does it attempt to offer any relief to consumers using Windows 95, Windows 98, Windows NT, or Windows 2000. To achieve even the uncertain benefits claimed by the Proposed Final Judgment, consumers will have to buy new software and hardware, including new computers.

Moreover, the Proposed Final Judgment is disturbingly reminiscent of Microsoft I in its ambiguities. Indeed, it was an ambiguity in Microsoft I that led to this proceeding and forced consumers to endure five long years of legal wrangling over an issue that the Government thought had been decided between the parties. As it stands, the Proposed Final Judgment does not permit the Court to determine, with any reasonable degree of comfort or certainty, what relief in fact would be provided by the Proposed Final Judgment. Indeed, in a number of specific instances, the exceptions provided for in the Proposed Finn Judgment appear to permit Microsoft to escape large portions or even the entirety of its obligations.

On the present record, the Proposed Final Judgment cannot be found to be in the public interest. The Court should either reject the Proposed Final Judgment outright, or order additional proceedings, as described herein, to definitively clarify its terms.

Dated: January 28, 2002

Respectfully submitted,

Audrie Krause
Executive Director
NetAction
601 Van Ness Avenue, #631
San Francisco, CA 94102
(415) 775–8674
(415) 673–3813 fax
audrie@netaction.org
Coralee Whitcomb
President
Computer Professionals for Social Responsibility
P.O. Box 717
Palo Alto, CA 94302
(650) 322–3778
(650) 322–4748
cwhitcomb@cpsr.org
/s/ Patrick O'Connor
Jeffrey Blumenfeld
Michael D. McNeely
Patrick O'Connor
Counsel for NetAction and Computer Professionals for Social Responsibility
Blumenfeld & Cohen—Technology Law Group
http://www.technologylaw.com
1625 Massachusetts Avenue, NW
Suite 300
Washington, DC 20036
(202) 955–6300
(202) 955–6460 fax
jeff@technologylaw.com
cwhitcomb@cpsr.orgmike@technologylaw.com
patrick@technologylaw.com

MTC–00030605

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Renata B. Hesse, Esq.
Antitrust Division
U.S. Department of Justice
601 D Street NW, Suite 1200
Washington, DC 20530–0001

Re: United States v. Microsoft Corp. & State of New York v. Microsoft Corp., United States District Court for the District o[Columbia, Case Nos. 98–1232, 98–1233

Dear Ms. Hesse: On behalf of Sony Corporation (''Sony''), a Japan corporation, we offer the following comments pursuant to 15 U.S.C. °16(d) with regard to the Revised Proposed Final Judgment (the ''Proposed Judgment'') in the above captioned matter.

Introduction and Summary

As one of the world's leading technology and entertainment companies, Sony develops and manufactures a wide variety of audio, video, communications and information technology products. Sony is also an original equipment manufacturer (''OEM'') of personal computers and a direct licensee of Microsoft Corporation (''Microsoft'').

Microsoft maintains that certain provisions of the Proposed Judgment require it to impose ''standard'' licensing terms on Sony and other OEMs that could possibly erode protections for their intellectual property. Sony and other OEMs have made, and continue to make, significant investments in such intellectual property. These companies should be free to negotiate more favorable licensing provisions that restrict Microsoft's ability to leverage its market power to gain access to this intellectual property. Accordingly, Sony requests a clarification or modification of the Proposed Judgment to ensure that Sony and other similarly situated OEMs can negotiate appropriate protections for their intellectual property beyond those available in ''standard'' licensing terms and conditions.

Background

Like other OEMs, Sony has entered into a series of one-year Desk Top Operating System (DTOS) license agreements with Microsoft that contain terms relating to operating system products, royalties and payments. These license agreements incorporate other terms and conditions from longer term ''Business Terms Documents'' negotiated between Microsoft and its OEMs. Last year, Sony and Microsoft entered into the current Business Terms Document, which is effective for several years.

The current Business Terms Document contains several provisions relating to intellectual property. These provisions include ''non-assertion covenants'' in which OEMs, under certain conditions, agree not to assert patent claims against Microsoft and Microsoft licensees. Sony and its various affiliates, however, have a significant history and patent portfolio in various areas, including audio, video, software applications and other technologies. To protect its rights to assert these patents, Sony negotiated with Microsoft important limitations on the scope of these non-assertion covenants. Sony believes these limitations are necessary to protect its investments in intellectual property.

Section III.B of (he Proposed Judgment

Under the terms of the Proposed Judgment, Sony is a ''Covered OEM'' because it is one of the 20 OEMs with the highest worldwide volume of licenses of Windows Operating System Products. (Revised Proposed Final Judgment, ° VI.D.) The Proposed Judgment would require Microsoft to offer Sony and other Covered OEMs licenses on ''uniform terms and conditions.'' Section III.B of the Proposed Judgment provides:

B. Microsoft's provision of Windows Operating System Products to Covered OEMs

shall be pursuant to uniform license agreements with uniform terms and conditions. Without limiting the foregoing, Microsoft shall charge each Covered OEM the applicable royalty for Windows Operating System Products as set forth on a schedule, to be established by Microsoft and published on a web site accessible to the Plaintiffs and all Covered OEMs, that provides for uniform royalties for Windows Operating System Products, except that:

1. the schedule may specify different royalties for different language versions;

2. the schedule may specify reasonable volume discounts based upon the actual volume of licenses of any Windows Operating System Product or any group of such products; and

3. the schedule may include market development allowances, programs, or other discounts in connection with Windows Operating System Products, provided that:

a. such discounts are offered and available uniformly to all Covered OEMs, except that Microsoft may establish one uniform discount schedule for the ten largest Covered OEMs and a second uniform discount schedule for the eleventh through twentieth largest Covered OEMs, where the size of the OEM is measured by volume of licenses;

b. such discounts are based on objective, verifiable criteria that shall be applied and enforced on a uniform basis for all Covered OEMs; and

c. such discounts or their award shall not be based on or impose any criterion or requirement that is otherwise inconsistent with any portion of this Final Judgment.

(Revised Proposed Final Judgment ° III.B.)

The Department of Justice has explained that Section III.B was included in the Proposed Judgment to prevent Microsoft from retaliating against OEMs that market or promote products from Microsoft's competitors. In its ''Competitive Impact Statement,'' the Department of Justice stated:

In order to ensure freedom for the 20 Covered OEMs from the threat of Microsoft retaliation or coercion, Section III.B requires that Microsoft's Windows Operating System Product licenses with such OEMs contain uniform terms and conditions, including uniform royalties. These royalties must be established by Microsoft in advance on a schedule that is available to Covered OEMs and the Plaintiffs.

(Competitive Impact Statement at 27–28.)

The Department of Justice also has argued that Section III.B will eliminate ''any opportunity for Microsoft to set a particular OEM's royalty or license terms as a way of inducing that OEM to decline to promote non-Microsoft software or retaliating against that OEM for its choices to promote non-Microsoft software.'' (Id. at 28.) The Department concluded that Section III.B will ''ensure that OEMs can make their own independent choices.'' (Id.) Microsoft's Proposed Uniform Terms and Conditions

Microsoft has informed Sony that it intends to enter into a new DTOS license agreement with Sony embodying new ''uniform terms and conditions'' mandated by Section III.B. These ''uniform terms and conditions'' apparently represent an effort to create a standard set of terms and conditions from a variety of existing Business Terms Documents with various OEMs. Microsoft's efforts to comply with Section III.B, however, may have produced new ''uniform terms and conditions'' that weaken certain pro-competitive limitations on the non-assertion covenants.

Microsoft has been adjuged to have illegally maintained its operating system monopoly in violation of the Sherman Act. United States v. Microsoft Corp., 253 F.3d 34, 54 (DC Cir. 2001), cert. denied, 122 S.Ct. 350 (2001). This raises the possibility that Microsoft will use its monopoly power to force its OEM licensees to give up intellectual property rights, thus affording Microsoft the opportunity to expand its power. In the current Business Terms Document, Sony has negotiated narrow non-assertion covenants to reduce this possibility,

Microsoft maintains that Section III.B of the Proposed Judgment precludes it from accepting the non-assertion covenants in the Business Terms Document freely negotiated and signed last year with Sony. Microsoft insists that, in order to comply with Section III.B, Sony must agree to new ''uniform'' non-assertion covenants that may weaken previously negotiated protections for Sony's intellectual property. If Sony is forced to agree to these changes, 1:he new license agreement would diminish Sony's ability to assert its patents, particularly in markets outside the operating system market, and thereby may enable Microsoft to expand its power into new areas. Proposed Clarification or Modification.

Requiring Sony to accept new ''uniform'' provisions that may weaken Sony's existing intellectual property protections and allow Microsoft to leverage its power into other markets is contrary to the underlying principles of the Proposed Judgment. Forcing all OEMs to accept identical non-assertion covenants also fails to acknowledge or accommodate the important differences among companies regarding intellectual property portfolios and business activities in other markets.

Sony or any other Covered OEM desiring additional intellectual property protection to enable it to compete with Microsoft or other licensees should be free to negotiate for such provisions outside any framework imposed by the Proposed Judgment. Accordingly, Sony respectfully requests that the Proposed Judgment be clarified or modified to provide that OEMs desiring protection for their particular intellectual property interests can negotiate for more favorable non-assertion covenants than those contained in the ''uniform terms and conditions.'' As long as there is a baseline set of ''uniform terms and conditions'' available to all covered OEMs that would apply if the OEM is unsuccessful in its efforts to obtain more favorable terms, the OEM is protected from coercion or retaliation. If an OEM obtains different terms and conditions for non-assertion covenants, these new covenants could be made available to all Covered OEMs on a non-discriminatory basis to prevent Microsoft from withholding these provisions to coerce or retaliate against other Covered OEMs. The OEMs should be free to accept or decline the non-assertion covenants depending on their own interests and intellectual property portfolios.

The courts have recognized the threat to competition posed by a monopolist that uses its power in one market to secure domination of other markets. See Spectrum Sports v. McQuillan, 506 U.S. 447 (1993); Alaska Airlines v. United Airlines, 948 F.2d 536 (9th Cir. 1991), cert. denied, 503 U.S. 977 (1992). An antitrust settlement should not enable a monopolist to erode the intellectual property barriers that would otherwise limit the monopolist's penetration of other markets. By including the clarifications or modifications described above, the Proposed Agreement would avoid this unfortunate consequence.

Very truly yours,
Debra A. Valentine
of O'MELVENY & MYERS LLP

MTC–00030606

Date: 1/28/02
To: U.S. Department of Justice
Fax:[1] 202–307–1454
From: The Progress & Freedom Foundation
Ms. Brooke Emmerick
Phone: 202–289–8928
Fax: 202–289–6079
Pages:32
Subject: Microsoft Settlement, Tunney Act Comments

Note: this document has also been submitted via email.

BEFORE THE UNITED STATES DEPARTMENT OF JUSTICE UNITED STATES OF AMERICA, Plaintiff, v. Civil Action No, 98–1232 (CKK)

MICROSOFT CORPORATION, Defendant.

STATE OF NEW YORK ex rel.

Attorney General Eliot Spitzer, et al., Plaintiffs, Civil Action No. 98–1233 (CKK)

v.

MICROSOFT CORPORATION Defendant.

Comments of The Progress & Freedom Foundation on the Revised Proposed Final Judgment and the Competitive Impact Statement

Jeffery A. Eisenach, Ph.D.
President
Thomas M. Lenard, Ph.D.
Vice President for Research
THE PROGRESS & FREEDOM FOUNDATION
1301 K. St., NW
Washington, DC 20005
(202) 289–8928
(202) 289–6079 Facsimile

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I. Introduction

These comments on the Proposed Final Judgment[1] (''PFJ'') and the Competitive Impact Statement[2] (''CIS'') in the Microsoft ease are submitted to provide the Department of Justice (''DOJ'') and the Court with information and analysis based on nearly five years of research by the authors on the legal, policy and economic implications of this landmark proceeding. Based on that research, it is our assessment that (a) the PFJ fails to address meaningfully the violations of law found by this court and upheld by the U.S. Court of Appeals and its entry by the court manifestly is not in the public interest; (b) the CIS fails to meet the standard of analysis demanded by the law mad occasioned by the magnitude of the issues involved; and (e) the public interest will best be served through imposition of a ''hybrid'' structural remedy or, if the court chooses not to impose a structural remedy, a conduct remedy modeled after the proposals of the remaining litigating states.

A. The Authors

Dr. Eisenach is President and Senior Fellow at The Progress & Freedom Foundation,[3] a non-profit research and educational institution dedicated to analyzing the impact of the digital revolution and its implications for public policy, and an Adjunct Professor at George Mason University Law School. As a professional economist, he has been actively engaged in the analysis of competition and regulatory policy issues for more than 20 years, and has served in senior positions at the Office of Management and Budget mad the U.S. Federal Trade Commission and as a consultant to the U.S. Sentencing Commission on criminal sentencing guidelines for corporations. He has also served on the faculties of Harvard University's Kennedy School of Government, the University of Virginia and Virginia Polytechnic institute and State University.

Dr. Lenard is Vice President and Senior Fellow at The Progress & Freedom Foundation and a professional economist with 30 years of experience in academia, government, private consulting and the non-profit sector. He has worked on a wide range of regulatory and antitrust issues covering a broad span of industries, and has consulted on antitrust cases for both private firms and the Federal Trade Commission. In government, he has held senior economic positions at the Council on Wage and Price Stability, the Office of Management and Budget and the Federal Trade Commission. A principal focus of his research has been the benefits and costs of regulatory interventions into the economy and the analytical underpinnings needed to make informed decisions about government interventions. Both Drs. Eisenach and Lenard have done extensive work on the economics of high-tech markets in general, and the Microsoft case in particular. They are co-authors of the annual Digital Economy Fact Book.[4] co-editors of Competition, Innovation and the Microsoft Monopoly: Antitrust in the Digital Marketplace and authors of numerous other papers on these and related topics.[5]

B. Summary of Comments

The PFJ is intended to settle the government's antitrust case against Microsoft and was agreed to by the United States, 9 of the 18 states that were also party to suit, and by Microsoft. The nine remaining states and the District of Columbia (the ''Litigating States'') have not agreed to the PFJ and are pursuing more stringent relief through a remedy hearing at the District Court.[6] The DOJ is required by the Antitrust Procedures and Penalty Act (''APPA'')[7] to prepare a CIS, which is intended to analyze the competitive implications of the PFJ and any alternatives to it.

The PFJ does not serve the public interest mid will not achieve the government's objective that it ''halt continuance and prevent recurrence of the violations of the Sherman Act by Microsoft that were upheld by the Court of Appeals and restore competitive conditions to the market.''[8] Indeed, much of the behavior found by the Court of Appeals to be anticompetitive would be permitted under the PFJ. Further, even if the PFJ did preclude such behavior it would fail to restore competitive conditions because it fails to affect the behavior of participants in the marketplace.

The CIS does not satisfy the government's obligation to provide the District Court with an analytical basis for determining whether the PFJ is hi the public interest. The APPA clearly requires, and good public policy demands, an ''evaluation'' of the proposed remedy and major alternatives to it. The C1S does not present such an evaluation. It does not explain why the PFJ will achieve the intended results, but merely asserts that it will do so. It also does not explain why the DOJ concluded that the PFJ will better serve the public interest than major alternatives, but merely states that ''[t]he United States ultimately concluded that the requirements and prohibitions set forth in the Proposed Final Judgment provided the most effective and certain relief in the most timely manner.''[9] The DOJ has produced no real analysis of the relative merits of alternative forms of relief to guide the District Court in deciding whether to approve the PFJ. Indeed, the CIS fails by a wide margin to meet the standards required of analyses of regulatory proposals routinely promulgated by government agencies.

Accordingly, the District Court should not accept the PFJ, but should, instead, expand its hearing on the Litigating States Proposal (''LS Proposal'') to include the full range of major alternatives. This would permit the District Court to gather the information needed to make an informed judgment concerning which of the remedy proposals will best serve the public interest.

The alternatives that should be considered include:

. The PFJ.

. The proposals of the Litigating States.

. Major structural remedies, including the vertical-divestiture remedy initially adopted by the District Court and the ''hybrid'' remedy proposed by Dr. Lenard and others.

Among these remedies, the ''hybrid'' structural approach would best serve the public interest and maximize net economic benefits to consumers.

In the sections that follow, we provide, first, a brief restatement of the facts and legal background in this case, including a brief discussion of what we believe to be the appropriate standards by which remedial action should he judged. Next we discuss the shortcomings in the PFJ and the CIS, explaining why the PFJ will not achieve the government's objectives or serve the public interest and demonstrating that the CIS falls far short of the analytical standard that should be demanded by the court. Finally, we turn to an evaluation of the remedial alternatives mad explain why we believe that (a) a ''hybrid'' structural remedy would best serve consumers and competition and (b) that if the court chooses not to impose a structural remedy, the LS Proposal is superior to the PFJ.

II. Background: The Facts, the Law and the Remedy

The U.S District Court[10] found, and the U.S. Court of Appeals[11] affirmed, a pattern of Sherman Act violations by Microsoft that had the effect of foreclosing competition in the market for personal computer operating systems. The District Court ordered a structural remedy, which was overturned by the Appeals Court, which remanded the remedy issue back to this court. The Appeals Court did not prescribe or prohibit adoption of any particular remedial actions by this court.

A. The Illegal Conduct and Its Effects The Appeals Court unanimously affirmed the core of the government's case against Microsoft, finding that the company had undertaken a broad array of anticompetitive practices to maintain its monopoly in personal computer operating systems, in violation of Section 2 of the Sherman Act. Microsoft's strategy was to use its monopoly

[1] United States v. Microsoft Corp., Stipulation and Revised Proposed Final Judgement (November 6, 2001) (hereafter ''PFJ'').

[2] United States v. Microsoft Corp., Competitive Impact Statement (November 15, 2001) (hereafter ''CIS'').

[3] These comments reflect the views of the authors and do not represent the views of The Progress & Freedom Foundation, its officers or board of directors.

[4] See Jeffrey A. Eisenach, Thomas M. Lenard and Stephen McGonegal, The Digital Economy Fact Book 2001 (Washington: The Progress & Freedom Foundation, 2001).

[5] See Jeffrey A. Eisenach and Thomas M. Lenard, ads., Competition, Innovation and the Microsoft Monopoly. Antitrust in the Digital Marketplace, Kluwer Academic Publishers, 1999; Thomas M. Lenard, Creating Competition in the Market for Operating Systems: A Structural Remedy for Microsoft. (Washington: ''rile Progress & Freedom Foundation, 2000), http://www.pff.org/remedies/htm; and Thomas M. Lenard, ''Creating Competition in the Market for Operating Systems: Alternative Structural Remedies in the Microsoft Case,'' George Mason Law Review, Vol., 9, Spring 2001,803–841.

[6] United States v. Microsoft Corp., Plaintiff Litigating States'' Remedial Proposals, (December 7, 2001) (hereafter ''LS Proposal'').

[7] 15 USCS 16 (b-h)

[8] CIS at 2.

[9] CIS at 63.

[10] United States v. Microsoft Corp., 84 F. Supp. 2d 9 (DCCirc 1999) (''Findings of Fact''); United States v. Microsoft Corp., 87 F. Supp. 2d 30 (DC Circ. 2000) (''Conclusions of Law'').

[11] United States v. Microsoft Corp., 253 F 3d, at 6 (DC Circ. 2001).

power to prevent the emergence of any new technology that might compete with Windows. Microsoft's anticompetitive activities were particularly directed against two products—the Netscape browser and Sun's Java programming language—that could support operating-system-neutral computing and thereby erode Microsoft's market position. In summary, the District Court found, and the Appeals Court affirmed, that:

. Microsoft has monopoly power in the market for Intel-compatible PC operating systems, with a market share of greater than 95 percent. Microsoft's market is protected by a substantial barrier to entry—the ''applications barrier to entry''—that discourages software developers from writing applications for operating systems that do not already have an established base of users.

. Microsoft effectively excluded rival browsers from the two most efficient means of distribution—pre-installation by Original Equipment Manufacturers (OEMs) and distribution by Internet Access Providers (IAPs).

. Microsoft imposed restrictions on its Windows licenses that effectively prevented OEMs from pre-installing any browser other than Interact Explorer (IE).

. Microsoft's technological binding of IE to Windows deterred OEMs from pre-installing rival browsers and consumers from using them.

. Microsoft's contracts with IAPs—for example, agreeing to give AOL preferential placement on the Windows desktop in exchange for AOL's agreement not to distribute any non-Microsoft browser to more than 15 percent of its subscribers and to do so only at the customer's explicit request—blocked the distribution of a rival browser.

. Microsoft's deals with Independent Software Vendors (ISVs)—for example, giving preferential support to ISVs that used IE as the default browser in software they develop—and Apple-prohibiting Apple from pre-installing any non-Microsoft browser—were similarly exclusionary.

. Microsoft's agreements with ISVs that made receipt of Windows technical information conditional on the ISVs'' agreement to use Microsoft's version of the Java Virtual Machine (JVM) exclusively were anticompetitive. Microsoft also deceived Java developers into believing that its tools were not Windows-specific and were consistent with Sun's objective of developing cross-platform applications.

. Microsoft's pressuring of Intel to stop supporting cross-plat form Java—by threatening to support an Intel competitor's development efforts—was exclusionary.

Microsoft was clearly successful in its efforts to eliminate threats to its desktop monopoly. Through its anticompetitive activities, Microsoft achieved dominance in the browser market and forestalled the development of such cross-platform technologies as the Netscape browser and Java that could have eroded the applications barrier to entry. The promise of operating-system-neutral computing was that it would inject competition into the market for operating systems, which would foster innovation throughout the industry. By preventing the development of competition, Microsoft's illegal conduct thwarted innovation and harmed consumers.

B. Appropriate Criteria for a Remedial Action

The Supreme Court has stated that he purpose of remedial action in an antitrust case is to ''terminate the illegal monopoly, deny to the defendant tile fruits of its statutory violation and ensure that there remain no practices likely to result in monopolization.[13] In other words, a remedy must be effective in the present (terminating the monopoly), the past (expropriating ill-gotten gains), and the future (preventing similar conduct going forward).

As professional economists, we s??ggest it is especially important to look to the future, where economic actors will make decisions based on the incentives inherent in whatever remedy the court imposes. The remedy should not only address the illegal practices Microsoft already has employed to maintain its operating system monopoly, it should also—as the Supreme Court has said—address practices that Microsoft might employ in the future to erect barriers to operating system competition or to use anticompetitive practices to leverage its monopoly beyond the desktop into new phases of computing. In a business that moves as rapidly as the software marketplace (and other information technology and communications markets Microsoft is now entering or is likely to enter soot) it is particularly important that the remedy be forward looking.

The DOJ claims that the PFJ meets these standards, and ''will eliminate Microsoft's illegal practices, prevent recurrence of the same or similar practices, and restore the competitive threat that middleware products posed prior to Microsoft's unlawful undertakings.''[14] For reasons discussed at length below, we disagree. Here, we address two issues relating to the standard by which any remedy should be judged.

First, it is noteworthy that the DOJ does not claim the PFJ achieves the goal of denying Microsoft the fruits of its violations, and clearly it will not. Such restitution is important not only to ''make whole'' the victims of Microsoft's illegal activity (e.g., the United States), but also to establish appropriate incentives on a going forward basis. In general, allowing violators to retain the fruits of their illegal conduct deprive the antitrust laws of much of their force, because it sends a signal to violators that the returns to their behavior are positive—even when they are caught. With $42 billion in the bank, on wonders how Microsoft's senior management could read the proposed PFJ any other way.

Second, and relatedly, DOJ's stated goal of restoring ''the competitive threat that middleware products posed prior to Microsoft's unlawful undertakings'' is not the appropriate objective, and certainly is not equivalent to the Supreme Court's standard of ''terminat[ing] the illegal monopoly.'' The competitive threat posed by the Netscape browser and Java was quantitatively relatively small at the tin: that Microsoft's illegal campaign against them was undertaken. But it was clear, certainly to Microsoft, that their competitive potential in the dynamic software marketplace was very significant. Had Microsoft not engaged in illegal activities, the competitive significance o t'' hose products would be much greater today than it was at the time.

There is a useful analogy here to simple commercial damage cases. If, for example, an individual or a company incurs monetary damages from actions in the past, compensation is generally based on the present value of those damages, typically calculated by bringing the damage amount forward (from the time of the damage to the present) at a normal rate of return. That would be the only way for the damaged party to be made whole. Similarly, society has been damaged by Microsoft's actions. For society to be made whole, competition should, to the extent possible, be restored to what it would be today in the absence of Microsoft's illegal conduct.[15] Equally important on a going forward basis, however, Microsoft should not be permitted to earn continuing returns based upon its illegally enhanced monopoly position. To do so would be to allow the company not only to retain the fruits of its illegal conduct in the past but to continue harvesting those fruits indefinitely.

III. The CIS and the PFJ: Flawed Analysis of a Flawed Remedy

DOJ and Microsoft prefer a PFJ which contains a number of restrictions on Microsoft's conduct on a going forward basis. The questions before the court are whether entry of the PFJ is consistent with the purpose and intent of the Sherman Act and, in addition, whether, under the APPA, it is consistent with the public into rest. To facilitate the court's deliberations on the latter issue, the APPA requires the DOJ to submit a CIS.[16] However, the CIS submitted in this proceeding contains virtually no analysis of either the PFJ or alternative remedies. It represents nothing more than a set of unsupported assertions, and accordingly should be given little deference by the court.

In this section, we briefly describe the main provisions of the PFJ. Next, we explain why the CIS fails to meet a reasonable standard of substantive analysis. Third, we provide some examples of shortcomings in the PFJ which would have been obvious had DOJ performed a more complete analysis in the CIS.

A. Major Provisions of the PFJ

As described in the CIS, the proposed PFJ contains seven major provisions. In brief summary, they are:

. OEMs would have the freedom to support and distribute non-Microsoft middleware products or operating systems without fear of retaliation by Microsoft.

. To help ensure against retaliation, Microsoft would be required to provide

[13] 253 F 3d at 99–100, quoting (United States v. United Shoe Mach. Corp), 391 U.S. 244,250 (1968).

[14] CIS at 3.

[15] To truly be made whole, society would in addition need to be compensated for the benefits it lost due to the absence of competition in the intervening years, which is probably not possible.

[16] CIS at 3–4.

uniform licensing terms to the 20 largest computer manufacturers.

. Computer manufacturers would have the freedom to feature and promote non-Microsoft middleware and customize their computers to use non-Microsoft middleware as the default.

. Microsoft would be required to disclose the interfaces and technical information that its own middleware uses, so that ISVs can develop competitive middleware products.

. Microsoft would be required to disclose communications protocols necessary for server and Windows desktop operating system software to interoperate with each other.

. Microsoft would be prohibited from retaliating against ISVs or IHVs that develop or distribute software that compeles with Microsoft middleware or operating system software.

. Microsoft would be prohibited from entering into exclusive contracts concerning its middleware or operating system products.

The CIS claims that these provisions, and the supporting provisions pertaining to enforcement, ''will eliminate Microsoft'' illegal practices, prevent recurrence of the same or similar practices, and restore the competitive threat that middleware products posed prior to Microsoft's unlawful undertakings.'' But the CIS presents virtually no analysis to support this claim.

B. The Competitive Impact Statement

The CIS does not meet the standards established by the APPA and does not provide sufficient analysis for this court to make an informed decision on whether the PFJ is in the public interest. Section 16(b)(3) of the APPA requires that the CIS include ''an explanation of the proposal ... and the anticipated effects on competition of such relief'' (Emphasis added.)

Section 16(b)(6) further requires ''a description and evaluation of alternatives to such proposal actually considered by the United States.'' (Emphasis added). Under Section 16(e), the District Court is required to determine that the consent judgment is in the public interest and in making that determination ''may consider...anticipated effects of alternative remedies....'' Taken together, these provisions make clear that the CIS was intended by Congress to serve as a guide to the court in evaluating the proposed relief relative to other alternatives which might better serve the public interest, not simply as a pro forma set of claims and assertions. Yet the CIS in this case fails even to fully ''explain,'' and certainly cannot be said to ''evaluate,'' either the likely effects of either the PFJ or the available alternatives. Such an analysis would seem especially important in a fully-litigated Tunney Act case such as this one, where a prior finding of liability suggests a lower degree of deference to the PFJ than would otherwise be appropriate, and thus a higher burden on the court to evaluate alternatives.

How should the court evaluate the adequacy of the CIS? Three sets of criteria present themselves.

First, does the CIS satisfy the plain language of the statute? Second, how does it compare with previous CIS's in similarly significant cases? Third, how does it compare with the standards of analysis that are required to be performed in similar situations, such as agency rulemakings? This CIS fails all three standards.

First, does the CIS satisfy the plain language of the statute? It depends on how the words ''explain,'' mad ''evaluate'' are defined. To defend successfully the plain-language adequacy of the CIS, the DOJ would have to adopt a very narrow interpretation of both words. Granted, the CIS devotes 43 pages[17] to reciting and, DOJ presumably would argue, ''explaining'' the provisions or the PFJ. What the CIS does not do at any point, however, is explain ''the anticipated effects [of the PFJ] on competition.''

The semantic sleight of hand upon which DOJ relies to avoid this obligation is found on page 24 of the CIS. There, DOJ reminds us that ''Restoring competition is the 'key to the whole question of an antitrust remedy,'' du Pout, 366 U.S. at 326.'' Then it continues with a clever subterfuge: ''Competition was injured in this case principally because Microsoft's illegal conduct maintained the applications barrier to entry....Thus, the key to the proper remedy in this ease is to end Microsoft's restrictions on potentially threatening middleware....''[18] (Emphasis added.)

There, in the word ''thus,'' lies the sum and the entirety of the CIS's explanation of the connection between the PFJ and its anticipated effects on competition. For as explained in more detail below, it is hardly obvious, indeed, it is highly unlikely, that simply ending Microsoft's illegal restrictions on middleware would have any significant effect on competition on a going forward basis. Even in these semantically troubled times, we submit, the word ''thus'' cannot be taken as the ''explanation'' the law requires.

But the CIS's discussion of the PFJ must be counted ,an analytical masterpiece when compared with its treatment of alternative remedies. In contrast to the lengthy, if failed, treatment accorded the PFJ, the CIS attempts its ''evaluation of alternatives'' in three pages. Not surprisingly, given its brevity, the analysis is limited in how much light it can shed on the DOJ's decisionmaking process or the relative merits of the alternatives before the court. With respect to structural remedies, for example, the evaluation consists of 49 words: ''After remand to the District Court, the United States informed the court and Microsoft that it had decided, in light of the Court of Appeals opinion and the need to obtain prompt, certain and effective relief, that it would not further seek a breakup of Microsoft into two businesses.''[19] Receiving even less attention are six other remedy alternatives, which are summarily dismissed in a single paragraph, and an unknown number of ''others received or conceived'' which, in apparent direct violation of the APPA, are not even described.[20] There simply is no semantic standard by which this treatment of the alternative remedies can possibly be considered ''an evaluation.''

In summary, the CIS submitted by the DOJ in this case fails the first test the court should apply: It does not fulfill the plain language requirements or either Section 16(b)(3) or Section 16(b)(6) of the APPA.

Any effort the DOJ may make to defend the CIS would be on firmer ground if it could argue it is simply following past practice. While we believe, as suggested above, that the CIS in this case should be held to a higher standard than in cases where the issues have not been fully litigated and a finding of liability has not been entered, at least the DOJ could claim it was adhering to precedent. Even by the standards of past cases, however, this CIS falls far short.

Of course, Tunney Act cases vary in significance and complexity. The best standard for comparison for this case would appear to be the CIS filed in the AT&T case in 1982.''[21] In that case as in this one, DOJ was tasked with explaining and evaluating a Proposed Final Judgment aimed at resolving a continuing series of complex antitrust actions affecting one of the most important sectors, and companies, in the U.S. economy.

The AT&T CIS differs markedly from the CIS in this proceeding both in its explanation of the competitive effects and in its evaluation of alternative remedies. Section Ill of the AT&T CIS[22] presents a comprehensive explanation of the proposed remedy and its anticipated effects on competition. Indeed, in stark contrast to the CIS in this case, the AT&T CIS contains, in Section III.E, an extensive discussion specifically detailing ''The Competitive Impact of the Proposed Modification.'' The section is a lengthy one, explaining in detail how each provision of the proposed remedy is expected to affect competition on a going forward basis, beginning as follows:

Put in simplest terms, the functional divestiture contemplated by the proposed modification will remove from AT&T the power to employ local exchange services in ways that impede competition in interdependent markets, and will remove from the Bell Operating Companies (''BOCs''), which will retain such power, any incentive to exercise it. The United States believes, therefore, that the modification% divestiture requirement, and its complementary injunctive provisions, will substantially accelerate the development of competitive markets for interexchange services, customer premises equipment, and telecommunications equipment generally.[23]

The ensuing pages present a careful analysis of why the government believes this to be the case and what the precise impacts on competition are likely to be. The proposed remedy will ''accelerate the emergence of competition in interexchange services,''[24] ''prevent the reemergence of the ... incentive

[17] CIS, 17–60.

[18] CIS at 24.

[19] CIS at 61.

[20] CIS at 63.

[21] United States v. Western Electric Company, Inc. and American Telephone & Telegraph Company, Competitive Impact Statement (February 17, 1982), 47 FR. 7170–01. (Hereafter AT&T CIS). Of course, unlike this case, the PFJ in the AT&T case was entered prior to any finding of liability.

[22] AT&T CIS at 7173–7180.

[23] AT&T CIS at 7178.

[24] AT&T CIS at 7178.

and ability to leverage regulated monopoly power into the customer premises equipment market,''[25] make AT&T ''subject to competition in all of its services,''[26] ''remove the source of AT&T's monopoly power ,and its ability to leverage monopoly power into related markets,''[27] and ''prevent the creation anew of incentives and abilities in the BOCs to use their monopoly power to undercut rivals in competitive markets.''[28] There is every reason to believe that, divested of the BOCs, AT&T wilt be a procompetitive force in the markets that it enters. As a result of the modification, it is likely that AT&T will expand not only its product lines, but also the areas in which it sells telecommunications equipment.''[29]

The authors have searched in vain, as will the court, for any similar explanation in the Microsoft CIS. As a procedural matter, the absence of such explanations flies in the face of the APPA. As a substantive one, it strongly suggests such statements are lacking for the simple reason that they are not justified by the remedy Microsoft and the DOJ are asking the court to adopt.

The AT&T CIS also differs from the one in this case in its treatment of'' alternative remedies.

The AT&T CIS appears to meet the requirements of the APPA by describing in some detail the alternative remedies considered and evaluating their likely impacts'' on competition relative to those expected from the one proposed. ''The United States believes,'' it concludes, ''that the [main alternative] did not approach even remotely the effectiveness of the proposed modification in achieving conditions that would assure full competition in the telecommunications industry.''[31] Again, such evaluative language is simply absent from the CIS in this case. And again, one cannot help but conclude that, had today's DOJ conducted the same careful analysis as that conducted 20 years ago, it might well have reached different conclusions in the current case.

In summary, then, the CIS not only fails the satisfy the plain language of the APPA, but also fails to meet the standard established by DOJ for a CIS in the most directly analogous case. The third criteria by which the court should evaluate the sufficiency of the CIS is whether it meets the standards of analysis that are required to be performed in similar situations, the most obvious of which is agency rulemakings.

For at least the last 20 years, agencies have been required to undertake a detailed regulatory impact analysis when they propose major regulatory actions. Under E.O. 12291 (in effect during the Reagan and Bush Administrations), and E.O. 12866 (issued by President Clinton and still in effect), government agencies have been expected to prepare a detailed analysis of the expected benefits and costs of major regulatory proposals and alternatives to them.[32] While the PFJ is technically not a regulation that would fall under E.O. 12866, the magnitude of its impact far exceeds the $100 million threshold that defines a ''major rule'' and thus triggers the requirement for a detailed analysis.

The analysis of regulatory interventions in the economy, which is what the PFJ in this case is, is not a black art. Increasingly, and on the basis of more than two decades of performing such analyses of all major rules, regulatory analysis has become a scientific process comprised of distinct steps and containing specific elements. E.O. 12866, for example, lays out specific criteria such analyses should meet, including: ''(i) An assessment, including the underlying analysis, of benefits anticipated from the regulatory action (such as, but not limited to, the promotion of the efficient functioning of the economy and private markets ....) together with, to the extent feasible, a quantification of those benefits; (ii) An assessment, including the underlying analysis, of costs anticipated from the regulatory action ... together with, to the extent feasible, a quantification of those costs; and (iii) An assessment including the underlying analysis, of the costs and benefits of potentially effective and reasonably feasible alternatives to the planned regulation....''

The specific analytical techniques to be used in such evaluations are further described in guidance from the Office of Management and Budget issued January 11, 1996,[33] and reiterated most recently by OMB on June 19, 2001.''[34] These guidelines require agencies, before issuing any major regulation, to take into account such issues as whether more ''performance oriented'' approaches are possible, the impact of alternative levels of stringency mad effective dates, and alternative methods of ensuring compliance, and to perform evaluations that take into account ''discounting,'' ''risk and uncertainty,'' and ''non-monetized benefits and costs.'' Each analysis, the guidance demands, must ''provide information allowing decisionmakers to determine that: There is adequate information indicating the need for and consequences of the proposed action; The potential benefits to society justify the potential costs ...; The proposed action will maximize the net benefits to society...; [and] .... Agency decisions are based on the best reasonably available scientific, technical, economic, and other information.''

The requirements of the APPA with respect to Competitive Impact Statements are, of course, far less specific than those listed above. Bat the purpose of the APPA in requiring a CIS is presumably similar to the purpose of regulatory analyses: To allow decisionmakers, in this case the court, to understand the ramifications of their actions relative to alternative choices. By the standards of modern policy analysis, DOJ's CIS fails to perform this function at the level the court should expect, especially in a case of this magnitude.

To repeat what we asserted at the outset of this section, the court might evaluate the CIS in this case by three standards: First, does the C1S satisfy the plain language of the statute? Second, how does it compare with previous CIS's in similarly significant cases? Third, how does it compare with the standards of analysis that are required to be performed in similar situations, such as agency rulemakings? This C1S Pails ale three standards.

C. The PFJ Will Not Have Its Claimed Effect, Nor Any Pro-Competitive Effect

In fact, a close reading of the language of the PFJ indicates that it will not do what the DOJ claims. Moreover, even if DOJ's claims are taken at face value, the PFJ will not have its intended effect because of the realities of the marketplace. Indeed, this is the only conclusion that can be reached based upon a real analysis of the ''competitive impact'' of the PFJ, which is to say an analysis of how, if at all, the provisions of the PFJ will change the behavior of participants in the marketplace.

Other commentators will undoubtedly thoroughly catalogue the loopholes in the PFJ, of which there are many, and it is not our intention to do so here. It is, however, illustrative of the defects of the PFJ to analyze it through the lens of the Netscape browser experience, since so much of Microsoft's liability concerns its actions toward the Netscape browser. Accordingly, much of the PFJ is directed at precluding the type of anticompetitive acts that Microsoft undertook against Netscape (even though the browser war is over and the industry has now moved on to a different stage). But, the PFJ does not even succeed in this minimal goal—of creating the conditions under which the Netscape browser could have competed without being subject to Microsoft's exclusionary practices. Indeed, the PFJ specifically permits many of the exclusionary practices in which Microsoft engaged:

. Section III.A of the PFJ is supposed to protect OEMs from retaliation by Microsoft if they distribute non-Microsoft products. However, the language of Section III.A prohibits Microsoft from retaliating against an OEM for ''developing, distributing, promoting, using, selling, or licensing any software that competes with Microsoft Platform Software or any product or service that distributes or promotes any Non-Microsoft Middleware.'' (Emphasis added). (Microsoft Platform Software is defined as including (i) a Windows Operating System Product and/or (ii) a Microsoft Middleware Product,) While the Netscape browser was a potential competitor for the Microsoft operating system, it never became an actual competitor. Morcover, at the time Netscape introduced its browser, Microsoft did not have a comparable Middleware Product. Thus, the language of III.A would have permitted Microsoft to retaliate against OEMs

[25] AT&T CIS at 7179.

[26] AT&T CIS at 7179.

[27] AT&T CIS at 7179.

[28] AT&T CIS at 7179.

[29] AT&T CIS at 7179.

[30]

[32] See E.O. 12291 (February 17, 1981) and E.O. 12866 (September 30, 1993).

[33] Office of Management and Budget, Economic Analysis of Federal Regulations Under Executive Order 12866 (January 11, 1996)(available at www.whitehouse.gov/omb/inforeg/riaguide.html).

[34] Office of Management and Budget, Memorandum for the Beads of Executive Departments and Agencies: Improving Regulatory Impact Analyses (June 19, 2001)(available at www.whitehouse.gov.omb/memoranda/m01–23.html)

for distributing the Netscape browser at the time it was introduced.

. Similarly, Section III.F.1 prohibits Microsoft from retaliating against any ISV or IHV for ''developing, using, distributing, promoting or supporting any software that competes with Microsoft Platform Software or any software that runs on any software that competes with Microsoft Platform Software....'' (Emphasis added). The prohibitions in Section III.F.2 on Microsoft's relations with ISVs are also triggered by software that ''competes with Microsoft Platform Software'', which the Netscape browser did not initially do.

. Section III.G.2 is intended to prevent similar exclusionary behavior with respect to IAPs and ICPs, by prohibiting Microsoft from entering into any agreement with ''any IAP or ICP that grants placement on the desktop or elsewhere ... on the condition that the IAP or ICP refrain from distributing, promoting or using any software that competes with Microsoft Middleware.'' (Emphasis added). Again, Netscape's browser was a new product that did not compete with any Microsoft product at the time it was introduced.

. Section III.C is intended to prevent restrictive agreements with OEMs by, for example, preventing Microsoft from restricting the ability of its OEM licensees from ''[l]aunching automatically ...any Non-Microsoft Middleware if a Microsoft Middleware Product that provides similar functionality would otherwise be launched ....'' (See Section III.C.3, emphasis added). Under this language, Microsoft can preclude its OEM licensees from permitting the automatic launch of a new product if Microsoft does not have a similar product or if the Microsoft product does not have ''similar functionality'' (obviously, a term open to interpretation). Again, when the Netscape browser was launched, Microsoft did not have a similar product.

. Section III.D is intended to preclude Microsoft from excluding rival products by denying them the technical information they need to interoperate with the Windows operating systems. It requires Microsoft to ''disclose to ISVs, IHVs, IAPs, ICPs, and OEMs, for the sole purpose of interoperating with a Windows Operating System Product ... the APIs and related Documentation that arc used by Microsoft Middleware to interoperate with a Windows Operating System Product.'' (Emphasis added). If, however, Microsoft does not produce an analogous product, it might not use the APIs needed for a new application, such as the Netscape browser, to get started.

. Section III H contains a variety of provisions designed to enable choice of Non-Microsoft Middleware Products on the part of users and OEMs. The PFJ explicitly states, however, that ''Microsoft's obligations under this Section III.H as to any new Windows Operating System Product shall be determined based on the Microsoft Middleware Products which exist seven months prior to the last beta test version (i.e., the one immediately preceding the first release candidate) of that Windows Operating System Product.'' At the time the Netscape browser was introduced, there was no comparable Microsoft Middleware Product.

. Finally, Non-Microsoft Middleware Products arc defined to include products ''of which at least one million copies were distributed in the United States within the previous year.'' (Section VI.N). Thus, regardless of any of the other provisions, the PFJ permits exclusionary behavior against new products that arc trying to get established.

In sum, under the provisions of the PFJ Microsoft would have been permitted to engage in anticompetitive practices against the Netscape browser because the browser did not compete against the Windows operating system and because Microsoft did not at the outset have a comparable product. Moreover, at least in the early stages, the Netscape browser would not have been covered because a million copies had not been distributed in a single year. The DOJ obviously feels that the fabled entrepreneurs of Silicon Valley, working in their garages, are not worthy of protection against Microsoft under the PFJ. It is especially ironic that Microsoft, which has dedicated so much rhetoric to persuading the courts and the public that its monopoly could be overturned at any moment by the proverbial entrepreneur working out of her garage, should seek to preserve the right to squash precisely such competitive threats.

More broadly, the requirement that Microsoft have a comparable product in order to trigger some of the PFJ's provisions creates perverse incentives. It may discourage Microsoft from introducing its own product, because to do so triggers provisions restricting its ability to exclude a potential competitor. The result could be that consumers would be deprived entirely of a useful middleware product that might potentially compete with the Windows operating system, because Microsoft is able to engage in exclusionary practices against another firm and does not find it in its interest to introduce its own product.

But the PFJ is flawed at an even deeper level: Even if it did what DOJ and Microsoft say it would, its effect on firms that operate in Microsoft's markets and its ability to restore competition in those markets would be minimal at most. Most of the PFJ is intended to prevent Microsoft from retaliating against OEMs, ISVs, IAPs and others that distribute, develop or otherwise support software that competes with Microsoft middleware. Under the terms of the PFJ, however, these entities would have little incentive to promote competitive middleware. This is principally because, despite the Appeals Court ruling that Microsoft's integration of the browser and the operating system was anticompetitive, the PFJ would allow Microsoft to continue to bundle its middleware (and other) products with its operating system. Indeed, Microsoft's new XP software incorporates new functionality into the Windows operating system as never before. It includes, among other things, the IE browser, Microsoft's instant messaging and email software, Windows Media Player and the Microsoft Passport digital authentication software. All of these functions are bundled together and the combined package is sold at a fixed price.

Thus, OEMs have virtually no incentive to customize their offerings with non-Microsoft software. To do so involves an additional cost for the non-Microsoft software when compariable functionality is provided by Microsoft at no additional cost. An OEM that did this would have to pass these added costs on to its customers and would likely lose sales to other OEMs. Obviously, if OEMs don't have the incentive to install non-Microsoft software, ISVs won't have the incentive to develop it and IAPs won't have the incentive to distribute it.

As a result, the PFJ will not have any significant pro-competitive impact in the markets for either middleware or PC operating systems. Nor, for the same reasons, is it likely to have any significant pro-competitive impact on newly emerging markets, such as voice-over-IP instant messaging, game boxes, e-commerce technologies (e.g., ''Passport'') or digital rights management technologies. Indeed, the inability to make any plausible claims for such pro-competitive effects is the most likely explanation for the fact that, in contrast to the AT&T CIS, the CIS in this case doesn't make any.

IV. The Remedy Alternatives

There are two general classes of remedies that can be employed to remedy Microsoft's antitrust violations—conduct remedies and structural remedies. Conduct remedies leave Microsoft intact and attempt to constrain its anticompetitive behavior by imposing a set of behavioral requirements-essentially, a regulatory regime tailor-made for one firm. Microsoft's structure—and, importantly, its incentives—remain largely the same.[35] The challenge is to develop rules that effectively deter anticompetitive behavior, given that such behavior might continue to be in Microsoft's interest. The PFJ, which relies on conduct remedies, will not be effective in deterring anticompetitive behavior on the part of Microsoft.

Structural relief takes a different approach. Structural relief, as the name implies, involves restructuring the firm so as. to change its incentives and ability to act anticompetitively. As DOJ explained eloquently in the AT&T CIS, if a restructuring is successful in achieving those goals, behavioral restrictions are largely unnecessary. The Appeals Court noted that structural relief is a common form of relief in ,antitrust cases and is ''the most important of antitrust remedies.''[36]

In this section, we describe the alternative structural remedies available to the court. Then we offer an evaluation of the proposals offered by the remaining litigating states.

A. Alternative Structural Remedies

At the government's urging, the District Court initially adopted a structural remedy, supplemented by interim conduct relief.[37] The Appeals Court vacated the District Court's remedy, partly because it modified the District Court's liability finding and

[35] Microsoft's incentives would be modified to the extent it faces legal penalties, but those penalties would have to be very large to have a significant effect on Microsoft's incentives.

[36] 253 F 3d at 103, quoting United States v,. E.I. du Pont de Nemours & Co., 366 U,S. 316, 331 (1961).

[37] United States v. Microsoft Corp., 97 F Supp-2d. (DCCirc. 2000) ''Final Judgement''.

partly because the District Court had failed to hold an evidentiary hearing.[38] The Appeals Court did not, however, rule out a structural solution to this case. The Court directed that ''the District Court also should consider whether plaintiffs have established a sufficient causal connection between Microsoft's anticompetitive conduct and its dominant position in the OS market.''[39] It continued, ''[i]f the court on remand is unconvinced of the causal connection between Microsoft's exclusionary conduct and the company's position in the OS market, it may well conclude that divestiture is not an appropriate remedy.''[40] This is an issue that should be explored in an evidentiary hearing. While it is difficult to predict exactly how the industry would have developed in the absence of Microsoft's anticompetitive behavior, it is likely that an alternative to Microsoft's operating-system platform would have emerged and it is a virtual certainty that Microsoft's position would be far less dominant than it is today. Clearly, Microsoft thought that was a distinct possibility.

The causation between Microsoft's anticompetitive practices and its operating system monopoly runs both ways. Without its monopoly, Microsoft would have been unable to engage in the exclusionary practices documented by the District Court and affirmed by the Appeals Court. Moreover, because of the wide array of business practices at issue and the complexity of the industry, it is very difficult to fashion a conduct relief regime that will be effective if Microsoft retains its dominant market position. This is why the Department of Justice (initially) and others (including ourselves) favor a structural solution. Two different forms of structural solution have been proposed, which we review in turn.

The DOJ initially proposed, and the District Court initially ordered, a vertical divestiture, which would divide Microsoft along product tines, into an operating systems company and an applications company.[41] The DOJ argued that this remedy would create two powerful companies that would have the incentive to compete with each other, diminishing the market power of both. According to Timothy Bresnahan, Chief Economist at the Antitrust Division at the time, ''divestiture of the company into an applications and an operating system company restores competitive conditions very like those destroyed by the anticompetitive acts, Absent the anticompetitive acts, Microsoft would have lost the browser war, and other firms would have commercialized useful technologies now controlled by Microsoft. Divided technical leadership, which could be accomplished by having an independent browser company in the late 1990s or an applications company now, lowers barriers to entry and competition in many markets. It was exactly this route to an increase in competition that Microsoft avoided by its anticompetitive acts. Second, ending Microsoft's unique position in the industry offers innovative new technologies the choice of two mass-market distribution partners, either Appsco [the applications company] or OSCo [the operating system company]. The divestiture will do much to reduce the motive to violate and also to reduce the effectiveness of future anticompetitive acts. It restores conditions for competitive innovation at a moment in technology history [i.e., when the Internet is starting to be commercialized] when having a single firm set the direction of innovation in PC and end-user oriented internet markets is most unwise,''[42]

Similarly, the Department of Justice, in initially proposing this remedy, argued that separating the operating system from the applications company would ''reduce the entry barriers that Microsoft's illegal conduct erected and make it less likely that Microsoft [would] have the incentive or ability to increase them in the future.''[43] An independent applications company would have every incentive to support competitors to Windows rather than make decisions based on the level of threat those competitors pose to Microsoft.[44] A separate applications company would have appropriate incentives to port its products to competing operating systems, such as Linux, thereby lowering the applications barrier to entry that potential competitors face. Currently, Microsoft has an incentive to strategically withhold applications from actual or potential competitors, even if providing them would otherwise be economically justified. In addition, the applications company would have the incentive to make its tools available to Independent Software Vendors (ISVs) that cooperate with competing operating system providers.

Separate operating system and applications companies would make it possible for middleware technologies in the applications company to be competitive with Windows. When applications are written to middleware technologies, like the Netscape browser, which operate between the applications software and the operating system, they become operating system-neutral,[45] reducing the applications barrier to entry and facilitating competition with Windows. There are several desktop applications, including Microsoft Office, that expose APIs and could become important middleware technologies.

Of course, a vertical divesture now would have a somewhat different effect than when it was first adopted by the District Court, because Microsoft has bundled many more applications into its new XP operating system. If the District Court again decided to adopt this remedy, it would also have to decide whether to require Microsoft to remove some applications functionality from its XP operating system or permit it to remain as is. If the XP operating system were allowed to remain as is, applications that would previously have been part of the applications company would be part of'' the operating system company. However, significant applications—principally, Microsoft Office—still remain separate from the operating system.

The alternative to a vertical approach is what we term a ''hybrid'' structural remedy, which combines both vertical and horizontal elements. A purely horizontal divestiture would divide Microsoft into several vertically integrated companies, each with full rights to Microsoft's intellectual property, creating several sellers of Windows as well as Microsoft's other software products. This remedy arguably goes beyond what is necessary or could be justified as matter of law, since it divides up products that were not the subject of the case.

A number of commentators, including Dr. Lenard, have proposed a ''hybrid'' remedy, which has elements of both vertical and horizontal divestiture.[46] It goes a step beyond the vertical divestiture remedy that the District Court adopted by first separating the operating systems company from the applications company and then creating three equivalent operating system companies.

Microsoft's bundling of more applications functionality into the new XP operating system strengthens the arguments for the hybrid remedy relative to other remedies. The PFJ (as discussed above) does not contain any restrictions on bundling, which will hinder its effectiveness dramatically, in addition, as more applications are moved into the operating system, the vertical divestiture becomes less able to restore the competitive balance, because the newly formed applications company would be a less powerful competitor.

By creating competing Windows companies, the hybrid remedy directly addresses the monopoly problem, which is the source of Microsoft's anticompetitive behavior. As indicated above, without the monopoly, Microsoft would never have been able to exclude the Netscape browser from the most effective means of distribution—OEMs and IAPs. It would not, for example, have been able to get the OEMs to refrain from pre-installing the Netscape browser as a condition for receiving a Windows license. Similarly, Microsoft would not have been able to extinguish the market for a competing browser by bundling the Windows operating system with IE. Microsoft would not have been able to do these things—which are at the core of the Appeals Court's liability finding—because the OEMs and the IAPs would have had competitive alternatives to which they could turn.

[38] 253 F 3d at 6.

[39] 253 F 3d at 105.

[40] 253 F 3d at 105–6..

[41] Final Judgement at 2.

[42] Timonthy F. Bresnahan, ''The Right Remedy,'' at 1, (available at www.stanford.edu/tbres/microsoft/The Right Remedy.pdf).

[43] Plantiffs'' Memorandom in support of Proposed Final Judgement at 30–43, Microsoft (No. 98–1232), available at http://www.usdoj.gov/atr/cases/f4600/4640.htm.

[44] United States v. Microsoft Corp., 147 F 3d 935 (DCCirc. 1998) Romer Declaration # 4, (hereafter Romer).

[45] Romer at 13.

[46] See Thomas M. Lenard, Creating Competition in the Market for Operating Systems.'' A Structural Remedy]'or Microsoft, (Washington: Progress & Freedom Foundation, 2000) http://www.pff.org/remedies/htm; Remedies Brief of Amici Curiae Robert E. Litan et al., 2000; Thomas M. Lenard, ''Creating Competition in the Market for Operating Systems: Alternative Structural Remedies in the Microsoft Case,'' George Mason Law Review, Vol. 9., Spring 2001.

The hybrid remedy would eliminate the applications barrier to entry for the new Windows companies and deprive Microsoft of its ability to leverage its desktop monopoly into new markets. Because it really does restore competition, extensive behavioral restrictions are not required, making this the least regulatory of the available alternatives.

The hybrid remedy is to a significant extent an ''intellectual property'' remedy, requiring Microsoft to grant full intellectual property rights to its Windows Operating System to two new companies. This type of remedy is particularly suited to ''new-economy'' companies like Microsoft, whose assets consist primarily of informational capital, which can easily be replicated. [47] The rationale for going further and dividing up employees is that much of the intellectual property is embodied in the employees.[48] In contrast to traditional ''old-economy'' companies, however, there is very little physical capital to be divided up.

This factor should alleviate some of the concerns expressed in the Appeals Court opinion about the use of a structural remedy in tile case of a ''unitary company''—i.e., a company not formed by mergers and acquisitions.[49] Such concerns bare more validity in the case of old-economy companies, because of the difficulty of dividing up physical capital. What is being proposed in the hybrid remedy is much closer to a reproduction than it is to a division of the company's assets. When those assets consist primarily of information, they can be reproduced at very low cost.

B. The Litigating States Proposal

We believe a structural remedy continues to offer the best hope of deterring Microsoft's anticompetitive behavior in a way that is not overly regulatory. If, however, a structural remedy is off the table, the conduct remedy proposed by the Litigating States (LS) is far better than the PFJ. The LS Proposal does not contain the obvious loopholes and exceptions that are pervasive in the PFJ. Moreover, the LS Proposal includes a number of provisions that can partially restore competition to what it might have been absent the anticompetitive behavior. Because it will change the behavior of the participants in the market, the LS Proposal provides a serious remedy to Microsoft's offenses. Some of the attractive features of the LS proposal are as follows:

. In contrast to the PFJ, the LS Proposal contains: prohibitions on exclusionary and retaliatory behavior that are clear and unambiguous and mean what they purport to mean. In general, they provide meaningful protection against retaliation for the development and distribution of non-Microsoft software.

. The LS Proposal would require Microsoft to license an unbundled version of its software. As discussed above, the bundling of applications together with the monopoly operating system makes it uneconomic in most cases to develop and distribute software that competes with Microsoft. This requirement would address that problem and create an environment in which rival software can be developed.

. The LS Proposal would require Microsoft to license its software to third parties (not just OEMs) who could produce a customized product that would enlarge the range of consumer choice and provide competition for Microsoft.

. The proposal also would require Microsoft to continue to license predecessor versions of Windows. This would permit OEMs to expand the range of consumer choice by providing a lower-priced operating-system product that might be perfectly satisfactory for a large number of users. In addition, it would permit OEMs and third parties to continue to develop a differentiated product that might be competitive with Microsoft.

. The LS Proposal would require Microsoft to make IE available on an open-source basis, and would require Microsoft to distribute Java, thereby partially reversing same of the effects of Microsoft's illegal activities

. Finally, the LS Proposal would require Microsoft %0 auction to a third party the right to port Microsoft Office to competing operating systems.'' This would reduce the applications barrier to entry for a competing operating system, such as Linux. All of these aspects of the LS Proposal would add significantly to the probability that the remedy in this case would actually have the desired effect of increasing competition in one or more of the relevant product markets.

V. Conclusion

The PFJ is not an adequate remedy and its adoption is not in the public interest. It will not deter Microsoft from engaging in anticompetitive activities and it will not restore competition in this extremely important sector of the economy. Moreover, the CIS that the government has prepared does not provide the information necessary for the District Court to determine that the PFJ is in the public interest.

In order to generate the necessary information for such a determination, the District Court should hold an evidentiary hearing in which the competitive impacts, benefits and costs of all the available remedies are closely evaluated. In addition to the PFJ, the Court should consider structural remedies—which appear to be justified under the criteria established by the Court or Appeals—as well as the LS Proposal. We believe that at the end of this process, the court will agree that the PFJ is not in the public interest and that the ''hybrid'' structural remedy we recommend best meets all the of the criteria governing the court's deliberations in this matter.

MTC–00030607

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA,))
Plaintiff,))
v.) Civil Action No. 98–1232 (CKK))
MICROSOFT CORPORATION,))
Defendant.)))

STATE OF NEW YORK, et al.,))
Plaintiffs,))
v.)Civil Action No. 98–1233 (CKK))
MICROSOFT CORPORATION,))
Defendant.))

PLAINTIFF LITIGATING STATES'' REMEDIAL PROPOSALS

Pursuant to this Court's Scheduling Order of September 28, 2001, Plaintiff States California, Connecticut, Florida, Iowa, Kansas, Massachusetts, Minnesota, Utah, West Virginia and the District of Columbia hereby submit their proposals for remedial relief in this matter.

Introduction

A unanimous en banc decision of the United States Court of Appeals for the District of Columbia Circuit affirmed the District Court's conclusion that Microsoft Corporation (''Microsoft'') unlawfully maintained its monopoly power by suppressing emerging technologies that threatened to undermine its monopoly control of the personal computer operating system market. See United States v. Microsoft Corp., 253 F.3d 34 (DC Cir.), cert denied, 122 S. Ct. 350 (2001). The key to Microsoft's monopoly maintenance was the use of its monopoly power to enhance and maintain what the Court of Appeals called the ''applications barrier to entry.'' Computer operating systems can compete successfully only if they provide a platform for the software applications that consumers want their computers to perform; but software developers naturally prefer to write applications for operating systems that already have a substantial consumer base. The applications barrier to entry, coupled with Microsoft's 90% plus market share, gave Microsoft the power to protect its ''dominant operating system irrespective of quality'' and to ''stave off even superior new rivals.'' Id. at 56.

During the mid-1990s, Microsoft was confronted with a potential threat to the applications barrier to entry, and thus to its monopoly power, in the form of two new products, Netscape's Internet browser, known as Navigator, and Sun Microsystems'' Java technologies. Recognizing the threat posed by these middleware products (i.e., software that can itself be a platform for applications development), Microsoft aggressively and unlawfully prevented these rivals from achieving the widespread distribution they needed to attract software development and ultimately make other platforms meaningful competitors with Microsoft's Windows operating system. The Court of Appeals catalogued an extensive list of anticompetitive, exclusionary acts by which Microsoft artificially bolstered the applications barrier to entry, including commingling the software code for its own middleware with that of its monopoly operating system, thereby eliminating distribution opportunities for competing middleware; threatening to withhold and withholding critical technical information from competing middleware providers, thereby allowing Microsoft middleware to

[47] Remedies Brief of Amici Curiae Robert E. Litan et al., 2000.

[48] Thomas M. Lenard, Creating Competition in the Market for Operating Systems: A Structural Remedy for Microsoft, (Washington,: Progress & Freedom Foundation, 2000) http://www.pff.org/remedies/htm.

[49] 253 F 3d at 103.

obtain significant advantages over its rivals; threatening to withhold porting of critical Microsoft software applications and financial benefits from those who even considered aiding its rivals; contractually precluding OEMs and ultimately end-users from the opportunity to choose competitive software; and even deceiving software developers to conceal the fact that the software they were writing would be compatible only with Microsoft's platform.

''The proper disposition of antitrust cases is obviously of great public importance, and their remedial phase, more often than not, is crucial. For the suit has been a futile exercise if the Government proves a violation but fails to secure a remedy adequate to redress it.'' United States v. E.I. du Pont de Nemours & Co., 366 U.S. 316, 323 (1961). As the Court of Appeals held, ''a remedies decree in an antitrust case must seek to 'unfetter a market from anticompetitive conduct,'' to 'terminate the illegal monopoly, deny to the defendant the fruits of its statutory violation, and ensure that there remain no practices likely to result in monopolization in the future.'" Microsoft, 253 F.3d at 103 (quoting Ford Motor Co. v. United States, 405 U.S. 562, 577 (1972) and United States v. United Shoe Mach. Corp., 391 U.S. 244, 250 (1968)) (citation omitted).

Consistent with these principles, any remedy must prevent Microsoft from continuing the practices it used to artificially enhance and protect the applications barrier to entry—prohibiting, for example, the types of deals with third parties that cut off the critical channels of distribution needed by Microsoft's middleware competitors. A meaningful remedy must do more, however, than merely prohibit a recurrence of Microsoft's past misdeeds: (1) it must also seek to restore the competitive balance so that competing middleware developers and those who write applications based on that middleware are not unfairly handicapped in that competition by Microsoft's past exclusionary acts, and (2) it must be forward-looking with respect to technological and marketplace developments, so that today's emerging competitive threats are protected from the very anticompetitive conduct that Microsoft has so consistently and effectively employed in the past. Only then can the applications barrier to entry be reduced and much-needed competition be given a fair chance to emerge.

Specific Remedial Proposals

A. Unbinding Microsoft's Software

As part of its illegal effort to suppress forms of middleware that threatened to offer a competitive platform for software development, Microsoft commingled the software code for Internet Explorer with the code for its monopoly operating system. See Microsoft, 253 F.3d at 66. The Court of Appeals affirmed the District Court's findings that (1) the commingling of Internet Explorer with the Windows Operating System deterred computer manufacturers (''OEMs'') from installing a rival browser such as Netscape Navigator, (2) Microsoft offered no specific or substantiated evidence to justify such commingling, and (3) ''such commingling ha[d] an anticompetitive effect.'' Id.

To prevent further unlawful commingling of Internet Explorer with the Windows Operating System, and to prevent similar anticompetitive commingling of other rival middleware (such as multimedia viewing and/or listening software or electronic mail software), Microsoft must be required either to cease such commingling or to offer its operating system software on an unbundled basis:[1]

1. Restriction on Binding Microsoft Middleware Products to Windows Operating System Products. Microsoft shall not, in any Windows Operating System Product (excluding Windows 98 and Windows 98 SE) it distributes beginning six months after the date of entry of this Final Judgment, Bind any Microsoft Middleware Products to the Windows Operating System unless Microsoft also has available to license, upon the written request of each Covered OEM licensee or Third-Party Licensee that so specifies, and Microsoft supports both directly and indirectly, an otherwise identical version of the Windows Operating System Product that omits any combination of Microsoft Middleware Products as indicated by the licensee; further, Microsoft must take all necessary steps to ensure that such version operates effectively and without degradation absent the removed Microsoft Middleware Product(s). Microsoft shall not deny timely access to alpha and beta releases of Windows Operating System Products to any OEM or third party seeking to exercise any of the options or alternatives provided under this Final Judgment. Microsoft shall offer each version of the Windows Operating System Product that omits such Microsoft Middleware Product(s) at a reduced price (compared to the version that contains them). The reduction in price must equal the ratio of the development costs of each omitted Microsoft Middleware Product to the relative development costs of that version of the Windows Operating System Product (i.e., development costs incurred since the previous major release; and for the avoidance of doubt, the major release previous to Windows XP is Windows 2000), multiplied by the price of the version of the Windows Operating System Product that includes all such Microsoft Middleware Products. However, if any such Microsoft Middleware Product(s) is/are sold separately from the Operating System, and the price of the license(s) for those omitted unbound Microsoft Middleware Product(s) is greater than the result of the formula in the preceding sentence, then the amount of the reduction shall be equal to or greater than the price of such separate licenses.

B. Mandating Uniform and Non-Discriminatory Licensing

The District Court concluded that Microsoft provided significant additional consideration to OEMs who promoted Internet Explorer or curtailed distribution or ''promotion of Netscape Navigator. See United States v. Microsoft Corp., 84 F. Supp. 2d 9, 67 (D.DC 1999). The Court of Appeals and the District Court both concluded that Microsoft also employed numerous restrictive license previsions to reduce distribution and usage of Netscape Navigator. 253 F.3d at 61. This restrictive and discriminatory contractual treatment of Microsoft licensees was a critical means of preventing rival middleware from receiving effective distribution in the important OEM channel.

Because Microsoft has monopoly power and thus typically licenses the overwhelming majority of the operating systems used by virtually every major OEM, Microsoft has the undeniable power to harm an OEM or any other third-party licensee, who wishes to distribute non-Microsoft middleware, by providing more favorable licensing terms to the recalcitrant OEM's or third-party licensee's competitors—i.e., those who promote or distribute Microsoft middleware. In order for competing middleware to have a chance to obtain distribution through the important OEM channel (and thereby achieve a degree of usage that would erode the applications barrier to entry), Microsoft must be required, at a minimum, (1) to offer uniform and non-discriminatory license terms to OEMs and other third-party licensees, and (2) to permit such licensees to customize Windows (including earlier versions of Windows) to include whatever Microsoft middleware or competing middleware the licensee wishes to sell to consumers. Moreover, Microsoft's obligation to license should not be restricted just to OEMs, but rather should include other third parties who also could repackage some or all of Windows with competing middleware and thereby offer software packages that are differentiated from and competitive with Microsoft's Windows:

2. Windows Operating System Licenses.

a. Mandatory, Uniform Licensing for Windows Operating System Products. Microsoft shall license, to Covered OEMs and Third-Party Licensees, Windows Operating System Products, including those versions made available for license pursuant to Section 1, pursuant to uniform license agreements with uniform terms and conditions. Microsoft shall not employ Market Development Allowances or other discounts, including special discounts based on involvement in development or any joint development process. Without limiting the preceding sentence, Microsoft shall charge each licensee the applicable royalty for the licensed product as set forth on a schedule, to be established by Microsoft and published on a web site accessible to Plaintiffs and all licensees, that provides for uniform royalties for each such product (which royalties shall in any case be consistent with the requirements of Section 1), except that:

i. the schedule may specify different royalties for different language versions; and

ii. the schedule may specify reasonable, uniform volume discounts to be offered on a non-discriminatory basis based upon the independently determined actual volume of total shipments of the licensed products (aggregating all Windows Operating System Products, including any versions made available for license pursuant to Section 1).

Microsoft shall not engage in any discriminatory enforcement of any license for

[1] The proposed text of the remedial order appears in italics throughout this document. The full text of the proposed remedial order is also attached at Exhibit A.

a licensed Windows Operating System Product (including those versions of the Windows Operating System Product offered and licensed pursuant to Section 1) and shall not terminate any such license without good cause and in any case without having first given the Covered OEM or other Third-Party Licensee written notice of the reason for the proposed termination and not less than sixty days'' opportunity to cure. Microsoft shall not enforce any provision in any Agreement with a Covered OEM or other Third-Party Licensee (including without limitation any cross-license) that is inconsistent with this Final Judgment.

Microsoft shall not, by contract or otherwise, restrict the right of a Third Party Licensee to resell licenses to Windows Operating System Products (including those versions of the Windows Operating System Product offered and licensed pursuant to Section 1).

b. Equal Access. Microsoft shall afford all Covered OEM licensees and Third-Party Licensees equal access to licensing terms; discounts; technical, marketing, and sales support; support calls; product information; technical information; information about future plans; developer tools or developer support; hardware certification; and permission to display trademarks or logos. Notwithstanding the preceding sentence, Microsoft need not provide equal access to technical information and information about future plans for any bona fide joint development effort between Microsoft and a Covered OEM with respect to confidential matters solely within the scope of that joint effort.

c. OEM and Third-Party Licensee Flexibility in Product Configuration. Microsoft shall not restrict (by contract or otherwise, including but not limited to granting or withholding consideration) an OEM or Third-Party Licensee from modifying the BIOS, boot sequence, startup folder, smart folder (e.g., MyMusic or MyPhotos), links, internet connection wizard, desktop, preferences, favorites, start page, first screen, or other aspect of a Windows Operating System Product (including any aspect of any Middleware in that product). By way of example, and not limitation, an OEM or Third Party Licensee may:

i. include a registration sequence to obtain subscription or other information from the user or to provide information to the user;

ii. display and arrange icons or menu entries of, or short-cuts to, or otherwise feature, other products or services, regardless of the size or shape of such icons or features, or remove or modify the icons, folders, links, start menu entries, smart folder application or service menu entries, favorites, or other means of featuring Microsoft products or services;

iii. display any non-Microsoft desktop, provided that an icon or other means of access that allows the user to access the Windows desktop is also displayed, or display any other user interface;

iv. launch automatically any non-Microsoft Middleware, Operating System, application or service (including any security/authentication service), offer a non-Microsoft IAP or other start-up sequence, or offer an option to make or make non-Microsoft Middleware the Default Middleware; or remove the means of End-User Access for Microsoft Middleware Products; or remove the code for Microsoft Middleware Products; or

v. add non-Microsoft Middleware, applications or services.

3. Continued Licensing of Predecessor Version.

a. License and Support. Microsoft shall, when it makes a major Windows Operating System Product release (such as Windows 98, Windows 2000 Professional, Windows Me, Windows XP, ''Longhorn,'' ''Blackcomb,'' and all their successors), continue for five years after such release to license on the same terms and conditions and support both directly and indirectly the immediately previous Windows Operating System Product (including any unbound versions of that Operating System licensed under Section 1) to any OEM or Third-Party Licensee that desires such a license. In addition, Microsoft shall continue to license and support, both directly and indirectly, Windows 98 SE to any OEM or Third-Party Licensee that desires such a license, on the same terms and conditions as previously licensed, for three years from the date of entry of this Final Judgment.

b. Royalty Rate. The net royalty rate for the immediately previous Windows Operating System Product shall be no more than the lowest royalty paid by the OEM or Third-Party Licensee for such product prior to the release of the new version. The net royalty rate for Windows 98 SE shall be no more than the lowest royalty offered to that OEM or Third-Party Licensee for Windows 98 SE prior to December 7, 2001.

c. Marketing Freedom. The OEM or Third-Party Licensee shall be free to market Personal Computers in which it preinstalls such immediately previous Windows Operating System Product or Windows 98 SE in the same manner in which it markets Personal Computers preinstalled with other Microsoft Platform Software.

C. Mandatory Disclosure to Ensure Interoperability

The District Court found that Microsoft threatened to delay and did delay disclosing critical technical information to Netscape that was necessary for the Navigator browser to interoperate with the Windows 95 Operating System. Microsoft, 84 F. Supp. 2d at 32–33. This delay in turn substantially delayed the release of a version of the Navigator browser that was interoperable with Windows 95, causing Netscape to be excluded from most of the crucial holiday-selling season and giving Internet Explorer an unfair advantage in the market. Id. at 33. Moreover, the Court of Appeals upheld the District Court's finding that Microsoft illegally gave preferential treatment in terms of early release of technical information to Independent Software Vendors (''ISVs'') that agreed to certain anticompetitive conditions, including using only Internet Explorer. Microsoft, 253 F.3d at 71.

In order to prevent future incidents in which Microsoft middleware developers receive preferential disclosure of technical information over rival middleware developers, thereby stifling the competitive threat posed by rival middleware, Microsoft must provide timely access to the technical information needed to permit rival middleware to achieve interoperability with Microsoft software so that such middleware may compete fairly with Microsoft middleware. Moreover, because nascent threats to Microsoft's monopoly operating system currently exist beyond the middleware platform resident on the same computer, timely disclosure of technical information must apply to facilitate not only interoperability between middleware and the monopoly operating system on the same computer, but also interoperability with respect to other technologies that could provide a significant competitive platform, including network servers, web servers and hand-held devices:

4. Disclosure of APIs, Communications Interfaces and Technical Information.

a. Interoperability Disclosure. Microsoft shall disclose to ISVs, IHVs, IAPs, ICPs, OEMs and Third-Party Licensees on an ongoing basis and in a Timely Manner, in whatever media Microsoft customarily disseminates such information to its own personnel, all APIs, Technical Information and Communications Interfaces that Microsoft employs to enable:

i. each Microsoft application to Interoperate with Microsoft Platform Software installed on the same Personal Computer;

ii. each Microsoft Middleware Product to Interoperate with Microsoft Platform Software installed on the same Personal Computer;

iii. each Microsoft software installed on one computer (including without limitation Personal Computers, servers, Handheld Computing Devices and set-top boxes) to Interoperate with Microsoft Platform Software installed on another computer (including without limitation Personal Computers, servers, Handheld Computing Devices and set-top boxes); and

iv. each Microsoft Platform Software to Interoperate with hardware on which it is installed.

b. Necessary Disclosure. Microsoft shall disclose to each OEM and Third-Party Licensee all APIs, Communications Interfaces and Technical Information necessary to permit them to fully exercise their rights under Section 2.c.

c. Compliance. To facilitate compliance, and monitoring of compliance, with this Section 4, Microsoft shall create a secure facility where qualified representatives of OEMs, ISVs, IHVs, IAPs, ICPs, and Third-Party Licensees shall be permitted to study, interrogate and interact with the source code and any related documentation and testing suites of Microsoft Platform Software for the purpose of enabling their products to Interoperate effectively with Microsoft Platform Software (including exercising any of the options in Section 2.c).

D. Prohibitions on Certain Licensing and Other Practices

The Court of Appeals affirmed the District Court's conclusion that Microsoft's licensing practices and/or other dealings with various third parties, including Internet Access

Providers (''IAPs''), Independent Software Vendors (''ISVs''), and rival operating system manufacturers, were similarly designed to stifle competition. Microsoft, 253 F.3d at 67. These dealings, when coupled with other Microsoft conduct designed to thwart or delay interoperability, confirm that Microsoft must also be prohibited from taking certain actions that could unfairly disadvantage its would-be competitors, whether by (a) knowingly interfering with the performance of their software with no advance warning, or (b) entering into certain types of contracts that could unreasonably foreclose competing middleware providers:

5. Notification of Knowing Interference with Performance. Microsoft shall not take any action that it knows, or reasonably should know, will directly or indirectly, interfere with or degrade the performance or compatibility of any non-Microsoft Middleware when Interoperating with any Microsoft Platform Software other than for good cause. If Microsoft takes such action it must provide written notice to the ISV of such non-Microsoft software us soon as Microsoft has such knowledge but in no case less than 60 days in advance informing the ISV that Microsoft intends to take such action. The written notice shall state Microsoft's reasons for taking the action, and every way known to Microsoft for the ISV to avoid or reduce interference with, or the degrading of, the performance of the ISV's software.

6. Ban on Exclusive Dealing. Microsoft shall not enter into or enforce any Agreement in which a third party agrees, or is offered or granted consideration, to:

a. restrict its development, production, distribution, promotion or use of (including its freedom to set as a default), or payment for, any non-Microsoft product or service;

b. restrict Microsoft redistributable code from use with non-Microsoft Platform Software;

c. distribute, promote or use any Microsoft product or service exclusively or in a minimum percentage;

d. interfere with or degrade the performance of any non-Microsoft product or service; or

e. in the case of an agreement with an IAP or ICP, distribute, promote or use a Microsoft product or service in exchange for placement with respect to any aspect of a Microsoft Platform Product.

7. Ban on Contractual Tying. Microsoft shall not condition the granting of a Windows Operating System Product license, or the terms (including without limitation price) or administration of such license (including any license granted pursuant to Section 1), on a licensee agreeing to license, promote, distribute, or provide an access point to, any Microsoft Middleware Product.

E. Ban on Retaliation

The Court of Appeals and the District Court catalogued a variety of conduct by Microsoft that was designed to reward those who acceded to Microsoft's anticompetitive aims and punish those who did not. An effective remedy therefore must prevent Microsoft from taking adverse or other retaliatory or discriminatory actions against OEMs, other third-party licensees, ISVs, and others, who in any way develop, distribute, support or promote competing products. Microsoft must also be barred from any acts of retaliation against any individual or any entity as a result of their participation in any capacity in any phase of this litigation:

8. Ban on Adverse Actions for Supporting Competing Products. Microsoft shall not take or threaten any action that directly or indirectly adversely affects any IAP, ICP, IHV, ISV, OEM or Third-Party Licensee (including but not limited to giving or withholding any consideration such as licensing terms; discounts; technical, marketing, and sales support; enabling and integration programs; product information; technical information; information about future plans; developer tools or developer support; hardware certification; ability to install Synchronization Drivers; and permission to display trademarks or logos) based directly or indirectly, in whole or in part, on any actual or contemplated action by that IAP, ICP, IHV, ISV, OEM or Third-Party Licensee to:

a. use, distribute, promote, support, license, develop, set as a default, produce or sell any non-Microsoft product or service; or

b. exercise any of the options or alternatives provided under this Final Judgment.

9. Non-retaliation for Participation in Litigation. Microsoft shall not take or threaten to take any action adversely affecting any individual or entity that participated in any phase of the antitrust litigation initially styled as United States v. Microsoft, Civil Actions No. 98–1232 and State of New York v. Microsoft, Civil Action No. 98–1233, including but not limited to pretrial discovery and other proceedings before the liability trial, the liability trial, any of the remedy proceedings before this Court, any proceeding to enforce the Final Judgment or to investigate any alleged violation of the Final Judgment, and any proceeding to review or otherwise consider any settlement or resolution of this matter, based directly or indirectly, in whole or in part, on such individual or entity's participation as a fact witness, consultant or expert on behalf of any party, or on such individual or entity's cooperation in any form, whether by meeting, providing information or documents, or otherwise, with or to ''any party in this litigation, or any counsel, expert or agent thereto or thereof.

F. Respect for OEM and End-User Choices

Microsoft engaged in various practices that were designed to coerce OEMs into setting Internet Explorer as the ''default browser'' on their computers. Microsoft, 84 F. Supp. 2d at 67–68. If competing middleware is to have a fair opportunity to gain distribution sufficient to erode the applications barrier to entry, OEMs and other third-party licensees, as well as end-user consumers, should be accorded the freedom to select a default middleware product other than a Microsoft middleware product. If applications software developers perceive that Microsoft, through its control of the operating system, is unfairly tilting end users to Microsoft applications, then they will be less inclined to develop the applications necessary to erode the entry barrier that preserves Microsoft's monopoly:

10. Respect for User, OEM and Third-Party Licensee Choices. Microsoft shall not, in any Windows Operating System Product distributed six or more months after the date of entry of this Final Judgment, make Microsoft Middleware the Default Middleware for any functionality unless the Windows Operating System Product (i) affords the OEM or Third-Party Licensee the ability to override Microsoft's choice of a Default Middleware and designate other Middleware the Default Middleware for that functionality, and (ii) affords the OEM, Third-Party Licensee or non-Microsoft Middleware the ability to allow the end user a reasonably accessible and neutrally presented choice to designate other Middleware as the Default Middleware in place of Microsoft Middleware. If the OEM, Third-Party Licensee, or end user has designated non-Microsoft Middleware as the Default Middleware for a functionality, the Windows Operating System Product (including updates thereto) or other Microsoft software or services shall not change the designation or prompt the user to change that designation (including by cautioning the end user against using the non-Microsoft Middleware). However, in the event that the end user has subsequently installed a Microsoft Middleware Product performing that functionality, the subsequently installed Microsoft Middleware Product may offer the end user a reasonably accessible and neutrally presented one-time choice to make that product the Default Middleware for that functionality.

G. Prohibition on Agreements Not to Compete

The Court of Appeals and the District Court found numerous instances in which Microsoft entered into agreements with OEMs, ISVs and others that stifled competition. In one particular instance, Microsoft proposed a ''special relationship'' with Netscape that, if consummated, would have effectively ended any potential competitive threat posed by the Navigator browser to the Windows Operating System. 84 F. Supp. 2d at 33. Given Microsoft's past conduct, a prohibition on offering or agreeing to limit competition with respect to Operating System Products or Middleware Products is necessary and appropriate:

11. Agreements Limiting Competition. Microsoft shall not offer, agree to provide, or provide any consideration to any actual or potential Platform Software competitor in exchange for such competitors agreeing to refrain or refraining in whole or in part from developing, licensing, promoting or distributing any Operating System Product or Middleware product competitive with any Windows Operating System Product or Microsoft Middleware Product.

H. Internet Browser Open-Source License

Much of the evidence during the trial concerned Microsoft's relentless campaign to drive down usage of Netscape's Navigator and push people instead to its own browser, Internet Explorer. Indeed, a substantial percentage of the acts reviewed by the Court of Appeals involved tactics designed to ''reduce[] the usage share of rival browsers not by making Microsoft's own browser more attractive to consumers but, rather, by

discouraging OEMs from distributing rival products.'' 253 F.3d 34, 65.

Eliminating Netscape and establishing Internet Explorer as the dominant browser was a critical component of Microsoft's monopoly maintenance strategy. Given that Microsoft's browser dominance was achieved to bolster the operating system monopoly, the remedial prescription must involve undoing that dominance to the extent it is still possible to do so. Accordingly, the appropriate solution is to mandate open source licensing for Internet Explorer, thereby ensuring at a minimum that others have full access to this critical platform and that Microsoft cannot benefit unduly from the browser dominance that it gained as part of its unlawful monopolization of the operating system market:

12. Internet Browser Open-Source License. Beginning three months after the date of entry of this Final Judgment, Microsoft shall disclose and license all source code for all Browser products and Browser functionality. In addition, during the remaining term of this Final Judgment, Microsoft shall be required to disclose and make available for license, both at the time of and subsequent to the first beta release (and in no event later than one hundred eighty (180) days prior to its commercial distribution of any Browser product or Browser functionality embedded in another product), all source code for Browser products and Browser functionality. As part of this disclosure, Microsoft shall identify, provide reasonable explanation of, and disseminate publicly a complete specification of all APIs, Communications Interfaces and Technical Information relating to the Interoperation of such Browser product(s) and/or functionality and each Microsoft Platform Software product. The aforementioned license shall grant a royalty-free, non-exclusive perpetual right on a non-discriminatory basis to make, use, modify and distribute without limitation products implementing or derived from Microsoft's source code, and a royalty-free, nonexclusive perpetual right on a non-discriminatory basis to use any Microsoft APIs, Communications Interfaces and Technical Information used or called by Microsoft's Browser products or Browser functionality not otherwise covered by this paragraph.

I. Mandatory Distribution of Java

Microsoft's destruction of the cross-platform threat posed by Sun's Java technology was a critical element of the unlawful monopoly maintenance violation affix-axed by the Court of Appeals. Microsoft continues to enjoy the benefits of its unlawful conduct, as Sun's Java technology does not provide the competitive threat today that it posed prior to Microsoft's campaign of anticompetitive conduct. Because an appropriate antitrust remedy decree should, among other things, attempt ''to deny to the defendant the fruits of its statutory violation,'' Microsoft, 253 F.3d at 103 (quoting United States v. United Shoe Mach. Corp., 391 U. S. 244, 250 (1968)), Microsoft must be required to distribute Java with its platform soft-ware (i.e., its operating systems and Internet Explorer browser), thereby ensuring that Java receives the widespread distribution that it could have had absent Microsoft's unlawful behavior, and increasing the likelihood that Java can serve as a platform to reduce the applications barrier to entry:

13. Java Distribution. For a period of 10 years from the date of entry of the Final Judgment, Microsoft shall distribute free of charge, in binary form, with all copies of its Windows Operating System Product and Internet Browser (including significant upgrades) a competitively performing Windows-compatible version of the Java runtime environment (including Java Virtual Machine and class libraries) compliant with the latest Sun Microsystems Technology Compatibility Kit as delivered to Microsoft at least 90 days prior to Microsoft's commercial release of any such Windows Operating System Product. Microsoft must publicly announce the commercial release of its Windows Operating System Products (including significant upgrades) at least 120 days in advance.

J. Cross-Platform Porting of Office

The applications barrier to entry can be eroded only when consumers can obtain significant software application functionality from their computers through means other than Microsoft's monopoly operating system. Cross-platform software, such as middleware, would have permitted the porting of numerous important applications to operating systems other than Microsoft's Windows. To begin to erode the applications barrier to entry that was enhanced by Microsoft's unlawful behavior, and thereby begin to ''pry open to competition a market that has been closed by defendants'' illegal restraints,'' International Salt Co. v. United States, 332 U.S. 392, 401 (1947), Microsoft should be required to auction to a third party the right to port Microsoft Office to competing operating systems:

14. Mandatory Continued Porting of Office to Macintosh and Mandatory Licensing of Office for the Purpose of Porting to Other Operating Systems.

a. Continued Porting of Office to Macintosh. Microsoft shall port each new major release of Office to the Macintosh Operating System within 60 days of the date that such version becomes commercially available for use with a Windows Operating System Product, pursuant to the same terms and conditions under which it currently ports Office to Macintosh. The ported version shall operate at least as effectively as the previous ported version.

b. Auction of Licenses To Port. Within 60 days of entry of this Final Judgment, Microsoft shall offer for sale, at an auction administered by an independent third party, licenses to sell Office for use on Operating Systems other than Windows, without further royalty beyond the auction price. In conjunction with these licenses, Microsoft shall supply to the winning bidders all information and tools required to port Office to other Operating Systems, including but not limited to all compatibility testing suites used by Microsoft to port Office to the Macintosh Operating System, the source code for Office for Windows and Office for Macintosh (to be used for the purpose of such porting only), all technical information required to port Office to other Operating Systems (including but not limited to file formats), and all parts of the source code of the Windows Operating System Product necessary for the porting. At such auction, Microsoft shall offer'' to sell at least three such licenses, as described in this Section 14.b, to three third parties not affiliated with either Microsoft or each other. The terms of such licenses shall become effective (and the relevant source code made available to the licensee) immediately upon their sale.

c. Provision of Necessary Information. As soon as practicable, but in no case later than 60 days prior to the date each new version of Office becomes commercially available for use with a Windows Operating System Product, Microsoft shall provide, to holders of the licenses issued pursuant to Section 14.b, the compatibility testing suites and source code necessary to enable porting of the new version of Office to other Operating Systems. The terms of such licenses shall become effective (and the relevant source code made available to the licensee) no later than the date on which the new version of Office becomes commercially available.

K. Intellectual Property Rights

For many of the provisions of the remedy to be effective, including but not limited to the disclosure provisions contained in Section 4, various 0EMs, ISVs and others must necessarily acquire certain intellectual property rights from Microsoft. Accordingly, it is appropriate for Microsoft to license to such third parties those intellectual property rights that are necessary for the effective implementation of this remedy proposal:

15. Necessary Intellectual Property License. Microsoft shall, within 20 days of request, license to IAPs, ICPs, IHV's, ISVs, OEMs and Third-Party Licensees all intellectual property rights owned or licensable by Microsoft that are required to exercise any of the options or alternatives provided or available to them under this Final Judgment (including without limitation enabling their product(s) to Interoperate effectively with Microsoft Platform Software), on the basis that:

a. the license shall be on a royalty-free basis and all other terms shall be reasonable and non-discriminatory;

b. the license shall not be conditional on the use of any Microsoft software, API, Communications Interface, Technical Information or service;

c. the scope of any such license (and the intellectual property rights licensed thereunder) must be as broad as necessary to ensure that the licensee is able to exercise the options or alternatives provided under this Final Judgment but shall not provide any unnecessary rights (e.g., an IAP's, ICP's, IHV's, ISV's, and OEM's option to promote Non-Microsoft Middleware shall not confer any rights to any Microsoft intellectual property rights infringed by that Non-Microsoft Middleware); and

d. the terms of any license granted under this section shall be in all respects consistent with the terms of this Final Judgment.

L. Adherence to Industry Standards

A common tactic in Microsoft's unlawful monopoly maintenance was the limitation on interoperability with potential competitors. This has been accomplished, on occasion, by

co-opting and/or undermining the industry standards for software developers. Microsoft also purposely deceived software developers into believing that the Microsoft Java programming tools had cross-platform capability with Sun-based Java:

16. Adherence to Industry Standards.

a. Compliance With Standards. If Microsoft publicly claims that any of its products are compliant with any technical standard (''Standard9 that has been approved by, or has been submitted to and is under consideration by, any organization or group that sets standards (a ''Standard-Setting Body''), it shall comply with that Standard. If Microsoft chooses to extend or modify the implementation of that Standard, Microsoft shall continue fully to implement the Standard (as that Standard may be modified from time to time by the Standard-Setting Body). Microsoft shall continue to implement the Standard until: (i) Microsoft publicly disclaims that it implements that Standard; or (ii) the Standard expires or is rescinded by the standard-setting body. However, Microsoft shall not be permitted to require third parties to use or adopt Microsoft's version of the Standard. To the extent Microsoft develops a proprietary version of a Standard, Microsoft's Operating Systems must continue to support non-proprietary, industry versions of such Standard.

b. Compliance With De Facto Standards. As to any Standard with which Microsoft is required to comply under the preceding paragraph, to the extent that industry custom and practice recognizes compliance with the Standard to include variations from the formal definition of that Standard (a ''De Facto Standard''), Microsoft may discharge its obligations under this provision by complying with the de facto Standard provided that: (i) before doing so, Microsoft notifies Plaintiffs and the Special Master in writing of its intention to do so, and describes with reasonable particularity the variations included in the De Facto Standard; and (ii) Plaintiffs do not, within 30 days of receipt of such notice, object to Microsoft's intention to comply with the De Facto Standard.

M. Internal Compliance

Vigilant compliance is absolutely critical to any remedial program's effectiveness. The first prong of such compliance must be an active program of internal controls to ensure compliance, including the appointment of an internal January 28, 2002

Ms. Renata Hesse
Antitrust Division
U.S. Department of Justice
601 D Street, N. W., Suite 1200
Washington, D. C. 20530

Re: United States v. Microsoft Corporation, Civil Action No. 98–1232 (CKK)
State of New York. ex tel. Attorney General Eliot Spitzer, et al. v. Microsoft Corporation, Civil
Action No. 98–1233 (CKK)

Dear Ms. Hesse:

I am writing on behalf of the states of California, Connecticut, Florida, Iowa, Kansas, Massachusetts, Minnesota, Utah, West Virginia and the District of Columbia. These jurisdictions continue to litigate against Microsoft Corporation to seek a remedies decree that will '''unfetter [the] market from anticompetitive conduct''; ''terminate the illegal monopoly, deny to the defendant the fruits of its statutory violation, and ensure that there remain no practices likely to result in monopolization in the future'' U.S. v. Microsoft, 253 F.3d 34, 103 (DC Cir. 2001) (quoting Ford Motor Co. v. United States, 405 U.S. 562, 577 (1972) and United States v. United Shoe Mach. Corp., 391 U.S. 244,250 (1968)). Although the litigating jurisdictions will have the opportunity to present evidence and argument directly to the. court concerning appropriate remedies in this case, we have produced or received three documents in the course of our litigation that we believe are especially pertinent to the record of the Tunney Act proceeding. Without waiving any rights to a hearing on our proposed decree, these documents arc:

1. Excerpt from Plaintiff Litigating States'' Answers to Interrogatories from Microsoft Corporation: Attached as Exhibit A it; the Litigating States'' answer to an interogatory from defendant Microsoft Corporation detailing the principal inadequacies of the proposed consent decree. (Please note that further or additional problems may be revealed by discovery so this list should not be considered final.);

2. Plaintiff Litigating States'' Re??ial Proposals: Attached as Exhibit B is rite Litigating Stales'' remedial proposal filed with the trial court on December 7, 2001. For the reasons stated in this document, the Litigating States conclude that their proposed remedy is necessary to address the illegal conduct of Microsoft Corporation; and

3. Defendant-Microsoft's Responses to the Litigating States' Requests for Admissions: Attached as Exhibit C ate the responses of defendant Microsoft Corporation to the Litigating States' requests for admissions. In this document, Microsoft repeatedly refuses to admit or sidesteps characterizations by the Department of Justice of the proposed consent decree contained in the Competitive Impact Statement (CIS). Microsoft's objection that such admissions require a ''legal conclusion'' is troubling. While this could mean that there was never a meeting of the minds among the parties, it suggests, at a minimum, that the decree itself is ambiguous. As a result, enforcement will. in all likelihood. be delayed as the parties wrangle over the meaning of their agreement in an industry in which product cycles are extremely short and in which enforcement must be swirl in order to be effective.

For the foregoing reasons, the litigating jurisdictions request that the Department of Justice withdraw its consent to the Revised Proposed Final Judgment because of its ambiguity and failure to adequately address the illegal conduct of Microsoft. If the Department chooses not to do this, the litigating jurisdictions request that the Revised Proposed Final Judgment be disapproved by the court because it fails to meet the standard in 15 U.S.C. section 16(e).

Respectfully submitted,
Tom Greene
Senior Assistant Attorney General
California Department of Justice
FOR THE LITIGATING STATES

Exhibit A

SUPPLEMENTAL RESPONSES TO INTERROGATORIES

1. State in the most specific and detailed manner possible each and every respect in which you claim that the Revised Proposed Final Judgment is deficient, and explain why.

RESPONSE: The Plaintiff Litigating States object to this Interrogatory as a contention interrogatory that is premature and more appropriately answered at a later time, see Fed. R. Civ. P. 33(c), and therefore the Plaintiff Litigating States reserve the right to amend, supplement or modify the response to this Interrogatory to incorporate information gained through discovery. Subject to and without waiving this objection or the General Objections, the Plaintiff Litigating States respond that, as highlighted in Plaintiff Litigating States'' Remedial Proposals filed on December 7, 2001, the Revised Proposed Final Judgment (the ''RPFJ'') is deficient in many respects, including without limitation the following:

(1) the RPFJ does not require Microsoft to license an'' unbundled version of Windows, even though (a) the Court of Appeals found that Microsoft's commingling of middleware code with its monopoly operating system was anticompetitive (see United States v. Microsoft Corp., 253 F.3d 34, 66 (DC Cir.) (''Microsoft''), cert. denied, 122 S. Ct. 350 (2001), and (b) such a remedy would enable competing middleware developers to gain access to the OEM channel of distribution, recognized by Microsoft, and the District Court, as one of the two most important distribution channels (United States v. Microsoft Corp., 84 F. Supp. 2d 9, 46 (D.DC 1999) (''Microsoft Findings of Fact'));

(2) the RPFJ provides for overly broad exceptions to the OEM uniform licensing requirement, including without limitation (a) market development allowances, and (b) consideration tied to the level of an OEM's promotion or distribution of Microsoft's products or services, even though the Court of Appeals and District Court found Microsoft's discrimination between OEMs in its contractual relationships a critical lever in several types of anticompetitive conduct (see Microsoft, 253 F.3d at 59–64; Microsoft Findings of Fact, 84 F. Supp. 2d at 66–68);

(3) the RPFJ does not adequately provide for timely and broad disclosure of interfaces and other technical information to third parties, despite the fact that (a) the Court of Appeals found that Microsoft illegally used the discriminatory disclosure of technical information to ISVs as an incentive to obtain their agreement to certain anticompetitive conditions, including curtailment of the use and promotion of Internet Explorer (see Microsoft, 253 F.3d at 71–79.; see also Microsoft Findings of Fact, 84 F. Supp. 2d at 93–94), and (b) the District Court found that Microsoft deliberately withheld technical information necessary to ensure the interoperation of a rival platform (Netscape's Navigator) and the Windows operating system (see Microsoft Findings of Fact, 84 F. Supp. 2d at 33–34) and thereby hampered the rise of this threat to Microsoft's monopoly;

(4) the RPFJ limits the disclosure of interfaces and technical information to those that concern the interoperation of only

Microsoft middleware and its Windows operating system, even though (a) there are many other currently existing nascent threats to Microsoft's operating system monopoly such as alternative platforms like network servers, web servers, handheld computing devices and set-top boxes, (b) disclosure of information relating to interoperation between these products is as important as information relating to interoperation with Windows, and (c) an antitrust remedy must be forward looking to prevent a recurrence of analogous harm and not simply seek to remedy specific past misconduct (see Nat'l Soc'y of Pro??l Engineers v. United States, 435 U.S. 679, 697 (1978));

(5) the RPFJ mandates the disclosure of communications protocols only in the context of client-server interoperation, even though the disclosure of such protocols is necessary to permit third parties to develop other nascent threats to Microsoft's operating system monopoly that communicate with personal computers such as widely interoperable handheld devices and middleware installed thereon;

(6) the RPFJ delays the impact of the disclosure provisions for up to nine months in the case of communications protocols that concern the interoperation of client personal computers and servers, and twelve months in the case of interfaces relating to the interoperation of middleware and operating systems—given the necessity of prompt disclosure in the light of the pace of change in the computer industry, such delays are simply unjustifiable;

(7) the RPFJ delays the required disclosure of middleware/operating system interoperability interfaces, in the case of new releases of Microsoft operating systems, until Microsoft releases a beta test version of the new release to 150,000 or more beta testers—this test is not only subject to manipulation to avoid timely disclosure but on its face means that disclosure will not be required until very close to the release date of the new product, thereby disadvantaging Microsoft's rivals;

(8) the RPFJ does not require disclosure of the technical information required by third parties to make full use of the disclosed interfaces and protocols;

(9) the RPFJ permits only members of a three person ''Technical Committee'' (one of whose members is appointed by Microsoft) to have access to Microsoft's source code, even though third parties wishing to make meaningful use of Microsoft's interoperability disclosures need direct access to source code through some means, such as a secure facility at which they can view and interrogate such code;

(10) the RPFJ imposes unjustifiable qualifications in the provisions that appear to provide for flexibility in product configuration (e.g., (i) Microsoft can limit the addition of icons, shortcuts and menu entries for non-Microsoft products to only those places where Microsoft has decided to promote a Microsoft product with similar functionality (thus blocking such additions if Microsoft does not make that decision and/or does not offer a competing product), and (ii) the automatic launching of competing software may be prohibited if such software displays a user interface that is not of a similar size and shape to the interface displayed by the equivalent Microsoft software or a Microsoft product would not otherwise launch automatically);

(11) the RPFJ does not adequately require Microsoft to respect OEM and end-user preferences for non-Microsoft software because the provisions which appear to have that aim are encumbered with unjustifiable qualifications (e.g., (i) the ability to designate a non-Microsoft middleware product to be invoked in place of a Microsoft middleware product is available only where the Microsoft middleware would be launched in a separate Window and would display all of the user interface elements or a trademark; and (ii) the restriction on Microsoft asking an end user to alter an OEM's product configuration lasts for only fourteen days and there is no restriction on the number of such requests Microsoft may make thereafter);

(12) the RPFJ does not require Microsoft to license previous versions of Windows, even though (a) the guaranteed existence of previous versions of Windows encourages the creation of middleware threats to Microsoft's operating system monopoly by giving software developers confidence that the operating system with which their middleware would be designed to interact will be available to end users for a reasonable length of time, and (b) the District Court found that Microsoft used its control of information regarding a new release of Windows to thwart the growing popularity of a threat to its operating system monopoly (see Microsoft Findings of Fact, 84 F. Supp. 2d at 3334), and efforts to use such leverage would be less effective if the previous version were still to be available;

(13) the RPFJ does not require Microsoft to notify third parties regarding its knowing interference with non-Microsoft middleware, despite the fact that (a) the Court of Appeals found that one aspect of Microsoft's anticompetitive conduct regarding the middleware threat of Sun's Java was to deceive software developers into writing programs using Microsoft Java development tools that did not interact with Sun's Virtual Java Machine (see Microsoft, 253 F.3d at 76–77), (b) the District Court found that Microsoft made technical changes to Windows and Internet Explorer to ensure that the interoperation of Windows and a non-Microsoft browser was a ''jolting experience'' for users (see Microsoft Findings of Fact, 84 F. Supp. 2d at 50), and (c) the Distric Court found that Microsoft deliberately withheld from Netscape vital information required to ensure the interoperability of Navigator and a new version of Microsoft's Windows operating system (see Microsoft Findings of Fact, 84 F. Supp. 2d at 33–34)—in other words the remedy fails to curb Microsoft's anticompetitive tendency to hinder the interaction of non-Microsoft products with Microsoft-sponsored products;

(14) the RPFJ does not adequately restrict Microsoft's exclusive arrangements, despite the Court of Appeals condemnation of such practices as anticompetitive (see Microsoft, 253 F.3d at 67—74), because, for example, the provisions that appear to be aimed at such practices are subject to overbroad and unjustifiable qualifications (e.g., (i) a joint venture exception that does not define with Any specificity the minimum criteria for the existence of such an arrangement and thus appears subject to manipulation; (ii) an exception where the third party represents that it could devote greater resources to non-Microsoft products than to Microsoft products, whether or not it actually does so; and (iii) an exception for any agreement under which Microsoft licenses intellectual property from a third party, no matter how anticompetitive the other terms of such agreement);

(15) the RPFJ does not prohibit contractual tying of Microsoft middleware to Microsoft's Windows operating system, even though (a) such arrangements could unreasonably foreclose competing middleware providers, (b) such a remedy would help to prevent Microsoft's ability to further reap benefits from its illegally maintained operating system monopoly, and (c) the Court of Appeals found that Microsoft manipulated contractual relationships with various third parties to stifle middleware threats to its operating system monopoly (see Microsoft, 253 F.3d at 59–64, 69–72, 75–76);

(16) the RPFJ does not adequately protect against retaliation by Microsoft (e.g., the prohibition on retaliation against OEMs is limited to particular types of actions, instead of broadly banning any adverse action, and lists OEM activities only in connection with middleware and operating systems, instead of referring to any activities relating to products or services that compete with Microsoft);

(17) the RPFJ does not effectively restrict agreements limiting competition, despite the Court of Appeals clear holding that such arrangements were anticompetitive (see Microsoft 253 F.3d at 71–72), because, for example, (a) the provision apparently aimed at restricting such conduct is subject to an exception where an ISV has agreed to use, distribute or promote Microsoft software, even though such an exception could be construed as effectively nullifying the applicable restriction, (b) the restriction does not apply to agreements with any entity other than an ISV (i.e., presumably such agreements with an OEM, ICP, IAP, IHV or any other third party would not be prohibited), and (c) the restriction only applies to agreements relating to Windows operating system products (i.e., an exclusive dealing arrangement that related to other Microsoft platform software would not be prohibited);

(18) the RPFJ does not address specifically the status of Microsoft's Internet browser, Internet Explorer, which benefited directly from much of Microsoft's anticompetitive conduct (see, e.g., Microsoft, 253 F.3d at 59–74);

(19) the RPFJ does not address specifically Microsoft's anticompetitive conduct aimed at elimination of Sun's Java as a threat to its operating system monopoly (see, e.g., Microsoft, 9.53 F.3d at 74–78);

(20) the RPFJ does not require Microsoft to port its Office suite of applications to Apple's Macintosh, even though the Court of Appeals found that Microsoft's threat to terminate

such support for Office had been deliberately used as a ''club'' to force Apple to enter into an anticompetitive exclusive dealing arrangement (see Microsoft, 253 F.3d at 72–74);

(21) the RPFJ does not provide a mechanism to ensure that Office is ported to ether operating systems, despite the Court of Appeals' recognition of the importance of this suite of applications and acknowledgment that the absence of Office on a rival operating system, Mac OS, would eliminate such competition (see Microsoft, 253 F.3d at 72–73), and the fact that ensuring the availability of Office on other platforms is likely to weaken the applications barrier to entry and enhance the potential of other platforms to compete with Microsoft's monopoly operating system;

(22) the RPFJ requires licensees of required Microsoft intellectual property to pay for such license and to cross license their intellectual property to Microsoft, even though the premise of this remedy is that such intellectual property is required to allow third parties to exercise their rights under the final judgment—it is unjustifiable for Microsoft to be paid and benefit from cross-licensing rights simply, for ensuring the efficacy of remedies imposed as a result of its illegal conduct;

(23) the RPFJ does not address Microsoft's undermining of industry standards, despite the Court of Appeals holding that Microsoft sabotaged the Java standard by deceiving software developers into believing that the Microsoft Java programming tools had cross-platform capability with Sun-based Java (see Microsoft, 253 F.3d at 75–76);

(24) the RPFJ does not require Microsoft to provide information about transactions that are not subject to the filing requirements of the Hart-Scott-Rodino Act, even though such transactions could be used by Microsoft to maintain its operating system monopoly;

(25) the RPFJ does not protect from retaliation individuals and entities that participate in this litigation, despite the District Court and Court of Appeals findings that Microsoft is no stranger to retaliation and threats when it does not get its own way (e.g., (i) retaliation against IBM (see Microsoft Findings of Fact, 84 F. Supp. 2d at 40); (ii) threats against Apple (see Microsoft, 253 F.3d at 72–74); and (iii) threats against Intel (see Microsoft, 253 F.3d at 77–78);

(26) the RPFJ contains other unjustifiable exceptions and carve-outs that hobble the provisions they qualify (e.g., (i) the restriction on retaliation against, and discriminatory treatment of, OEMs that promote non-Microsoft products is qualified by an exception that permits Microsoft to provide additional consideration to OEMs that, inter alia, promote Microsoft products; (ii) Microsoft's disclosure obligations may be construed as not extending to areas of activity that Microsoft has identified as important enough to its monopoly operating system to include in its latest Windows operating system release, such as authentication and security/encryption systems and digital rights management; and (iii) Microsoft's disclosure obligations relating to certain matters such as authentication systems are subject to Microsoft's subjective determination as to whether, inter alia, the recipient has a ''reasonable'' business need and a ''viable'' business);

(27) the RPFJ contains ineffective compliance provisions (e.g., (i) there is no independent office or body such as a special master to assist the Court with compliance and enforcement; (ii) there is no annual compliance certification by Microsoft; (iii) there is no periodic reporting to the Court by an independent body regarding Microsoft's compliance; (iv) there is no mandatory document retention provision; (v) there is no mechanism for Microsoft employees to submit evidence of violations on a confidential basis to a third party; and (vi) no work product, findings or recommendations of the body empowered to consider complaints against Microsoft may be used in court, necessitating a duplication of effort if a complaint is not adequately dealt with on an extra-judicial basis);

(28) the RPFJ does not provide for a sanctions regime making clear the potential consequences to Microsoft of non-compliance and thus providing a strong incentive to comply;

(29) the RPFJ's middleware definitions are drawn too narrowly, excluding from protection competitors of Microsoft in critical middleware markets and excluding from the restrictions of the judgment important Microsoft products—for example, (a). software cannot qualify as a ''Non-Microsoft Middleware Product'' unless at least one million copies were distributed in the U.S. in the previous year, meaning that by definition nascent or developing middleware threats receive no protection under the user configuration flexibility remedy, (b) certain important software categories such as web-based software and digital imaging software are not present in any of the middleware definitions, (c) software developed in the future by Microsoft that does not perform a pre-identified function (e.g., Internet browsing) but that does exhibit the characteristics of middleware, such as API exposure, would be excluded from the definition of ''Microsoft Middleware Product'' if it is not trademarked (e.g., Microsoft's photo editing software), had not been distributed by Microsoft separately from an operating system product (e.g., many of the new features on Windows XP) or was not similar to a competitor's product;

(30) the RPFJ's definition of ''Windows Operating System Product'' leaves Microsoft to determine its scope, a freedom that could potentially eviscerate major portions of the judgment;

(31) the RPFJ does not define certain key terms (e.g., ''Interoperate,'' ''Bind,'' ''Web-Based Software'') and narrowly defines other key terms (e.g., ''Communications Protocol'');

and

(32) the RPFJ's term is limited initially to five years—given the scope of Microsoft's violations and the time needed to restore effective competition, this term is too short.

Exhibit B

COMPLIANCE OFFICER AND AN ANNUAL CERTIFICATION BY MICROSOFT THAT IT IS ADHERING TO THE REQUIREMENTS OF THE FINAL JUDGMENT:

17. Internal Antitrust Compliance. This section shall remain in effect throughout the term of this Final Judgment.

a. Compliance Committee. Within 30 days of entry of this Final Judgment, Microsoft shall establish a compliance committee (the ''Compliance Committee9 of its Board of Directors, consisting of at least three members of the Board of Directors who are not present or former employees of Microsoft.

b. Compliance Officer. The Compliance Committee shall hire a Compliance Officer, who shall report directly to the Compliance Committee and to the Chief Executive Officer of Microsoft. The Compliance Officer shall be responsible for development and supervision of Microsoft's internal programs to ensure compliance with the antitrust laws and this Final Judgment. Microsoft shall give the Compliance Officer all necessary authority and resources to discharge the responsibilities listed herein.

c. Duties of Compliance Officer. The Compliance Officer shall:

i. within 60 days after entry of this Final Judgment, arrange for delivery to each Microsoft officer, director, and Manager, and each platform software developer and employee involved in relations with OEMs, ISVs, IHVs, or Third-Party Licensees, a copy of this Final Judgment together with additional informational materials describing the conduct prohibited and required by this Final Judgment;

ii. arrange for delivery in a timely manner of a copy of this Final Judgment and such additional informational materials to any person who succeeds to a position described in subsection c.i above;

iii. ensure that those persons described in subsection c.i above are annually briefed on the meaning and requirements of this Final Judgment and the United States antitrust laws and advising them that Microsoft's legal advisors are available to confer with them regarding any question concerning compliance with this Final Judgment or under the United States antitrust laws;

iv. obtain from each person described in subsection c.i above, within 30 days of entry of this Final Judgment and annually thereafter, and for each person thereafter succeeding to such a position within 5 days of such succession and annually thereafter, a written certification that he or she:

(1) has read, understands, and agrees to abide by the terms of, and has to their knowledge not violated, this Final Judgment; and

(2) has been advised and understands that his or her failure to comply with this Final Judgment may result in conviction for criminal contempt of court;

v. maintain a record of persons to whom this Final Judgment has been distributed and from whom, pursuant to subsection c.iv above, such certifications have been obtained;

vi. establish and maintain a means by which employees can report to the Special Master potential violations of this Final Judgment or the antitrust laws on a confidential basis;

vii. on an annual basis, certify to the Plaintiffs and the Special Master that Microsoft is fully compliant with this Final Judgment; and

viii. report immediately to the Plaintiffs and the Special Master any credible evidence of violation of this Final Judgment.

d. Removal of Compliance Officer. The Compliance Officer may be removed only by the Chief Executive Officer with the concurrence of the Compliance-Committee.

e. Retention of Communications and Relevant Documentation, Microsoft shall, with the supervision of the Compliance Officer, maintain for a period of at least four years (i) the e-mail, instant messages, and written correspondences of all Microsoft officers, directors and managers engaged in software development, marketing, sales, and developer relations related to Platform Software, and (ii) all documentation necessary or useful to facilitate compliance with this Final Judgment, including without limitation the calculation of development costs in Section 1.

f. Compliance Inspection. For purposes of determining or securing implementation of or compliance with this Final Judgment, or determining whether this Final Judgment should be modified or vacated, and subject to any legally recognized privilege, from time to time:

i. Duly authorized representatives of a Plaintiff, upon the written request of the Attorney General of such Plaintiff, and on reasonable notice to Microsoft made to its principal office, shall be permitted:

(1) access during office hours to inspect and copy (or, at the option of the duly authorized representatives, to demand Microsoft provide copies of) all books, ledgers, accounts, correspondence, memoranda, source code, and other records and documents in the possession or under the control of Microsoft (which may have counsel present), relating to the matters contained in this Final Judgment; and

(2) subject to the reasonable convenience of Microsoft and without restraint or interference from it, to interview, either informally or on the record, its officers, employees, and agents, who may have their individual counsel present, regarding any such matters.

ii. Upon the written request of the Attorney General of a Plaintiff, made to Microsoft at its principal offices, Microsoft shall submit such written reports, under oath if requested, as may be requested with respect to any matter contained in this Final Judgment.

iii. No information or documents obtained by the means provided in this section shall be divulged by a representative of a Plaintiff to any person other than a duly authorized representative of a Plaintiff, except in the course of legal proceedings to which the Plaintiff is a party (including grand jury proceedings), or for the purpose of securing compliance with this Final Judgment, of as otherwise required by law.

iv. If at the time information or documents are furnished by Microsoft to a Plaintiff, Microsoft represents and identifies in writing the material in any such information or documents to which a claim of protection may be asserted under Rule 26(c)(7) of the Federal Rules of Civil Procedure, and Microsoft marks each pertinent page of such material, ''Subject to claim of protection under Rule 26(c)(7) of the Federal Rules of Civil Procedure,'' then 10 days notice shall be given by a Plaintiff to Microsoft prior to divulging such material in any legal proceeding (other than a grand jury proceeding) to which Microsoft is not a party.

N. The Special Master

In addition to internal oversight by Microsoft, effective implementation of this remedy also requires a Special Master empowered and equipped to conduct prompt investigations of any complaints and to propose resolutions within the short time frame necessary to be meaningful in such a fast-moving market. Such a Special Master can ensure timely resolution of any disputes and minimize any demand on judicial resources.

18. Special Master. Pursuant to Rule 53 of the Federal Rules of Civil Procedure (''Rule 53'') the Court will appoint a special master (the ''Special Master'') to monitor Microsoft's obligations under the Final Judgment and to aid the Court in enforcing the Final Judgment.

a. Appointment. The Court will select a Special Master. Ten days after the Plaintiffs and Microsoft are notified of the selection, the Plaintiffs and Microsoft may file with the Court their written objections to the proposed Special Master. Any party who does not object within ten (10) days shall be deemed to have consented to the Court's selection. The terms of this subsection shall apply to any replacement Special Master chosen by the Court.

b. Powers. The Special Master has and shall exercise the power and authority to monitor Microsoft's compliance with this Final Judgment, including taking all acts and measures he or she deems necessary or proper for the efficient performance of the Special Master's duties and responsibilities as set forth in this Final Judgment.

c. Internal Compliance. The Special Master, and those acting under his or her authority, shall have access to all information, personnel, systems, equipment, premises and facilities the Special Master considers relevant to the performance of his or her duties. Microsoft shall develop such financial or other information as the Special Master may request and shall cooperate with the Special Master and facilitate the Special Master's ability to perform his or her responsibilities and to monitor Microsoft's compliance with this Final Judgment. To facilitate Microsoft's compliance, Microsoft will create a full-time position entitled ''Special Master Liaison Officer'' with primary responsibility for ensuring full cooperation with the Special Master, including without limitation arranging for timely access to personnel, information and facilities. The Special Master Liaison Officer shall be a senior Microsoft executive and shall report directly to the Chief Executive Officer of Microsoft. Microsoft shall give the Special Master Liaison Officer all necessary authority and resources to discharge his or her responsibilities under this subsection. If the Special Master determines that Microsoft is inhibiting the Special Master in any of its Rule 53 functions, the Special Master may file with the Court, sua sponte, a report of non-compliance.

d. Advisory Committee; Staff and Expenses. The Court, with the assistance of the Special Master, shall appoint an advisory committee of 3 individuals (the ''Advisory Committee9 to assist the Special Master on technical, economic, business and/or other areas of expertise. Objections to the Court's selection shall be lodged in the manner noted in Section 18.a. Microsoft shall indemnify each Advisory Committee member and hold him or her harmless against any losses, claims, damages, liabilities or expenses arising out of, or in connection with, the performance of the Advisory Committee's functions, except to the extent that such liabilities, losses, damages, claims, or expenses result from gross negligence or willful acts by an Advisory Committee member.

The Special Master, upon approval from the Court, may hire such additional individuals as a permanent staff or on an advisory basis to assist the Special Master. The Special Master shall submit to the Court a monthly accounting of the Special Master, his or her staff and the Advisory Committee's services and expenses. Upon approval from the Court, Microsoft will remit payment to the Special Master.

e. Periodic Reports. The Special Master shall apprise the Court, in writing (with copies to the Plaintiffs), whether Microsoft is in compliance with this Final Judgment thirty (30) days after the date of his or her appointment and every one hundred eighty (180) days thereafter until the Final Judgment terminates.

f. Actions and Proceedings.

i. Any person who has reason to believe that Microsoft is not complying with the Final Judgment may submit a complaint to the Special Master. The Special Master shall promptly provide a copy of the complaint to a State chosen by the Plaintiffs to serve as the recipient of such complaints.

ii. To facilitate the communication of complaints by third parties, the Special Master Liaison Officer shall place on Microsoft's Internet website, in a manner acceptable to the Special Master, the procedures for submitting complaints.

iii. The Special Master may preserve the anonymity of any third party complainant where he or she deems it appropriate to do so upon the request of the Plaintiffs or the third party, or in his or her discretion.

iv. Within fourteen (14) days of the receipt of the complaint, the Special Master shall determine if an investigation is warranted. In making this decision, the Special Master may use any of its Rule 53 powers. If the Special Master determines that an investigation is not warranted, the Special Master will issue a statement noting his or her decision to the complainant, Microsoft and each Plaintiff.

v. If the Special Master decides to pursue a formal investigation, the Special Master must notify Microsoft, each Plaintiff and the complainant of'' (i) its decision to investigate; (ii) the conduct underlying the potential violation; and (iii) the provision of the Final Judgment at issue. The Special Master will furnish a copy of this notice to the Court.

vi. Within fourteen (14) days of receiving the notice of the Special Master's investigation, Microsoft and the complainant shall file with the Special Master, and copy to the Plaintiffs, a response, including any

documentation they wish the Special Master to consider.

vii. Upon receipt of the responses, the Special Master shall schedule a hearing within twenty-one (21) days. The Special Master may exercise all powers available under Rule 53 (including without limitation requiring the production of documents and examining witnesses). The Plaintiffs shall have standing to participate in each such hearing.

viii. Within fifteen (15) days from the conclusion of the hearing, the Special Master will file with the Court a report containing its factual findings and a proposed order pursuant to Rule 53(e)(1).

ix. Pursuant to the requirements of Rule 53(e)(2), Microsoft and the complainant may object to the Special Master's report.

g. Power Retained by Court. In addition to acting on the recommendations of the Special Master, the Court may institute its own proceedings and modify or amend the Final Judgment as necessary either sua sponte or at the request of the Plaintiffs.

h. Admissibility in Subsequent Proceedings. (i) Any findings or recommendations by the Special Master and work product of the Special Master and the Advisory Committee are not prohibited hereunder from submission or admission in any subsequent action or proceeding whether before this Court or elsewhere regarding this Final Judgment, and [ii) the Special Master and any person who provided assistance thereto (including without limitation any member of the Special Master Advisory Committee) is not prohibited hereunder from testifying in any such action or proceeding.

O. Consequences of a Pattern of Non-Compliance. In a market in which timing is so important, it is all too likely that delaying one's rivals by begrudging compliance with the obligations of the Final Judgment punctuated by occasional acts of outright non-compliance—could well be profit-maximizing behavior. One prudent and potentially highly effective means of avoiding this situation is to make clear in advance that a pattern of significant, material non-compliance will lead to serious consequences, and thereby reduce the likelihood that such non-compliance will ever be an issue:

19. Orders and Sanctions.

a. Orders. The Court may act at any time to issue orders or directions for the construction or carrying out of this Final Judgment, for the enforcement of compliance therewith, and for the punishment of any violation thereof.

b. Jurisdiction. Jurisdiction is retained by this Court for the purpose of enabling any of the parties to this Final Judgment to apply to this Court at any time for such further orders or directions as may be necessary or appropriate for the construction or carrying out of this Final Judgment, for the modification of any of the provisions hereof, for the enforcement of compliance herewith, and for the punishment of any violation hereof.

c. Knowing Act of Material Non-Compliance. Upon recommendation of the Special Master or the Plaintiffs, or sua sponte, the Court shall review evidence pertaining to Microsoft's Material Non-Compliance with the terms of this Order. If the Court determines that Microsoft has knowingly committed an act of Material Non-Compliance, the Court may, in addition to any other action, convene a hearing to consider an order requiring Microsoft to license its source code for the Microsoft software that is implicated by the act of Material Non-Compliance to anyone requesting such a license for the purpose of facilitating interoperability between the relevant Microsoft product and any non-Microsoft product or, in the case of an act of Material Non-Compliance that does not implicate particular Microsoft software, to order such other sanctions as the Court deems just and appropriate given the nature of Microsoft's actions and the likely deterrent effect of the sanction.

d. Pattern or Practice of Material Non-Compliance. If the Court finds that Microsoft has knowingly engaged in a pattern or practice of Material Non-Compliance with the terms of this Order, the Court may, in addition to any other action, (i) convene a hearing to consider an order requiring Microsoft to pay such civil penalties as the Court deems just and appropriate, given the nature of the violation and the likely deterrent effect of the sanction, and/or (ii) request proposals from the Plaintiffs and/or the Special Master for appropriate further conduct remedies and impose those or other conduct remedies the Court deems just and appropriate, given the nature of the violation and the likely deterrent effect of the sanction.

e. Meaning of Material Non-Compliance. For purposes of this Section, ''Material Non-Compliance'' shall include any:

i. violation of the disclosure requirements relating to APIs, Communications Interfaces, and Technical Information that has any significant effect on the ability of ISVs to develop Software Products or Web-Based Software that Interoperate as effectively with Microsoft Platform Software as Microsoft's own Software Products or Web-Based Software do;

ii. violation of any anti-retaliation or non-discrimination provision included in this Order;

iii. violation of the provision of this Final Judgment pertaining to interference with the performance of non-Microsoft applications, Middleware, or Web-Based Software; or

iv. other action or omission that the Court determines has the effect of undermining a substantial purpose of this Order.

f. Intellectual Property Infringement Claims. Upon recommendation of the Special Master or the representative of the Plaintiffs, or sua sponte, the Court shall review evidence that Microsoft has brought or has threatened to bring a groundless claim of Intellectual Property infringement for the purpose of preventing, hindering, impairing, or inhibiting any non-Microsoft software, Middleware, or Web-Based Software from Interoperating with a Microsoft Operating System Product or Microsoft Middleware Product. If the Court determines that Microsoft has undertaken such action, it shall issue an order enjoining Microsoft from asserting or enforcing any intellectual property rights in related APIs, Communications Interfaces, or Technical Information.

P. Reporting of Software and Related Transactions

Microsoft can use acquisitions as a weapon to maintain its operating system monopoly. Many of these deals are structured in such a way, or relate to such relatively small businesses, that they are not captured by the disclosure regime under the Hart-Scott-Rodino Act. To ensure governmental oversight over these transactions, the remedy should provide for limited disclosures to the plaintiffs in connection with such transactions.

20. Reporting of Certain Transactions.

a. Notice. For any direct or indirect acquisition (which term includes an acquisition of securities or of assets) or investment by Microsoft or any of its Subsidiaries and for any exclusive license of technology or other intellectual property to Microsoft or any of its Subsidiaries, Microsoft must provide the Plaintiffs with sixty (60) days'' prior written notice of the consummation of such acquisition, investment or license transaction where such transaction involves (either as a direct or indirect ''acquiree, investee or licensor) a person (other than Microsoft or any of its Subsidiaries) whose business (or any part thereof) has been or could reasonably be classified under (or any of whose Subsidiary's businesses, or any part thereof, has been or could reasonably be classified under) any of the following North American Industry Classification System codes, and Microsoft did not own 33% or more of the securities of such person prior to December 1, 2001:

i. 334 (computer and electronic product manufacturing);

ii. 42143 (computer and computer peripheral equipment and software wholesalers);

iii. 5133 (telecommunications);

iv. 5132 (cable networks and program distribution);

v. 52 (finance and insurance); or

vi. 5415 (computer systems design and related services).

b. Information. Accompanying such written notice shall be the same information that would be reported if the Hart-Scott-Rodino Antitrust Improvements Act of 1976 (the ''HSR Act9 were applicable to such transaction. Such information shall be treated as confidential to the extent that it would be so treated under the HSR Act.

21. Effective Date, Term, Broad Interpretation, Costs and Fees.

a. Effective Date. This Final Judgment shall take effect 30 days after the date on which it is entered.

b. Term. This Final Judgment shall expire at the end often years from the date on which it takes effect.

c. Broad Interpretation. All of the provisions of this Final Judgment, whether substantive, regulatory or procedural, will be interpreted broadly consistent with its remedial purpose of restoring the prospect of competition to the operating systems market.

d. Costs and Fees. Plaintiffs shall be awarded reasonable costs and fees. The Plaintiffs shall submit a motion for costs and

fees, with supporting documents as necessary, no later than forty-five (45) days after the entry of this Final Judgment.

22. Definitions.

a. ''Advisory Committee'' has the meaning given in Section 18.d.

b. ''Agreement'' means any agreement, understanding, joint venture, arrangement or alliance, whether written or oral.

c. ''APIs'' or application programming interfaces mean the interfaces, service provider interfaces, file formats, data structures, Component Object Model specifications and interfaces, registry settings, global unique identifiers (''GUIDs'') and protocols that enable a hardware device or an application, Middleware, server Operating System or network Operating System to efficiently obtain services from (or provide services in response to requests from) and fully Interoperate with Platform Software and to use, benefit from, and rely on all the resources, facilities, and capabilities of such Platform Software. APIs include all interfaces, methods, routines and protocols that enable any Microsoft Operating System or Middleware Product installed on a Personal Computer to (a) execute fully and properly applications or Middleware designed to run in whole or in part on any Microsoft Platform Software installed on that or any other device (including servers, telephones and devices), (b) fully Interoperate with Microsoft Platform Software, applications or directories installed on the same computer or on any other computer or device, and (c) perform network security protocols such as authentication, authorization, access control, encryption / decryption and compression/decompression.

d. ''Bind'' means to include software or a link to Web-Based Software in an Operating System Product in such a way that either an OEM or an end user cannot readily remove or uninstall the binary code of that software or link without degrading the performance or impairing the functionality of such software or the Operating System.

e. ''Browser'' means software that, in whole or in part, provides the functionality present in any version of Internet Explorer or MSN Explorer offered on either Macintosh or Windows, including without limitation utilizing, storing or communicating in any way with or via HTTP, HTML, URLs, XML, Javascript or any broadly compatible or competitive standards, products, systems, protocols, or functionalities.

f. ''Communications Interfaces'' means the interfaces and protocols that enable software, directories, networks, Operating Systems, network Operating Systems or Web-Based Software installed on one computer (including Personal Computers, servers and Handheld Computing Devices) to Interoperate with the Microsoft Platform Software on another computer including without limitation communications designed to ensure security, authentication or privacy.

g. ''Covered OEM'' means one of the 20 Personal Computer OEMs having obtained the highest volume of licenses of Windows Operating System Products from Microsoft in the calendar year preceding the effective date of the Final Judgment. Starting on January 1, 2003, Microsoft shall annually determine and publish within 30 days the list of OEMs that shall be treated as covered OEMs for the new calendar year, based on the independently determined volume of licenses during the preceding calendar year.

h. ''De Facto Standard'' has the meaning given in Section 16.b.

i. ''Default Middleware'' means Middleware configured to launch automatically (that is, ''by default'') to provide particular functionality in the event that the user has not selected specific Middleware for this purpose. For example, a default Web browser is Middleware configured to launch automatically to display Web pages in the event that the user has not selected other software for this purpose.

j. ''End-User Access'' means the invocation of Middleware directly or indirectly by an end user of a computer, or the end user's ability to invoke Middleware. ''End-User Access'' includes invocation of Middleware that the Operating System Product's design requires the end user to accept.

k. ''Handheld Computing Device'' means any RAM-based electronic computing device (including without limitation a cellular telephone, personal digital assistant and Pocket PC) that is small enough to be used while held in the user's hand, that may or may not be capable of networked operation, including Internet access, that contains a computer microprocessor, and that can run software applications or Web-Based Software.

l. ''HSR Act'' has the meaning given in Section 20.b.

m. ''IAP'' means an Internet access provider that provides consumers with a connection to the Internet, with or without its own proprietary content.

n. ''ICP'' means an Internet content provider that provides content to users of the Internet by maintaining Web sites or Web servers.

o. ''IHV'' means an independent hardware vendor that develops hardware to be included in or used with a computer.

p. ''Intellectual Property'' means copyrights, patents, trademarks or trade secrets that Microsoft uses or licenses to third parties.

q. ''Interoperate means the ability of two products to effectively access, utilize and/or support the full features and functionality of one another.

r. ''ISV'' means any entity other than Microsoft (or any subsidiary, division, or other operating unit of any such other entity) that is engaged in the development and licensing (or other marketing) of software products or Web-Based Software (including without limitation products or services designed for Personal Computers, servers or Handheld Computing Devices).

s. ''Manager'' means a Microsoft employee who is responsible for the direct or indirect supervision of more than 100 other employees.

t. ''Market Development Allowance'' means any marketing development allowance, agreement, program, rebate, credit or discount, whereby an OEM or Third-Party Licensee is provided a monetary discount in the applicable royalty for a licensed product (other than the discount specifically described in Section 2.a.ii of this Judgment) in exchange for the OEM or Third-Party Licensee agreeing to some additional licensing term. For example, Microsoft has previously referred to Marketing Development Allowances as marketing development agreements, or MDAs, and marketing development programs, or MDPs.

u. ''Material Non-Compliance'' has the meaning given in Section 19.e.

v. ''Microsoft'' means Microsoft Corporation, its successors and assigns (including any transferee or assignee of any ownership rights to, control of, or ability to license the Intellectual Property referred to in this Final Judgment), their subsidiaries, affiliates, directors, officers, managers, agents, and employees, and all other persons in active concert or participation with any of them who shall have received actual notice of this Final Judgment by personal service or otherwise.

w. ''Middleware'' means software, whether provided in the form of files installed on a computer or in the form of Web-Based Software, that operates directly or through other software within an Operating System or between an Operating System (whether or not on the same computer) and other software (whether or not on the same computer) by offering services via APIs or Communications Interfaces to such other software, and could, if ported to or made Interoperable with multiple Operating Systems, enable software products written for that Middleware to be run on multiple Operating System Products. Examples of Middleware within the meaning of this Final Judgment include without limitation Internet browsers, network operating systems, e-mail client software, media creation, delivery and playback software, instant messaging software, voice recognition software, digital imaging software, the Java Virtual Machine, calendaring * systems, Handheld Computing Device sychronization software, directories, and directory services and management software. Examples of software that are not Middleware within the meaning of this Final Judgment are disk compression and memory management software.

z. ''Microsoft Middleware Product'' means

i. Internet browsers, e-mail client software, media creation, delivery and playback software, instant messaging software, voice recognition software, digital imaging software, directories, Exchange, calendaring systems, systems and enterprise management software, Office, Handheld Computing Device synchronization software, directory services and management software, the Common Language Runtime component of the Net framework, and Compact Framework, whether provided in the form of files installed on a computer or in the form of Web-Based Software, or

ii. Middleware distributed by Microsoft that-

(1) is, or in the three years preceding this Judgment has been, distributed separately from an Operating System Product, any successors thereto, or

(2) provides functionality similar to that provided by Middleware offered by a Microsoft competitor.

y. ''Microsoft Platform Software'' means a Windows Operating System Product or

Microsoft Middleware Product or any combination of a Windows Operating System Product and a Microsoft Middleware Product.

z. ''OEM'' means the manufacturer or assembler of a computer (including without limitation servers and Handheld Computing Devices), regardless of whether such manufacturer or assembler applies its trademark to the final product.

aa. ''Office'' means all software developed and distributed by Microsoft incorporating the brand name ''Microsoft Office'' and its successors, including at least the individual Microsoft Middleware Products Word, Excel, Outlook, Power Point, and Access.

bb. ''Operating System'' means the software that controls the allocation and usage of hardware resources (such as memory, central processing unit time, disk space, and peripheral devices) of a computer (including without limitation Personal Computers, servers and Handheld Computing Devices) or network, providing a ''platform'' by exposing APIs that applications use to ''call upon'' the Operating System's underlying software routines in order to perform functions.

cc. ''Operating System Product'' means an Operating System and additional software shipped with the Operating System, whether or not such additional software is sold separately. An Operating System Product includes Operating System Product upgrades that may be distributed separately from the Operating System Product and any version of any Operating System Product created pursuant to the terms and requirements of this Final Judgment.

dd. ''Personal Computer'' means any computer configured so that its primary purpose is to be used by one person at a time, that uses a video display and keyboard (whether or not the video display and keyboard are actually included), and that contains an Intel x86, successor, or competitive microprocessor, and computers that are commercial substitutes for such computers.

ee. ''Plaintiff'' means any of the following plaintiffs in this action: the States of California, Connecticut, Florida, Iowa, Kansas, Massachusetts, Minnesota, Utah and West Virginia and the District of Columbia.

ff. ''Platform Software'' means an Operating System or Middleware or any combination of an Operating System and Middleware.

gg. ''Rule 53'' has the meaning given in Section 18.

hh. ''Special Master'' has the meaning given in Section 18.

ii. ''Special Master Liaison Officer'' has the meaning given in Section 18.c.

jj. ''Standard'' has the meaning given in Section 16. a above.

kk. ''Standard-Setting Body'' has the meaning given in Section 16.a above.

ll. ''Subsidiary'' of a person means an affiliate controlled by such person directly, or indirectly through one or more intermediaries.

mm. ''Synchronization Drivers'' means software that facilitates or enables the synchronization of information on any two computers (including without limitation Personal Computers, servers and Handheld Computing Devices).

nn. ''Technical Information'' means all information regarding the identification and means of using and/or implementing APIs and Communications Interfaces that competent software developers require to make their products running on any computer Interoperate effectively with Microsoft Platform Software running on a computer. Technical information includes but is not limited to reference implementations, communications protocols, file formats, data formats, syntaxes and grammars, data structure definitions and layouts, error codes, memory allocation and deallocation conventions, threading and synchronization conventions, functional specifications and descriptions, encryption algorithms and key exchange mechanisms for data translation, reformatting, registry settings and field contents.

oo. ''hird-Party Licensee'' means any person offering to purchase from Microsoft at least 10,000 licenses of a product or products offered and licensed under Section 1, including without limitation ISVs, systems integrators and value-added resellers.

pp. ''Timely Manner'': Disclosure of APIs, Technical Information and Communications Interfaces in a Timely Manner means, at a minimum, publication on a Web site accessible to ISVs, IHVs, OEMs and Third-Party Licensees at the earliest of the time that such APIs, Technical Information, or Communications Interfaces are (i) disclosed to Microsoft's applications developers, or (ii) used by Microsoft's own Platform Software developers in software released by Microsoft in alpha, beta, release candidate, final or other form, or (iii) disclosed to any third party, or (iv) within 90 days of a final release of a Windows Operating System Product, no less than 5 days after a material change is made between the most recent beta or release candidate version and the final release.

qq. ''Web-Based Software'' means software code that resides, in whole or in part, on a computer connected to a network and whose functionality (whether or not described as or labeled a service), includes without limitation database, directory and/or security functionality, accessed via a different computer via the Internet.

rr. ''Windows Operating System Product'' means software code (including source code and binary code, and any other form in which Microsoft distributes its Windows Operating Systems for Personal Computers) of Windows 95, Windows 98, Windows 2000 Professional, Windows Me, Windows XP and their successors (including the Windows Operating Systems for Personal Computers codenamed ''Longhorn,'' and ''Blackcomb,'' and their successors), as distributed by Microsoft to any licensee, whether or not such product includes software code of any one or more Microsoft Middleware Products.

The Importance of this Remedy Litigation

Plaintiff Litigating States'' proposed remedies, taken together, redress Microsoft's anticompetitive behavior in a manner that fully comports with the principles and spirit of the Court of Appeals'' decision. These proposed remedies are intended to prohibit the recurrence of, and remedy the harm done by, the Microsoft practices that were held to be unlawful by the Court of Appeals.

They are framed in terms of the specific anticompetitive conduct in which Microsoft engaged, such as commingling middleware and operating system software code; discriminatory licensing; failure to make timely disclosure of the interfaces necessary to enable its rivals to market software compatible with Windows; actual and threatened retaliation against customers and rivals to discourage their development and use of competing software; refusal to give OEMs and consumers the freedom to choose software based solely on its merits; the pollution of cross-platform technologies like Java; and the abuse of important applications like Office to deter the emergence of alternative software platforms.

These remedies are also intended to minimize the enforcement burden on the Court by giving Microsoft incentives to comply and by appointing a Special Master with substantial authority. Unlike the previously announced settlement between the Department of Justice (''DOJ'') and Microsoft, these remedies create a real prospect of achieving what the DOJ said it intended to accomplish: ''stop Microsoft from engaging in unlawful conduct, prevent any recurrence of that conduct in the future, and restore competition in the software market...'' Assistant Attorney General Charles James, DOJ Press Release, Nov. 2, 2001, at page 1.

To implement a meaningful remedy faithful to the Court of Appeals decision, the Plaintiffs'' proposals must and do differ substantially from the DOJ settlement. By the terms of the Final Judgment, Plaintiffs propose that, unlike the DOJ settlement, Microsoft be required, inter alia: (1) to license an unbundled version of Windows (i.e., in which code for Microsoft's middleware and its monopoly operating system is not commingled); (2) to provide early and broad disclosure of interfaces so that rival software companies have a fair opportunity to bring their products to market at the same time as Microsoft; (3) to disclose technical information so that rival handheld devices, servers and networks can interoperate with Microsoft's dominant Windows operating system; (4) to respect OEM and end-user preferences for non-Microsoft software, so that consumers have real freedom of choice unbiased by Microsoft; (5) to make Internet Explorer, the browser that benefited from so many of Microsoft's anticompetitive acts, available on an open source basis; (6) to carry Java, which Microsoft also labored mightily to destroy, along with its own operating system; and (7) to pert Office to work on other operating systems. These remedies also differ from the DOJ settlement in that they recognize that: (1) carefully crafted carve-outs and exceptions must be avoided, because of their tendency to render potentially useful provisions impotent, and (2) effective compliance requires strict requirements for internal compliance, strong incentives, and an enforcement mechanism (the Special Master) that promises prompt resolution of differences and minimal burden on the Court's resources. Accepting the determinations and directives from the Court of Appeals, both in its liability determination

and in its guidance on remedy, the Plaintiff Litigating States'' Remedy Proposals maximize the prospect for truly meaningful platform competition, and all of the benefits to consumers that such competition would yield.

Respectfully submitted,

By: /s/ Brendan V. Sullivan, Jr.

Brendan V. Sullivan, Jr. (Bar No. 12757)

By: /s/ Steven R. Kuney

Steven R. Kuney (Bar No. 253286)

WILLIAMS & CONNOLLY LLP

725 Twelfth. Street, NW

Washington, DC 20005

Tel: (202) 434–5000

Fax: (202) 434–5029

Counsel for the Plaintiff Litigating States California, Connecticut, Florida, Iowa, Kansas, Massachusetts, Minnesota, Utah and the District of Columbia

By: /s/Thomas Greene

Thomas Greene

Office of the Attorney General of the State of California

455 Golden Gate Avenue, Suite 11000

San Francisco, California 94102

Tel: (415) 703–5555

For the Plaintiff Litigating States

By: /s/Douglas L. Davis

Douglas L. Davis

Assistant Attorney General for the State of West Virginia

Consumer Protection/Antitrust Division

P.O. Box 1789

Charleston, West Virginia 25326–1789

Tel: (304) 558–8986

Counsel for the Plaintiff Litigating State West Virginia

Exhibit C

IN THE UNITED STATES DISTRICT COURT FOR THE D1STRICT OF COLUMBIA

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———————————————

STATE OF NEW YORK ex. rel. Attorney General ELIOT SPITZER, et at., Plaintiffs, Civil Action No. 98–1233 (CKK)

v.

Next Court Deadline: March 4, 2002 MICROSOFT CORPORATION, Status Conference

Defendant. ———————————

———————————————

MICROSOFT CORPORATION'S RESPONSE TO PLAINTIFF LITIGATING STATES'' FIRST JOINT REQUESTS FOR ADMISSION IN REMEDY PROCEEDINGS

Pursuant to Rule 36 of the Federal Rules of Civil Procedure, Local Rule 26.2, and the Scheduling Order entered by the Court on September 28, 2001, defendant Microsoft Corporation (''Microsoft'') hereby objects and responds as follows to the Plaintiff Litigating States'' First Joint Requests for Admission in Remedy Proceedings (the ''Requests'').

GENERAL OBJECTIONS

The following General Objections apply to each of the Requests and shall have the same force and effect as if set forth in full in response to each individually numbered request.

A. To the Requests Generally

1. Microsoft objects to each of the Requests to the extent that they seek information protected from discovery by file attorney-client privilege, the attorney work product doctrine or any other applicable privilege, protection, immunity, law or rule. Any disclosure??of information protected from discovery by the attorney-client privilege, the attorney work product doctrine or any other applicable privilege, protection, immunity, law or rule is inadvertent and should not be construed to constitute a waiver.

2. Microsoft objects to each of the Requests (and their accompanying Instructions) to the extent that they seek to impose burdens and obligations on Microsoft that exceed those imposed by the Federal Rules of Civil Procedure or the Local Rules of the United States District Court for the District of Columbia.

3. Microsoft objects to each of the Requests to the extent they are overly broad and unduly burdensome and seek information that is not relevant to any remaining claim or defense in this action.

4. Microsoft objects generally to the Requests to the extent they are vague and ambiguous and do not pose simple and direct questions that cab. be readily admitted or denied.

5. Microsoft objects generally to the Requests to the extent they seek to elicit information concerning issues in dispute between the parties that is more appropriately sought through other discovery devices.

6. Microsoft objects generally to the Requests to the extent they call for legal conclusions or seek ratification of the legal significance plaintiffs ascribe to disputed issues of fact.

7. Microsoft objects generally to the Requests 1o the extent they are argumentative or reflect plaintiffs'' subjective interpretation of factual issues.

8. By agreeing to respond to the Requests, Microsoft does not concede that the Requests seek information that is relevant to any remaining claim or defense in this action. Similarly, Microsoft does not concede that the Requests seek information that is reasonably calculated to lead to the discovery of admissible evidence. Microsoft instead expressly reserves all further objections as to the relevance and admissibility of the information provided, as well as the fight to object to further discovery relating to the subject matter of any information provided.

9. Microsoft objects to the Requests to the extent they purport to require that the response be made ''under oath.'' Rule 36 of the Federal Rules of Civil Procedure provides that a written answer ''signed by the party or the party's attorney'' is a fully sufficient response to requests for admission.

B. To the Instructions

1. Microsoft objects to Instruction No. 1 to the extent that it purports to impose burdens and obligations on Microsoft that arc different from or greater than those imposed by Rule 36 of the Federal Rules of Civil Procedure.

2. Microsoft objects to Instruction No. 2 to the extent that it purports to impose burdens and obligations on Microsoft that are different from or greater than those imposed by Rule 36 of the Federal Rules of Civil Procedure.

3. Microsoft objects to Instruction No. 3 to the extent that it purports to impose burdens and obligations on Microsoft that are different from or greater than those imposed by Rule 26(e) of the Federal Rules of Civil Procedure.

RESPONSES TO SPECIFIC REQUESTS FOR ADMISSION

REQUEST NO. 1

Admit that Microsoft has violated the antitrust laws of the United States of America, and in particular Section 2 of the Sherman Act, 15 U.S.C. § 2. Response: Objection. This request improperly calls for a legal conclusion. Notwithstanding this objection, Microsoft admits that the United States Court of Appeals for the District of Columbia affirmed in part a conclusion that Microsoft had violated Section 2 of the Sherman Act and avers that, pending resolution of all proceedings in this Court, Microsoft retains the ability to challenge that conclusion in the United States Supreme Court.

REQUEST NO. 2

Admit that ''the key 1o the proper remedy in this case is to end Microsoft's restrictions on potentially threatening middleware, prevent it from hampering similar nascent threats in the future and restore the competitive conditions created by similar middleware threats.'' Plaintiff United States Department of Justice Competitive Impact Statement (''CIS'') at 24. Response: Admit that the quoted statement appears in the CIS prepared by the A?? Division of the U.S. Department of Justice. (''DOJ'') but deny that Microsoft shares the opinion expressed.

REQUEST NO. 3

Admit that ''OEMs are a crucial channel for distribution and ultimate usage of Non-Microsoft Middleware Products such as browsers.'' CIS at 25. Response: Admit that the quoted statement appears in the CIS prepared by the DOJ but deny that Microsoft shares the opinion expressed. There are numerous other distribution channels for software products, including electronic downloading from the Interact, and those channels have, if anything, become more effective in garnering usage since the original trial of this action ended.

REQUEST NO. 4

Admit that in order for a remedy in this proceeding to be effective, ''it is critical that the OEMs ... are free to choose to distribute and promote middleware without interference from Microsoft.'' CIS at 23.

Response: Admit that the quoted statement appears in the CIS prepared by the DOJ but deny that Microsoft shares the opinion expressed, particularly to the extent it suggests that OEMs were appreciably restrained from promoting non-Microsoft middleware in the past. OEMs have always been free to install non-Microsoft software products on their personal computers and to promote such software products through placement of icons on the Windows desktop and in the Start menu and otherwise.

REQUEST NO. 5

Admit that in determining whether Microsoft has violated Section III.A. of the Revised Proposed Final Judgment filed on November 6, 2001 (hereafter ''RPFJ''), ''It]he existing Microsoft-OEM relationship provides a baseline against which any changes Microsoft makes in its treatment of that OEM for prohibited reasons can be detected and assessed.'' CIS at 25.

Response: Admit that the quoted statement appears in the CIS prepared by the DOJ but deny knowledge or information sufficient to form a belief as to how the DOJ intends to ascertain whether a violation of Section III.A of the RPFJ has occurred.

REQUEST NO. 6

Admit that under the RPFJ, Microsoft can compensate (both monetarily and non-monetarily) an OEM in return for an agreement to include a Microsoft product or service with personal computers shipped to customers.

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.A of the RPFJ for a complete end accurate statement of its terms.

REQUEST NO. 7

Admit that under the RPFJ, Microsoft can withhold Consideration from an OEM if an OEM chooses not to support, promote or carry any Microsoft product or service.

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.A of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 8

Admit that under the RPFJ, if an OEM chooses to remove user access to any Microsoft Middleware Product, Microsoft can compensate (both monetarily and non-monetarily) that OEM less than an OEM that chooses not to remove user access to any Microsoft Middleware Product.

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Sections III.A and III.B of the RPFJ for a complete and accurate statement of their terms.

REQUEST NO. 9

Admit that the majority of Covered OEMs were at one or more times during the calendar years 2000 and 2001 in violation of the terms of their license agreements with Microsoft.

Response: Denied.

REQUEST NO. 10

Admit that ''Windows license royalties and terms are inherently complex and easy for Microsoft to use to affect OEMs'' behavior, including what software the OEMs will offer to their customers.'' CIS at 28.

Response: Admit that the quoted statement appears in the CIS prepared by the DOJ but deny that Microsoft shares the opinion expressed.

REQUEST NO. 11

Admit that under the RPFJ, Microsoft is free to enforce its license, s with OEMs for Windows Operating System Products in a non-uniform manner.

Response: Objection. The nature of Microsoft's rights and obligations under the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 12

Admit that under the RPFJ, if an OEM ''promote[s] or install[s] third party offers for Interact access, subscription on-line music services, or Web-based applications that use or support Non-Microsoft Middleware such as an alternate browser, audio/video client software, or Java Virtual Machine,'' CIS at 30, Microsoft may offer that OEM less Consideration than an OEM that agrees to promote or install Microsoft software applications, services and/or Middleware Products.

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Sections III.A and III.C of the RPFJ for a complete and accurate statement of their terms.

REQUEST NO. 13

Admit that under the RPFJ, if Microsoft designs a Windows Operating System Product to ''reserve a particular list for multimedia players, [Microsoft] cannot specify either that the listed player be its own Windows Media Player or that, whatever multimedia player an OEM chooses to list in that entry, it be capable of supporting a particular proprietary Microsoft data format.'' CIS at 30–31.

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.C.1 of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 14

Admit that under the RPFJ, Microsoft can prevent an OEM from installing a list of Middleware Products or other software products on a Windows Operating System Product.

Response: Objection. This request is vague and ambiguous in its use of the phrase ''installing a list of Middleware Products or other software products.'' Moreover, the proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.C.1 of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 15

Admit that under the RPFJ, Microsoft can prohibit an OEM from launching automatically, at the conclusion of the initial boot sequence or upon connection or disconnection from the Internet, any non-Microsoft Middleware Product so long as a Microsoft Middleware Product with similar functionality would not otherwise launch automatically.

Response: Objection The proper interpretation of the RPFJ calls for a legal conclusion Microsoft refers plaintiffs to Section III.C.3 of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 16

Admit that under the ??PFJ, Microsoft can prevent an OEM from configuring its products to launch non-Microsoft Middleware automatically, other than when Microsoft Middleware Products launch automatically at the conclusion of the first boot sequence or subsequent boot sequences or upon connection to or disconnection from the Internet.

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.C.3 of die RPFJ fur a complete and accurate statement of its terms.

REQUEST NO. 17

Admit that under the RPFJ, Microsoft can offer an OEM Consideration in return for that OEM configuring its products to launch Microsoft Middleware Products at any time, including at the conclusion of the first boot sequence* or subsequent boot sequences or upon connection to or disconnection from the Internet.

Response: Objection. The nature of Microsoft's rights and obligations under the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 18

Admit that under the RPFJ, Microsoft can impose currently unspecified ''technical specifications'' in connection with any IAP offer presented during the initial boot sequence.

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.C.5 of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 19

Admit that under the RPFJ, Microsoft can restrict by agreement an OEM from promoting any non-Microsoft Middleware or any other ISV product or service during the initial boot sequence.

Response: Objection. The nature of Microsoft's rights and obligations under the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs 1o the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 20

Admit that under the RPFJ, Microsoft can offer an OEM Consideration in return for aa agreement to promote only Microsoft products or services, including Microsoft Middleware Products, during the initial boot sequence.

Response: Objection. The nature of Microsoft's fights and obligations under the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 21

Admit that under the RPFJ, Microsoft does not have to disclose to ISVs, IHVs, IAPs, ICPs, and OEMs all of the APIs and related technical information relating to Microsoft Platform Software that are disclosed to developers of Microsoft Middleware Products.

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.D of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 22

Admit that since January 1, 2000 developers of Microsoft Middleware Products have studied, interrogated and/or interacted with the source code and any related documentation of Microsoft Platform Software.

Response: Objection. This request is circular #yen that Microsoft Platform Software is defined in Section VIA. of the RPFJ to include the Microsoft Middleware Products defined in Section VI.K of the RPFJ.

REQUEST NO. 23

Admit that the APIs that must be disclosed under the RPFJ include, ''broadly, any interface, protocol or other method of information exchange between Microsoft Middleware and a Windows Operating System Product.'' CIS at 33–34.

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.D of the RPFJ for a complete* and accurate statement of its terms.

REQUEST NO. 24

Admit that under the RPFJ, Microsoft's obligation to disclose ''documentation'' only requires Microsoft to disclose the sort of information that Microsoft already provides to ISVs and others through the Microsoft Developer's Network (''MSDN'').

Response: Objection. The proper interpretation of the RPFJ calls ''for a legal conclusion. Microsoft refers plaintiffs to Section III.D of the RPFJ and the definition of Documentation in Section VI.E of the RPFJ for a complete and accurate statement of their terms.

REQUEST NO. 25

Admit that developers of Microsoft Middleware have access to APIs and/or related technical information and documentation relating to Microsoft Platform Software that are not disclosed by Microsoft through the MSDN.

Response: Objection. This request is circular given that Microsoft Platform Software is defined in Section VI.L of the RPFJ to include the Microsoft Middleware* Products defined in Section VI.K of the RPFJ, and the developers of such Microsoft Middleware Products are also the developers of the Microsoft Middleware defined in Section VI.J of'' the RPFJ.

REQUEST NO. 26

Admit that under the RPFJ, developers of Microsoft Middleware are permitted access to APIs and/or related technical information relating to Microsoft Platform Software that arc not made available to ISVs, IHVs, IAPs, ICPs and OEMs.

Response: Objection. This request is circular given that Microsoft Platform Software is defined in Section VI.L of the RPFJ to include the Microsoft Middleware Products defined in Section VI.K of the RPFJ, and the developers of such Microsoft Middleware Products are also the developers of the Microsoft Middleware defined in Section VI.J of the RPFJ.

REQUEST NO. 27

Admit that under the RPFJ, Microsoft Middleware developers may have access to APIs and/or related technical information relating to Microsoft Platform Software before such information is made available to ISVs, IHVs, IAPs, ICPs and OEMs.

Response: Objection. This request is circular given that Microsoft Platform Software is defined in Section VI.L of the RPFJ to include the Microsoft Middleware Products defined in Section VI.K of the RPFJ, and the developers of such Microsoft Middleware Products arc also the developers of the Microsoft Middleware defined in Section VI.J of the RPFJ.

REQUEST NO. 28

Admit that under the RPFJ, Microsoft is not obliged to release the last major beta version of any Windows Operating System Product ''well in advance of the actual commercial release'' of that Windows Operating System Product. CIS at 35.

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.D of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 29

Admit that under the RPFJ, Microsoft is not obliged to release the last major beta version of any Microsoft Middleware ''well in advance of the actual commercial release'' of that Middleware. CIS at 35.

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.D of the RPFJ for a complete and accurate, statement of its terms.

REQUEST NO. 30

Admit that under the RPFJ, developers of Microsoft Middleware* ''will not have access to any ... features of Windows Operating System Products that might allow it to operate more effectively'' that are not also made available to ISVs, IHVs, IAPs, ICPs and OEMs. CIS at 35.

Response: Objection. This request misquotes the CIS by (i) referring to developers of Microsoft Middleware rather than to the Microsoft Middleware itself and (ii) replacing the words ''hidden or proprietary'' with an ellipsis. Moreover, the proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.D of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 31

Admit that under the RPFJ, all APIs and related technical information, including all documentation, ''for the Secure Audio Path digital fights management service that is part of Windows XP must be disclosed and mad* available for use by competing media players in interoperating with Windows XP.'' CIS at 35.

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.D of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 32

Admit that the ''competitive significance'' of non-Microsoft Middleware is ''highly dependent on content, data and applications residing on servers and passing over networks such as the Internet or corporate networks ....'' CIS at 36.

Response: Admit that the quoted statement appears in the CIS prepared by the DOJ but deny that Microsoft shares the opinion expressed.

REQUEST NO. 33

Admit that under tile RPFJ, Microsoft is not obliged to license to third parties all APIs, technical information and Communications Protocols relating to Windows Operating System Products that Microsoft makes available to Microsoft developers of server software.

Response: Objection. This request is vague and ambiguous in its use of the term ''technical information'' and ''server software.'' Moreover, the proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.E of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 34

Admit that under the RPFJ, third party licensees ''will have full access to and be able to use, the protocols that arc necessary for software located on a server computer to interoperate with, and fully take advantage of, the functionality provided by a Windows Operating System Product.'' CIS at 36.

Response: Objection. This request is vague and ambiguous in its use of the phrases ''software located on a server'' and ''fully take advantage of.'' Moreover, the proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.E of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 35

Admit that notwithstanding the fact that the term ''server operating system products'' is not defined in the RPFJ, it ''include, but is not limited to, the entire Windows 2000 Server product families and any successors...as well as a number of server software products and functionality, including the Interact Information Services ... and Active Directory.'' CIS at 37.

Response: Objection. This request misquotes the CIS by (i) adding an ellipsis at the end of the first sentence of the first paragraph on page 37, wrongly suggesting that the words following the ellipsis are part of the same sentence; (ii) adding the words ''as well as'' without placing them in square brackets, wrongly suggesting that those words are part of the original text; and (iii) quoting only a portion &the third sentence of the paragraph and concluding the quotation with a period rather than an ellipsis, wrongly suggesting that the sentence ends with the words ''Active Directory.'' In fact, Internet Information Services and Active Directory are features of the Windows 2000 Server family of products. Microsoft admits that Windows 2000 Server, Windows 2000 Advanced Server and Windows 2000 Datacenter Server and their successors are server operating system products as that term is used in the RPFJ.

REQUEST NO. 36

Admit that under the RPFJ, Microsoft is not required to license Communications Protocols implemented in any Windows Operating System Product that are used by a Microsoft server operating system product to interoperate with that Windows Operating System Product with the addition of other software to the client computer.

Response: Objection. The proper interpretation of the RPFJ'' calls for a legal conclusion. Microsoft refers plaintiffs to Section III.E of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 37

Admit that under the RPFJ, there is no time period within which Microsoft must make available for license to third parties the Communications Protocols referenced in Section III.E. of the RPFJ.

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.E of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 38

Admit that under the RPFJ, Microsoft is not obliged to license any Communications Protocols distributed only with a Microsoft server or otherwise separately from a Windows Operating System Product.

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.E of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 39

Admit that one of the purposes* of Section III.E. of the RPFJ is to ''??nsur[e] that competing, non-Microsoft server products ... will have the same access to and ability to interoperate with Windows Operating System Products as do Microsoft's server operating systems.'' CIS at 38.

Response: Objection. This request is vague and ambiguous in its use of the term ''non-Microsoft server products.'' Moreover, Microsoft denies knowledge or information sufficient to form a belief as to what the DOJ thinks are the ''purposes'' of Section III.E of the RPFJ. The proper interpretation of the RPF3 calls for a legal conclusion. Microsoft refers plaintiffs to Section III.E of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 40

Admit that one of the purposes of Section III.E. of the RPFJ is to ''permit seamless interoperability between Windows Operating System Products and non-Microsoft servers on a network.'' CIS at 38.

Response: Objection. This request is vague and ambiguous in its use of the term ''seamless interoperability.'' Moreover, Microsoft denies knowledge or information sufficient to form a belief as to what the DOJ thinks arc the ''purposes'' of Section III.E of the RPFJ. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.E of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 41

Admit that Section III.E. of the RPFJ ''requires the licensing of all Communications Protocols necessary for non-Microsoft servers to interoperate with the Windows Operating System Products'' implementation of the Kerberos security standard in the same manner as do Microsoft servers, including the exchange of Privilege Access Certificates.'' CIS at 38.

Response: Objection. This request is vague and ambiguous in its use of the phrase ''the Windows Operating System Products'' implementation of the Kerberos security standard.'' Moreover, the proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.E of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 42

Admit that Section III.E. of the RPFJ requires Microsoft to ''license for use by non-Microsoft server operating system products the Communications Protocols that Windows Operating System Products use to enable network services through mechanisms such as Windows server message block protocol/common Internet file system protocol communications, as well as Microsoft remote procedure calls between the client and server operating systems.'' CIS at 39.

Response: Objection. This request is vague and ambiguous in its use of the terms ''network services'' and ''Microsoft remote procedure calls.'' Moreover, the proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.E of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 43

Admit that Section III.E. of the RPFJ requires Microsoft to license to third parties ''Communications Protocols that permit a runtime environment (e.g., a Java Virtual Machine and associated class libraries or competing functionality such as the Common Language Runtime) to receive and execute code from a server ... if those protocols are implemented in a Windows Operating System Product.'' C1S at 39.

Response: Objection. This request is vague and ambiguous in its use of the term ''runtime environment.'' Moreover, the proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.E of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 44

Admit that Section III.J.1.a. of the RPFJ exempts from disclosure under Section III.E. only ''specific end-user implementations of security items such as actual keys, authorization tokens or enforcement criteria, the disclosure of which would compromise the security of a particular installation or group of installations of the listed security features.'' CIS at 39 (quoting RPFJ §III.J.1.a.).

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Sections III.E and III.J.1.a of the RPFJ for a complete and accurate statement of their terms.

REQUEST NO. 45

Admit that Section III.J.1.a, of the RPFJ ''permits Microsoft to withhold limited information necessary to protect particular installations of the Kerberos and Secure Audio Path features of its product5 (e.g., keys and tokens parti?? to a given installation) but does not permit it to withhold any capabilities that are inherent in the Kerberos and Secure Audio Path features as they are implemented in a Windows Operating System Products.'' CIS at 39.

Response: Objection. This request is vague and ambiguous in its use of the phrase ''capabilities that arc inherent in the Kerberos and Secure Audio Path features as they arc implemented in a Windows Operating System Product'' Moreover, the proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Section III.J.1.a of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 46

Admit that under the RPFJ, Microsoft may contractually prevent an ISV from developing, using, distributing or promoting any software that competes with Microsoft Platform Software or runs on any software that competes with Microsoft Platform Software so long as it is part of an agreement to use, distribute or promote any Microsoft software or to develop software for, or in conjunction with, Microsoft.

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiff?? to Sections III.F and III.G of the RPFJ for a complete and accurate statement of their terms.

REQUEST NO. 47

Admit that under the RPFJ, Microsoft may cater into an agreement with an ISV in which Microsoft pays the ISV to make Internet Explorer the default browser for software developed by the ISV.

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Sections III.F and III.G of the RPFJ for a complete and accurate statement of their terms.

REQUEST NO. 48

Admit that under the RPFJ, Microsoft may enter into an agreement with an ISV or ICP in which Microsoft pays the ISV or ICP to make Windows Media Player the default media player for software or Interact content developed by the ISV or ICP.

Response: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Sections III.F and III.G of the RPFJ for a complete and accurate statement of their terms.

REQUEST NO. 49

Admit that under Section III.G.1. of the RPFJ, Microsoft could not make the ''commercially practicable'' representation a standard part of its agreements with IAPs, ICPs, ISVs, IHVs or OEMs. Respond: Objection. The proper interpretation of the RPFJ calls for a legal conclusion. Microsoft refers plaintiffs to Sections III.G.1 of the RPFJ for a complete and accurate statement of its terms.

REQUEST NO. 50

Admit that under the RPFJ, Microsoft is free to take action it knows or reasonably should know will directly or indirectly interfere with or degrade the performance or compatibility of non-Microsoft Middleware when interoperating with Microsoft Platform Software, without providing notice to the ISV of such non-Microsoft Middleware prior to taking the action.

Response: Admit the subject matter of this request is not addressed in the RPFJ, but deny that (i) Microsoft has ever taken such action or (it) such action is expressly or impliedly permitted under the RPFJ.

REQUEST NO. 51

Admit that Microsoft currently restricts its redistributable code from use with some non-Microsoft Platform Software.

Response: Objection. This request is vague and ambiguous in its use of the terms ''redistributable code'' and ''non-Microsoft Platform Software,'' neither of which is defined in the RPFJ or the

Requests.

Dated: Washington, DC
January 11,2002

William H. Neukom
Thomas W. Butt
David A. Heiner Jr.
Diane D'Arcangelo
Christopher J. Meyers
MICROSOFT CORPORATION
One Microsoft Way
Redmond, Washington 98052
(425) 936–8080
Dan K. Webb
Bruce R. Braun
WINSTON & STRAWN
35 West Wacker Drive

Chicago, Illinois 60601
(312) 558–5600
Charles F. Rule (Bar No. 370818)
FRIED, FRANK, HARRIS, SHRIVER & JACOBSON
1001 Pennsylvania Avenue, NW Suite 800
Washington, DC 20004
(202) 639–7300
John L. Warden (Bar No. 222083)
Richard J. 1 Urowsky
Steven L. Holley
Michael Lacovara
Richard C. Pepperman, II
Stephanie G. Wheeler
Ronald J. Colombo
SULLIVAN & CROMWELL
125 Broad Street
New York, New York 10004
(212) 558–4000
Bradley P. Smith (Bar No. 468060)
SULLIVAN & CROMWELL
1701 Pennsylvania Avenue, NW
Washington, DC 2f)006
(202) 956–7500
Counsel for Defendant Microsoft Corporation
CERTIFICATE OF SERVICE
I hereby certify that on this 11th day of January, 2002, I caused a true and correct copy of the foregoing Microsoft Corporation's Response to Plaintiff Litigating States'' First Joint Requests for Admission in Remedy Proceedings to be served by facsimile and overnight courier upon:
Philip S. Beck
Bartlit Beck Herman Palenchar & Scott
Courthouse Place, Suite 300
54 West Hubbard Street
Chicago, Illinois 60610
Tel: (312) 494–4411
Fax: (312) 494–4440
Renata B. Hesse
U.S. Department o f Justice
Antitrust Division
601 D Street, NW, Suite 1200
Washington, DC 20530
Tel: (202) 514–8276
Fax: (202) 30/-1454
Brendan V. Sullivan, Jr.
Williams & Connolly LLP
725 Twelfth Street, NW
Washington, DC 20005
Tel: (202) 434–5000
Fax: (202) 434–5029
Kevin J. O'Connor
Wisconsin Attorney General's Office
P.O. Box 7857
123 West Washington Avenue
Madison, Wisconsin 53703–7857
Tel: (608) 266–1221
Fax: (608) 267–2223
Blake Harrop
Illinois Attorney General's Office
100 West Randolph Street, I2th Floor
Chicago, Illinois 60601
Tel: (312) 814–2503
Fax: (312) 814–2549
Jay L. Himes
Assistant Attorney General
New York State Attorney General's Office
120 Broadway, Suite 2601
New York, New York 10271
Tel: (212) 416–8282
Fax: (212) 416–6015

MTC–00030608

PROJECT TO PROMOTE COMPETITION & INNOVATION IN THE DIGITAL AGE
2001 K STREET, NW . SUITE 800 . WASHINGTON, DC 20006
January 28, 2002
Ms. Renata Hesse
Trial Attorney
Suite 1200
Antitrust Division
Department of Justice
601 D. Street, NW
Washington, DC 20530
RE: Comments to the Proposed Final Judgment In United States v. Microsoft Corporation, No. 98–1232 State of New York, et al v. Microsoft Corporation, No. 98–1233
Dear Ms. Hesse,
Enclosed please find ten (10) copies of the comments of the Project to Promote Competition and Innovation in the Digital Age (''ProComp''), submitted pursuant to the Tunney Act, 15 U.S.C. §16, with respect to the Proposed Final Judgment in the above-captioned matters.

Please also note that this filing is accompanied by an affidavit prepared and submitted by Professor Kenneth J. Arrow, the original signed copy of which is attached hereto.
Sincerely yours,
Mitchell S. Pettit
President
ProComp
Comments to the Proposed Final Judgment In United States v. Microsoft Corporation, No. 98–1232 State of New York, et al. I,. Microsoft Corporation, No. 98–1233
Submitted By
Project to Promote Competition & Innovation in the Digital Age (''ProComp'')
Pursuant to the Tunney Act, 15 U.S.C. § 16
January 28, 2002
Kenneth W. Starr
Thomas D. Yannucci
Mark L. Kovner
Kirkland & Ellis
Robert H. Bork
1150 17th Street, NW
Washington, DC 20036
Counsel for ProComp
655 15th Street, NW, Suite 1200
Washington, DC 20005 (20
2) 879–5000
Counsel for ProComp
Kevin J. Arquit
Michael C. Naughton
Arman Y. Oruc
Clifford Chance Rogers & Wells LLP
200 Park Avenue
New York, N.Y. 10166
(212) 878–8000
Counsel for ProComp
Mitchell S. Pettit, President
ProComp
2001 K Street, NW, Suite 800
Washington, DC 20006
(202) 912–7140
Glenn B. Manishin
Stephanie A. Joyce
Kelley Drye & Warren LLP
1200 19th Street, NW, Suite 500
Washington, DC 20036
(202) 955–9600
Counsel for ProComp

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I. INTRODUCTION

This proposed decree is so ineffective that it would not have prevented Microsoft from destroying Netscape and Java, the very acts that gave rise to this lawsuit. It is so ineffective in controlling Microsoft that it might as well have been written by Microsoft itself.

A. Standard of Tunney Act Review

The ''public interest'' standard of the Tunney Act, 15 U.S.C. § 16(e), is determined in this case by the unanimous legal ruling of the Court of Appeals for the District of Columbia Circuit sitting en bane. That Court held that Microsoft has maintained its monopoly in personal computer operating systems in clear violation of Section 2 of the Sherman Act. No decree that fails to cure that illegality and prevent its recurrence can conceivably serve the public interest. The Proposed Final Judgment (''PFJ'' or ''proposed decree'') accomplishes neither of those mandatory purposes.

For that reason, the proposed decree should be rejected by the District Court.

This case is entirely different from any settlement since the adoption of the Tunney Act in 1974.

All other settlements were entered into prior to the conclusion of any trial, usually before any trial had even commenced. Cases holding that a Tunney Act court must accept a lesser remedy than might (or might not) be obtained after trial are utterly irrelevant. The Competitive Impact Statement's (''CIS'') reliance upon such cases is misguided. United States v. Microsoft Corp., Revised Proposed Final Judgment and Competitive Impact Statement, 66 Fed. Reg. 59,452 (2001). Here, the District Court and the Court of Appeals, including a total of eight judges, have decided that in violating the Sherman

Act, Microsoft's behavior is directly contrary to the public interest. The Tunney Act does not empower the District Court to enter a remedy that excuses past violations and permits future conduct of the same nature. The proposed decree does precisely that. It is no more binding on the District Court than would be a Department of Justice statement that henceforth a named company would be immune from antitrust prosecution.

In particular, the proposed settlement takes no steps to remedy Microsoft's foreclosure of middleware threats from competing Internet browsers and cross-platform Java technology, Microsoft's related efforts to illegally increase the applications barrier to entry protecting its Windows monopoly, or Microsoft's illegal commingling of browser and other middleware code with Windows. Further, the proposed settlement does not assure that future middleware competitors will have access to the necessary technical information to interoperate properly with Windows, and does not open up the critical Original Equipment Manufacturer (''OEM'') distribution channel to these future competitors. Finally, the PFJ ignores the competitive threat to Microsoft's monopoly presented by server-based distributed applications, and thus fails to address Microsoft's practice of protecting its monopoly by controlling proprietary interfaces and communications protocols.

More significantly, the only suggestion in the CIS as to any basis for a very limited and deferential scope of judicial review is simply wrong. The Department insists that such a standard is ''particularly'' appropriate ''where, as here, court's review of the decree is informed not merely by the allegations contained in the Complaint, but also by the extensive factual and legal record resulting from the district and appellate court proceedings.'' CIS, 66 Fed. Reg. at 59476. Exactly the opposite is the case. In routine Tunney Act cases, the law is clear that respect is to be accorded to the Department's antitrust enforcement judgments—its ''perceptions of the market structure and its view of the nature of the case''—precisely because there is no factual or legal record before the court. United States v. Microsoft Corp., 56 F.3d 1448, 1448 (DC Cir. 1995) (''Microsoft I'') (emphasis added). When a Sherman Act case has been litigated and affirmed on appeal, however, the district court is fully capable of assessing the proposed remedy in light of those rulings and its ''familiarity with the market involved.'' Id. at 1461.

The closest parallel to this Court's review of the PFJ is the AT&T monopolization settlement presented by the Department and decided by this Court (Harold Greene, J.) under the Tunney Act. United States v. AT&T, 552 F. Supp. 131 (D.DC 1982), aff'd mere. sub nora., Maryland v. United States, 460 U.S. 1001 (1983). In the AT&Tease, Judge Greene had heard the vast majority of the evidence—on all issues except remedy—and more than a year earlier bad denied AT&T's motion to dismiss on the merits after the close of the government's case-in-chief.

Following a wide-ranging Tunney Act process that included evidentiary hearings, third-party submissions and several days of oral argument, Judge Greene refused to approve the consent decree as proposed, even though it mandated divestiture of major components of the Bell System. He concluded that the decree was in certain respects substantively inadequate, precluded the Court from effective oversight and enforcement, and posed a risk of harming third-parties (despite the presence of complementary regulatory jurisdiction to accomplish similar goals). Judge Greene therefore insisted upon substantial modifications to the proposed decree before he would enter the settlement under the Tunney Act's public interest standard.

Recognizing the intense public concern over a possible ''rubber stamp'' of the settlement by the Court, Judge Greene concluded that it was his responsibility to ensure that the decree protected consumers, opened the relevant markets to effective competition in a timely manna-, and was readily enforceable. Significantly, Judge Green found that ''unlike ordinary pre-trial antitrust settlements, the Court would ''be able to render sound judgments'' because it ''ha[d] already heard what probably amounts to well over ninety percent of the parties'' evidence both quantitatively and qualitatively, as well as all of their legal arguments.'' Id. at 152 (citations omitted). For this reason, Judge Greene held that ''it does not follow that [the Court] must unquestionably accept a consent decree as long as it somehow, and, however inadequately, deals with the antitrust problems implicated in the lawsuit.'' Id.

The purpose of judicial review under the Tunney Act is to ensure that a consent decree follows ''the public interest as expressed in the antitrust laws.'' S. REP. NO. 93—298 (1973) (''SENATE REPORT'') (emphasis added). Here, the Court of Appeals held specifically that ''a remedies decree in an antitrust case must seek to ''unfetter a market from anticompetitive conduct,'' to ''terminate the illegal monopoly, deny to the defendant the fruits of its statutory violation, and ensure that there remain no practices likely to result in monopolization in the future.'' United States v. Microsoft Corp., 253 F.3d 34, 103 (DC Cir. 2001) (''Microsoft III'') (quoting Ford Motor Co. v. United States, 405 U.S. 562, 577 (1972), and United States 1,. United Shoe Mach. Corp., 391 U.S. 244, 250 (1968)). The Department itself earlier emphasized to this Court on remand that ''both the applicable remedial legal standard and the liability determination of the Court of Appeals are clear.'' Joint Status Report, United States v. Microsoft Corp., at 24 (D.DC filed Sept. 20, 2001). The Court of Appeals has spoken and its holding is binding on this Court as well as the litigants. Consequently, in the unique procedural posture of this case, the ''public interest as expressed in the antitrust laws'' is the Court of Appeals'' mandate itself. SENATE REPORT, supra, at 5.

B. Failure to Satisfy Settled Monopolization Remedies Law

The CIS does not even cite, let alone argue, that the PFJ meets the DC Circuit's remedial standard, quoted above, to terminate the monopoly, deny the defendant of its ill-gotten fruits, and ensure that monopoly practices cannot arise in the future.

As that standard recognizes, there is no difference between the remedies called for when a defendant has unlawfully gained a monopoly or unlawfully maintained a monopoly. The offense of monopolization under Section 2 of the Sherman Act occurs when a finn has either ''acquired or maintained'' monopoly power by anticompetitive means. United States 1,. Grinnell Corp., 384 U.S. 563, 570–71 (1966); Microsoft III, 253 F.3d at 50. There is no legal basis to distinguish between the methods of monopolization either for liability or relief purposes, and neither DOJ nor Microsoft has cited a case making such a distinction. All arc equally unlawful and all arc equally harmful to consumers. Here, for example, even assuming that Microsoft achieved its monopoly power through legitimate business means, it has been found to have maintained such monopoly power through a series of anticompetitive conduct designed to illegally preserve its monopoly position by foreclosing rivals. But for this illegal maintenance, Microsoft's monopoly power would probably have dissipated, and competitors and consumers would have enjoyed the benefits of free and fair competition. Microsoft's internal communications demonstrate that Microsoft thought that would be the likely outcome.

For these reasons, courts apply broad relief even where a firm has been found to possess monopoly power that was legally acquired but illegally maintained. See, e.g., United Shoe, 391 U.S. at 250 (in context of a legally attained monopoly position that was illegally maintained, the Court held it has a duty to ''prescribe relief which will terminate the illegal monopoly, deny to the defendant the fruits of its statutory violation, and ensure that there remain no practices likely to result in monopolization in the future''). And courts have never distinguished between illegal attainment and illegal maintenance when determining remedies for a Sherman Act Section 2 monopolization claim. See, e.g., Schine Chain Theatres, Inc. v. United States, 334 U.S. 110, 128 (1948) (holding conduct injunctions against future violations not adequate to protect public interest in monopolization cases since defendant thus maintains the full benefit of the monopoly; instead broad remedies, including divestiture, are necessary to undo the harm to the market); see also 3 PHILLIP E. AREEDA AND HERBERT HOVENCAMP, ANTITRUST LAW ¶653i (2002) (quoting United Shoe, 391 U.S. at 250–52, for the proposition that a ''monopoly that has been created or maintained by plainly exclusionary conduct is unlawful and that it is the duty of the court to assure its ''complete extirpation.'' (emphasis added)). In short, an appropriate set of remedies to restore competition needs to be sufficient to pry open the market to competition, stop the bad acts, undo the effects of the bad acts, and preclude future alternative anticompetitive tactics.

The DC Circuit was well aware that this case involves monopoly maintenance—that the achievement by Microsoft of a Windows monopoly in the first instance was not alleged to be unlawful—but nonetheless specifically adopted the Ford/United Shoe

remedy standard, including its command to ''terminate'' the defendant's monopoly power. That is the law of this case and the law in all Sherman Act monopolization cases.

C. Failure to Redress Core Violations

By agreeing to the proposed settlement, the Department and the Settling States have ''won a lawsuit and lost a cause.'' International Salt Co. v. United States, 332 U.S. 392, 401 (1947). By excluding consideration of terminating the Windows monopoly from their remedy calculations, Plaintiffs have ignored the central meaning of Section 2. They would have the Court sanction Microsoft's unlawful conduct allowing its monopoly to remain intact. The Court of Appeals'' use of the traditional Ford/United Shoe standard clearly holds that that is not a proper remedy. The CIS explains that the applications barrier to entry protecting Microsoft's monopoly was directly threatened by ''two incarnations of middleware that, working together, had the potential to weaken the applications barrier severely without the assistance of any other middleware''—Netscape and Java. CIS, 66 Fed. Reg. at 59464–65. Nonetheless, the PFJ inexplicably contains no provision addressing Internet browsers or cross-platform Java runtime technology, let alone any other provisions that erode the applications barrier to entry. Moreover, the proposed decree simply ignores a number of other significant ways in which the Court of Appeals held that Microsoft's practices violated the Sherman Act. Consequently, the PFJ does not ''unfetter [the] market from anticompetitive conduct'' or ''ensure that there remain no practices likely to result in monopolization in the future.'' Microsoft III, 253 F.3d at 103.

Nothing in the settlement prohibits Microsoft from commingling code or binding its middleware to the operating system. This was a major issue in this litigation, and the Court of Appeals specifically found Microsoft's commingling of browser and operating system code to be anticompetitive. The danger is reinforced by the definition of ''Windows Operating System Product'' in Section VI.U, which states that what code comprises Windows ''shall be determined by Microsoft in its sole discretion.'' PFJ, 66 Fed. Reg. at 59459. Thus, Microsoft can render the protections for middleware, meaningless by binding and commingling code and redefining the operating system to include the bound/commingled applications.

ProComp strongly disagrees with the notion that it is impossible to move the market forward to approximate where it would have been absent Microsoft's violations. The applications barrier to entry is not an immutable condition. There are remedial alternatives available to restore Internet browsers and cross-platform runtime technology to the position they would have achieved—ubiquitous distribution without any ''lock-in'' to the Windows operating system m in the absence of Microsoft's violations. The open source Internet Explorer (''IE'') licensing requirement proposed by the Litigating States does just that. More specifically, a remedy that acts directly to undermine the applications barrier to entry, for instance by requiring ''porting'' of the Office suite to other operating systems platforms, could potentially do precisely what Netscape and Java were poised to accomplish in 1995–98—''commoditize'' the operating systems and thus allow operating systems competition to occur on the basis of efficiency and consumer demand, rather than hardware lock-in. In any event, by ignoring the economic importance of the competition destroyed by Microsoft's wide range of exclusionary practices, the PFJ fails to address the central lesson of this litigation. It does not redress the core Sherman Act violations on which liability was unanimously affirmed by the en bane Court of Appeals.

The relief proposed by the Litigating States acts directly to deny Microsoft the fruits of the violation (Interact Explorer licensing), pry open the operating systems market to competition (Java must carry) and erode the barrier to entry protecting Microsoft's monopoly power (applications porting). It is precisely these omissions m consequences of the Department's current, erroneously truncated remedy analysis m that fatally undermine the legal sufficiency of the PFJ. The Department's proposed remedy flatly contradicts the Court of Appeals'' directives and thus ''the public interest as expressed in the antitrust laws.'' SENATE REPORT, supra, at 5.

D. The PFJ Does Not Achieve its Purported Goals

The PFJ purports to provide applications developers with the tools to create competing platforms, but the proposed decree fails to achieve even the narrow goals it sets out to accomplish. The PFJ neither creates the conditions under which new middleware competition can flourish nor provides OEMs with the freedom to support such middleware in the event these technologies avoid the predatory acts of Microsoft.

Most predatory conduct fails to achieve or maintain monopolization because the aggressor must incur greater costs than its prey in order to keep or drive competitors from the market. What this litigation has shown is that Microsoft has numerous weapons in its arsenal to impose far greater damage on its competitors than the loss Microsoft suffers by using such weapons. Controlling the disclosure of the Application Program Interfaces (''API'') and the related technical information, imposing conditions on OEM licenses, ''commingling'' or bolting of software code and products are all examples of weapons Microsoft employed in its predatory attack on Netscape's Navigator and Java technologies. The PFJ does nothing to protect Microsoft from using the same tactics against any future middleware threats.

1. The API Disclosure Requirements

The PFJ purports only to make public those APIs between the operating system and Microsoft middleware that run on top of the operating system. It does not accomplish even that narrow result. To name a few, the convoluted definitions and exemptions to the API disclosure obligation allow Microsoft itself to decide which APIs will be subject to the disclosure requirement and when those APIs will be released. The decree also permits Microsoft to design and bundle its products in different ways to evade the disclosure requirements, for instance by permitting Microsoft in ''its sole discretion'' to decide what software comprises a ''Windows Operating System Product.'' PFJ, 66 Fed. Reg. at 59459. With some simple packaging decisions, Microsoft can unilaterally dictate whether middleware competitors will receive the interoperability information necessary to innovate. In short, as explained in detail below, the API disclosure provisions are riddled with numerous deficiencies that render them ineffective in promoting competition.

These are not loopholes, but triumphal arches that allow Microsoft to proceed uninhibited by the antitrust laws. The PFJ expressly allows Microsoft to play a game of form over substance by categorizing pieces of code into different defined terms. The operation of the disclosure requirements is devoid of any notion of technological or economic efficiency.

2. OEM Desktop Flexibility

The PFJ relies almost exclusively on OEMs to restore competition, a naive hope at best. OEMs do not have the resources or the economic incentive to create competition for Microsoft. In any event, the provisions regarding OEM flexibility to distribute competing middleware products ignore the economic realities of the software industry. Most importantly, the decree fails to provide OEMs and consumers with the flexibility to support competing middleware or other new technologies that Microsoft may deem as a threat to its monopoly position. The add/remove provisions in the proposed decree only allow for removal of end user access, i.e., the icon for Microsoft middleware, not the middleware itself. As discussed in the accompanying Declaration of Kenneth Arrow (Attachment A), Nobel laureate and the Department's own expert in Microsoft 1, this perpetuates the applications barrier to entry that is at the heart of this litigation. Thus, the OEM provisions enhance rather than erode Microsoft's operating system monopoly power.

E. The PFJ Fails to Address Competitive Issues that Will Determine the Future of the Software Industry

Even if these serious deficiencies in the structure, scope and language of the proposed decree were corrected, the settlement would still not create the conditions for a competitive operating systems market. The proposed decree hardly deals at all with Microsoft's likely future anticompetitive conduct. Microsoft's prodigious market power is now directed at the next threat to the Windows platform—applications and services provided via the Internet and other networks m not the Netscape/Java threat of 1995–99. Microsoft has destroyed those revolutionary technologies that are a source of operating systems competition and has moved on to other areas that the proposed decree all but ignores.

The PFJ fails to serve the public interest and to achieve the settled goals of monopolization relief reaffirmed in the Court of Appeals'' decision. It ignores the changing market realities, and the core violations upheld by the DC Circuit. The proposed

settlement exhibits an unjustifiable deference to a convicted monopolist in designing its products and determining the scope of the remedy. In doing so, it renounces its purported goal of creating the conditions for new middleware threats to flourish. Additionally, it clearly fails to deny Microsoft the ''fruits'' of its violations and ''terminate'' its monopoly power. It is precisely these flaws that fatally undermine the legal sufficiency of the PFJ. In contrast, the relief proposal by the Litigating States includes provisions, such as Interact Explorer licensing, Java must carry, applications porting, sufficient and timely disclosure of information, and the freedom to license unbundled Microsoft products, just to name a few, which deny Microsoft the fruits of the violation, pry open the OS market to competition and erode the barrier to entry protecting Microsoft's monopoly power. As a matter of law, the Department's settlement proposal cannot be said to be consistent with ''the public interest as expressed in the antitrust laws,'' SENATE REPORT, supra, at 5, where it has proposed a remedy without reference to those laws as reiterated by the Court of Appeals m this very case.

11. THE COURT SHOULD DEFER DECISION ON THE PROPOSED DECREE UNTIL AFTER THE LITIGATING STATES'' REMEDIES HEARING AND SHOULD APPLY THE SETTLED ANTITRUST REMEDY STANDARD EXPRESSLY REAFFIRMED IN THIS CASE BY THE COURT OF APPEALS

This is the only substantial Government Section 2 case in more than 30 years litigated through trial to judgment, appeal and dual opportunities for Supreme Court review. [1] A ''rush to judgment'' is simply not the appropriate course of judicial review under the Tunney Act, or otherwise. A decision on the adequacy of the proposed decree should therefore be deferred until after the conclusion of the evidentiary heating on the remaining Plaintiffs'' (''Litigating States'') relief proposals. Moreover, the normal Tunney Act flexibility accorded to the Government in offering a proposed pretrial antitrust settlement cannot hold in the unique circumstances of this case, in which the Court is obligated to conduct a searching, independent inquiry into the proposed decree, with no deference accorded to the government.

A. Approving the Proposed Decree Before Completion of the Remedy Hearings Would Be Wholly Unprecedented and Highly Prejudicial

No court has ever approved an antitrust settlement where, as here, there are remaining plaintiffs in the very same consolidated action that are about to begin a full remedies hearing based on adjudicated Sherman Act liability that has been affirmed on appeal. In this unprecedented case, [2]it is essential that the Court evaluate all available evidence bearing on the ''public interest'' of the Department's proposed settlement.

1. Waiting to Rule on the Proposed Decree Until After the Remedies Trial Avoids PreJudging the Remedies Case and the Prospect of Inconsistent Rulings

The Tunney Act sets no deadlines. Neither the Act nor its legislative history in any way encourages ''fast-track'' review. Instead, the Act expressly allows the Court to set its own schedule and to tailor its judicial review process to the facts and circumstances of each antitrust case. 15 U.S.C. ¶¶16(1) [3] As the Senate sponsor of the Tunney Act explained:

> The decision to make [Tunney Act] procedures discretionary is dictated by a desire to avoid needlessly complicating the consent decree process. There are some cases in which none of these procedures may be needed. On the other hand, there have been and will continue to be cases where the use of many or even all of them may be necessary. In fact, in a very few complex cases, failures to use some of the procedures might give rise to a, indication that the district court had failed to exercise its discretion properly.
>
> 119 Cong. Rec. 3453 (statement of Sen. Tunney) (emphasis added).

This highly complex case demands that the Court utilize all available procedures for evaluating the adequacy of the proposed decree and the evidentiary basis of the economic projections that underly the Department's remedial scheme. Deferring decision on the proposed decree is the only sensible approach. The Court's consideration of testimonial and other evidence on the failings of the decree will avoid unfair pre-judgment of the remedies remand and the entry of potentially conflicting relief. It also offers the most efficient means of ensuring that the many issues raised by the proposed decree and the Court of Appeals'' decision receive a thorough hearing on the merits. Deferring judgment will not harm any party or inconvenience the Court, given that the Litigating States'' upcoming remedies trial is scheduled to begin just thirteen days after the completion of the Tunney Act comment process. [4]Indeed, neither the Justice Department nor Microsoft can claim to be prejudiced by a short deferment in judgment on the PFJ, because Microsoft represents that it is already complying with the terms of the proposed decree.

Deferral would also avoid the highly undesirable result of inconsistent judgments. The Litigating States'' remedy proposal differs markedly from the proposed settlement in breadth, scope and approach. A premature ruling on the PFJ would force the Litigating States either to (1) pursue their relief proposal in full, knowing there may be inconsistent remedy orders issued by this Court that would make compliance difficult, if not impossible, or (2) stunt their case by limiting their proposed remedies to those that can be implemented in a manner consistent with the PFJ, even though they have already rejected that settlement as inadequate.

The Court faces a similar, untenable choice if it seeks to issue an early ruling on the proposed decree. The Court would have to limit its ultimate remedy order to the terms already required by its ruling on the Department's settlement, or order new remedies but vacate those portions of the PFJ that are inconsistent with the subsequent decree. This dilemma is easily avoided, however, by waiting to resolve the issues raised by the Tunney Act comments until after the Litigating States and Microsoft have had a full and fair opportunity to present evidence supporting their respective remedy proposals.

Avoiding conflicting remedial orders alone is reason enough to defer judgment on the decree. Inconsistent judgments are to be avoided in antitrust as in all complex litigation. See In re Transit Co. Tire Antitrust Litigation, 67 F.R.D. 59, 65 (W.D. Mo. 1975) (separate relief hearings ''would result in duplication of effort [and] possible inconsistent judgments''). It is well-established that ''[t]he avoidance of logically inconsistent judgments in the same action'' is a ''just reason for delay[ing]'' entry of final judgment in multi-party civil actions. [5]

The Court should give particular weight to considerations of uniformity in this case, because of the great need to ensure that all in the software industry—suppliers, customers and competitors —face a fair and even playing field. As the Supreme Court has held, antitrust violations should be remedied ''with as little injury as possible to the interest of the general public.'' United States v. American Tobacco Co., 221 U.S. 106 (1911). Thus, ''the Court would be justified in rejecting the proposed decree or requiring its modification if it concluded that the decree unnecessarily conflicts with important public policies other than the

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[1] Microsoft Corp. v. United States, 530 U.S. 1301 (2000) (denying appeal); Microsoft Corp. v. United States, 122 S. Ct. 350 (2001) (denying certiorari).

[2] Like AT&T, ''It]his is not an ordinary case.'' 552 F. Supp. at 151

[3] A Tunney Act court is authorized to ''take testimony of Government officials,'' appoint a ''special master and such outside consultants or expert witnesses as the court may deem appropriate,'' hear evidence and argument from other interested persons and organizations, and ''take such other action in the public interest as the court may deem appropriate.'' 15 U.S.C. § 16(f). These procedures are so important to a careful assessment of the public interest that courts routinely employ them, even in pretrial Tunney Act cases. See, e.g.. United States v. Bechtel Corp., 1979–1 Trade Cas. (CCH) ¶62,430 (N.D. Cal. 1979), aff'd 648 F.2d 660 (9th Cir. 1981); Dillard v. City of Foley, 166 F.R.D. 503 (M.D. Ala. 1996); United States v. Westinghouse Elec. Corp., 1988–1 Trade Cas. (CCH) ¶68,012 (D.DC 1988); United States v. ARA Serves., 1979–2 Trade Cas. (CCH) ¶62,861 (E.D. Mo. 1979); United States v. Mid-America Dairymen, Inc., 1977–1 Trade Cas. (CCH) ¶61,508 (W.D. Mo. 1977).

[4] Based on the deadlines set forth in the Court's November 8, 2001 Order and Section 16(b) of the Tunney Act, comments on the PFJ and the Department's responses to those comments are not due until February 26, 2002. Thus, the remedy trial, scheduled to begin on March I 1, 2002, will start only two weeks after the Justice Department is scheduled to submit its Response-to-Comments on the PFJ. Even if the Justice Department files its Response-to-Comments early, deferring judgment on the PFJ will cause little if any delay, no prejudice, and great benefits to the parties and the Court.

[5] Phoenix Renovation Corp. v. Gulf Coast Software, F.R.D. 580, 582 (E.D. Va. 2000) (quoting Fed. R. Civ. P. 54(b)); see also Dana Corp. v. Celotex Asbestos Settlement Trust, 251 F.3d 1107, 1120 (6 th Cir. 2001) (affirming the district court's condemnation of a reorganization plan provision that unnecessarily ''raise[d] a likelihood of inconsistent judgments'').

policy embodied in the Sherman Act.'' AT&T, 552 F. Supp. at 151. In this case, such an important public policy is the uniform application of antitrust law to the national software market.

2. Deferring Ruling on the Proposed Decree Promotes the Tunney Act's Express Goal of Conserving Judicial Resources

Deferring judgment on the proposed decree will also conserve judicial resources by allowing the Court to determine which questions raised by the PFJ can be resolved by the testimony and other evidence offered in the remedy trial. The Court may then limit or avoid duplicative evidence that must be adduced to assess whether the decree meets the applicable substantive standard for Tunney Act judicial review.

Consent decrees subject to Tunney Act review are generally used to obviate trial—to avoid ''extended proceedings'' and provide a ''prompt and less costly'' means of resolving antitrust suits pre-litigation. CIS, 66 Fed. Reg. at 59476 (quoting 119 Cong. Rec. 24598 (1973)). Even the Department of Justice, in discussing the negotiation of antitrust settlements in its Practice Manual, identifies the consent decree as the best way to obtain relief ''without taking the case to trial.'' Antitrust Division Manual, Ch. IV, § E, at 50 (3 rd ed. 1998) (emphasis added). Here, however, a liabilities trial has already occurred, and a remedies trial must occur regardless of when or whether the proposed Department settlement is approved. There is little or no court action to avoid. As a result, judicial resources are best conserved and most efficiently allocated by holding the remedies trial before ruling on the PFJ.

B. The Applicable Legal Standard for Reviewing the Proposed Decree is the Ford/United Shoe Test Specifically Mandated by the Court of Appeals

In no reported case since adoption of the Tunney Act in 1974 has the Department sought to settle a monopolization action after prevailing at trial and on appeal. The CIS nonetheless suggests that in assessing the adequacy of the proposed decree under the Act, this Court must approve a settlement that is less than the remedy the Court would otherwise impose of its own accord. CIS, 66 Fed. Reg. at 59476 (citations omitted). In the unprecedented procedural posture of this case, it cannot.

The Court of Appeals agreed that relief in this case must seek to ''terminate'' Microsoft's operating system monopoly, to ''unfetter'' barriers to competition to the operating systems market, to ''deny'' Microsoft the ''fruits'' of its statutory violations, and to ''ensure'' there are no practices ''likely to result in monopolization in the future ''[6] That mandate is binding on this Court as well as the litigants. The Supreme Court has ''consistently held that an inferior court has no power or authority to deviate from the mandate issued by an appellate court.'' Briggs v. Pennsylvania R. Co., 334 U.S. 304, 306 (1948). Indeed, even prior to the Tunney Act the Supreme Court emphasized that in antitrust cases, ''[t]he Department of Justice ... by stipulation or otherwise has no authority to circumscribe the power of the courts to see that [their] mandate is carried out.'' Cascade Natural Gas Corp. v. El Paso Natural Gas Co., 386 U.S. 129, 136 (1967).[7]Consequently, in the unique procedural posture of this case, the ''public interest as expressed in the antitrust laws,'' SENATE REPORT, supra, at 5, is the Court of Appeals'' mandate itself. [7] ''[A] remedies decree in an antitrust case must seek to ''unfetter a market from anticompetitive conduct,'' to ''terminate the illegal monopoly, deny to the defendant the fruits of its statutory violation, and ensure that there remain no practices likely to result in monopolization in the future.'' Microsoft III, 253 F.3d at 103 (citations omitted). 7 The legislative history of the Tunney Act indicates that Congress was clearly aware of Cascade and intended the Act's public interest standard to codify that rule of antitrust remedies. Judge L Skelly Wright, former Chief Judge for the DC Circuit, discussed the Cascade problem at length in his Senate appearance, explaining that ''the Supreme Court felt compelled to say that—and I am quoting—''The United States knuckled under to El Paso and settled this litigation''—close quote, rather than fully protecting the public interest by getting a decree which fully insured future competition.'' SENATE REPORT, supra, at 147.

The DC Circuit did not establish a new legal standard for monopolization relief, but rather adopted the traditional test developed by the Supreme Court decades ago. See Microsoft. III, 253 F.3d at 103 (quoting Ford Motor Co. v United States, 405 U.S. 562, 577 (1972), and United States v. United Shoe Mach. Corp., 391 U.S. 244, 250 (1968)). Notably, however, the CIS does not even cite, let alone argue, that the PFJ meets the DC Circuit's remedial standard. The Department instead offers its own view that ''[a]ppropriate injunctive relief in an antitrust case should: (1) [e]nd the unlawful conduct; (2) avoid a recurrence of the violation and others like it; and (3) undo its anticompetitive consequences.'' CIS, 66 Fed. Reg. at 59465 (citations omitted). This lesser standard is invalid because it ignores the Supreme Court's directives to ''terminate'' the monopoly and to eradicate the ''fruits'' enjoyed by the unlawful monopolist.

To the extent that DOJ may contend this case is different because the acquisition of Microsoft's monopoly was not challenged, rather the unlawful maintenance of that monopoly, it would be incorrect. There is no legal basis to distinguish between the methods of monopolizalion either for liability or relief purposes, and neither DOJ nor Microsoft has ever cited a case making such a distinction. The adverse consumer welfare and economic efficiency consequences of monopoly power are the same whether a monopoly was illegally acquired, illegally maintained or both. Indeed, the DC Circuit was well aware that the achievement by Microsoft of a Windows monopoly in the first instance was not alleged to he unlawful, [8] but nonetheless specifically adopted the traditional Ford/United Shoe remedy standard.

The Court of Appeals'' carefully crafted and detailed opinion can hardly be deemed to have applied this standard by accident. Accordingly, notwithstanding Microsoft's claim, it is simply not true that ''contrary to the critics'' overheated rhetoric, there is no basis for relief designed to terminate an 'illegal monopoly.''' [9] The fact that a monopoly was acquired lawfully does not provide any defense, because the monopolist forfeits its right to continue to hold even a lawfully acquired monopoly when it violates the Sherman Act in its preservation.[10]

The Department and Microsoft may argue that the Court of Appeals'' ''drastic'' modification of liability is of crucial significance in evaluating the scope of a remedy. See Microsoft III, 253 F.3d at 105. What this contention ignores is that the Court of Appeals reversed or remanded separate, distinguishable legal theories for Sherman Act liability that all arose from the same set of operative facts. As the government explained to the Supreme Court: The court of appeals affirmed the district court's central ruling that Microsoft violated Section 2 of the Sherman Act by engaging in an unlawful course of conduct to maintain its monopoly of the market for Intel-compatible PC operating systems. With minor exceptions, the court agreed with the district court's findings and conclusions that Microsoft's restrictions on original equipment manufacturers; its bundling of Internet Explorer into Windows; its dealings with internet access providers, independent software vendors, and Apple Computers; and its efforts to contain and to subvert Java technologies that threatened Microsoft's operating system monopoly, all served unlawfully to maintain the Windows monopoly.

Brief for the United States in Opposition [To Certiorari], Microsoft Corp. v. United States, No. 01–236, at 5 (S. Ct. filed Aug. 2001) (emphasis added; citations omitted). And the Court of Appeals added the explicit, highly unusual caution that ''[n]othing in the Court's opinion is intended to preclude the District Court's consideration of remedy

[8] See Microsoft L 56 F.3d at 1452 (no claim that ''Microsoft obtained its alleged monopoly in violation of the antitrust laws'') (emphasis in original); Microsoft III, 253 F.3d at 58 (Microsoft ''violated § 2 by engaging in a variety of exclusionary acts ... to maintain its monopoly'').

[9] Statement of Charles F. (Rick) Rule, Fried Frank Hams Shriver & Jacobson, Prepared for the Committee on the Judiciary, United States Senate, at 5 (Dec. 12, 2001) (''Rule Senate Testimony''). 10 This self-evident proposition becomes even more clear when the relief in this case is compared with that adopted by the Department, approved by this Court under the Tunney Act and affirmed on the merits by the Supreme Court in the AT&T antitrust case. United States v. AT&T, 552 F. Supp. 131. There, like here, the Section 2 claim was monopoly maintenance, not unlawful acquisition of monopoly power. Furthermore, unlike Microsoft, AT&T's monopoly was in part a de jure consequence of regulatory and legal protections. Id. at 135–41. Had there in fact been a difference for antitrust remedy purposes between monopoly maintenance and monopoly acquisition, use of the ultimate relief of divestiture in A T& T would have been impermissible. Thus, only by ignoring the largest antitrust settlement of the generation preceding Microsoft can the settling litigants here escape the conclusion that termination of a defendant's monopoly power is the principal remedial objective of Section 2 monopoly maintenance cases.

issues.'' [11] That the lesser included offenses of attempted monopolization and tying were not upheld does nothing to subtract from the seriousness of the widespread Section 2 violations affirmed by the Court of Appeals or the Court's explicit reaffirmation of the Ford/United Shoe standard for antitrust relief.

CIS'' lengthy recitation of cases indicating that a Tunney Act court must accept a lesser remedy than might be obtained after trial is irrelevant. CIS, 66 Fed. Reg. at 59475–76. None of these cases arose in the context of a post-trial settlement of a Section 2 monopolization claim and thus none resolved whether the remedial standard adopted by the federal courts in a fully litigated antitrust case must be jettisoned if the government subsequently agrees to a consensual decree. [12] More importantly, the Department has not offered any statutory or policy basis 1o justify its wooden invocation of Tunney Act dicta to this case. By failing to articulate any legitimate justification for the deference it insists upon, the Department's position suggests that it is designed to shield the merits of the decree from critique by the Court and to mask the weakness of the proposed settlement, rather than to satisfy any compelling institutional or constitutional policy.

The only suggestion in the CIS as to any basis for a limited scope of judicial review is just wrong. The Department insists that a different relief standard is ''particularly'' appropriate ''where, as here, court's review of the decree is informed not merely by the allegations contained in the Complaint, but also by the extensive factual and legal record resulting from the district and appellate court proceedings.'' CIS, 66 Fed. Reg. at 59476. That has things backwards. In normal Tunney Act cases, the law is clear that respect is to be accorded to the Department's antitrust enforcement judgments w its ''perceptions of the market structure and its view of the nature of the case''—precisely because there is no factual or legal record before the court. Microsoft I, 56 F.3d at 1448. When a Sherman Act case has been litigated and affirmed on appeal, however, the district court is fully capable of assessing the proposed remedy against that record and its ''familiarity with the market involved.'' Id. at 1461. [13] In short, the Court of Appeals'' mandate, and its application of traditional monopolization remedy law, is the applicable standard against which to measure the scope and efficacy of the PFJ.

C. The Court Owes No Tunney Act Deference To the Department in this Unprecedented Post-Trial, Post-Appeal Settlement The language, legislative history and purpose of the Tunney Act all indicate that the relatively deferential attitude ordinarily adopted by courts to antitrust settlements should not constrain this Court's inquiry into the legal sufficiency and acceptability of the remedy proposed by Microsoft, the Department and the Settling States.

The leading authority on Tunney Act deference is not at all to the contrary. In Microsoft I, the DC Circuit reversed the district judge for ''construet[ing] his own hypothetical case and then evaluat[ing] the decree against that case.'' 56 F.3d at 1459. Here, no one is asking the Court to consider claims the government chose not to pursue. Quite to the contrary. ProComp asks the Court to grant effective relief for those claims that the Department actually brought and on which it has already prevailed.

The difference in judicial deference owed to the Executive Branch is easily understood against this backdrop. The Tunney Act was created as a ''check on prosecutorial discretion,'' In re IBM, 687 F.2d 591,595 (2d Cir. 1982), that is, ''a check.., on the government's expertise m or at the least, its exercise of it—even on its good faith.'' United States v. Gillette Co., 406 F. Supp. 713, 715 (D. Mass. 1975). The concern of Congress was the predominance of pretrial antitrust settlements that otherwise would never reach a courtroom, [14] For these reasons, the Microsoft I decision cautions that a district court's Tunney Act obligation to avoid delving too deeply into the substantive merits of antitrust settlements arises because ''there are no findings that the defendant has actually engaged in illegal practices.'' Microsoft I, 56 F.3d at 1460 (emphasis in original). .

That is obviously not the case here. Microsoft's liability for a wide variety of exclusionary practices violative of Section 2 of the Sherman Act has been adjudicated and affirmed on appeal. In contrast, it is clear that the Tunney Act was predicated on the assumption that proposed consent decrees would be presented in the context of pretrial settlements over which the courts had yet to engage in an exercise of judicial power. See 15 U.S.C. § 16(e)(1) (district court must ''evaluate the competitive impact of... termination of alleged violations ....''); § 16(e)(2) (court must consider ''the public benefit, if any, to be derived from a determination of the issues at trial''). Unlike the ordinary Tunney Act situation, in this case it is indisputably not correct to conclude that ''[r]emedies which appear less than vigorous may well reflect an underlying weakness in the government's case.'' Microsoft I, 56 F.3d at 1461.

The Tunney Act's underlying principles of judicial restraint applicable to the exercise of prosecutorial discretion—deeply rooted in separation of powers—simply do not apply here. [15] In the typical Tunney Act case, courts have made ''no judicial finding of relevant markets, closed or otherwise, to be opened or of anticompetitive activity to be prevented,'' is by definition not present in a post-appeal antitrust settlement. Maryland v. United States, 460 U.S. 1001, 1004 (1983) (per curiam) (Rehnquist, J., dissenting). The separation of powers concerns in a post-trial settlement are actually reversed. [16] The source of Tunney Act deference is that ''the court's authority to review a decree depends entirely on the government's exercising its prosecutorial discretion by bringing a case in the first instance.'' Microsoft I, 56 F.3d at 1459–60 (emphasis added). In contrast, deferential review of a post-trial settlement in a fully litigated, finally appealed antitrust prosecution would directly contradict the ''mandate rule'' of Cascade Natural Gas and would be inconsistent with this Court's Article III obligations.

The Court of Appeals has explained that because there are ''constitutional difficulties that inhere in this statute,'' it is ''inappropriate for the [district] judge to measure the remedies in the decree as if they were fashioned after trial.'' Microsoft I, 56 F.3d at 1461. The converse is true when a remedy is in fact fashioned after trial. In that situation, the court has already made the factual and legal findings that do not exist in the ordinary consent decree situation, and therefore is not required to ''give due respect to the Justice Department's perception of the market structure and its view of the nature of the case.'' Id. at 1461.

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[11] United States v. Microsoft Corp., No. 00–5212, Order (Aug. 2, 2001) (per curiam).

[12] The Department's reliance on United States I,. BNS, Inc., 858 F.2d 456 (9 th Cir. 1988), is especially problematic. CIS, 66 Fed. Reg. at 59476. In BNS, a merger case, the public interest ''could be harmed irreparably by permitting a merger to become a fait accompli'' while the district court deliberated on the adequacy of the decree's provisions. 858 F.2d at 462. The proposed Microsoft settlement could not be more different. This is not a merger proceeding. Indeed, the public interest would be harmed profoundly if the Court accepts a relief proposal, like the PFJ, that is plainly inadequate to restore competition or eliminate the widespread anticompetitive practices whose illegality was squarely affirmed by the Court of Appeals. Accordingly, the Department's citation to BNS for the proposition that this Court cannot ''engage in an unrestricted evaluation of what relief would best serve the public,'' id., is both highly misleading and inapplicable.

[13] The Court of Appeals admonished and reversed the prior District Judge in this case, in part, for entering a decree based largely on the relief proposed by the government. Although the Justice Department's officers ''are by reason of office obliged and expected to consider w and to act—in the public interest,'' Microsoft 111. 253 F.3d at 34 (quoting Judge Jackson), that did not excuse the District Court from its independent obligation to consider and explain how the relief proposed would meet the sealed objectives of antitrust remedies. Microsoft I!!. 253 F.3d at 34. Nothing less is warranted now.

[14] H.R. REP. NO. 93–1463 (1974) (''HOUSE REPORT''). Note, The ITT Dividend: Reform of Department of Justice Consent Decree Procedures, 73 colum. L. Rev. 594 (1973).

[15] The purposes of the Tunney Act are not implicated in a proposed post-trial settlement of a Government. Section 2 prosecution that has already been affirmed on appeal. There is no risk of excessive secrecy, because the remedy phase of a litigated antitrust case necessarily takes place in an open judicial process dining which, based on the trial record and l/ability findings, the district determines whether the government's requested relief adequately remedies the defendant's violations of the antitrust laws. Nor is there any risk that judicial review of a proposed post-appeal consent decree will discourage government antitrust settlements, as the Department retains the power—which it exercised long ago in this case -whether to initiate an antitrust prosecution or settle.

[16] The courts have therefore distinguished between a court's involvement in ''the executive branch's decision to abandon litigation,'' which ''might impinge upon the doctrine of separation of powers,'' and ''[j]udicial approval of consent decrees under the [Tunney] Act,'' which is ''an entirely distinct proposition because the decree is entered as the court's judgment.'' In re IBM Corp., 687 F.2d 591,602 (2d Cir. 1982).

In light of these serious constitutional concerns, this Court should not and cannot accept a proposed decree that falls short of the remedy that the Court would impose based on its own, independent assessment of the record and the Court of Appeals'' remand mandate. The Court is undoubtedly aware of the long-standing maxim that constitutional questions are to be avoided if a statute can be interpreted so as not to raise them. E.g., Richmond Screw Anchor Co., 275 U.S. 331, 346 (1928). In the context of this unprecedented Tunney Act case, simple prudence dictates that the Court should construe the Act to dispense with deference to the government where liability has been adjudicated and affirmed on appeal, and thus avoid any possibility of a constitutional challenge to its remand decision on remedies.

D. Tile AT&T. Model is Instructive by Conducting a Searching Inquiry into the Scope, Adequacy and Effectiveness of the Proposed Decree Before turning to a substantive critique of the PFJ, it is appropriate to discuss the close parallels between Microsoft and the last major monopolization settlement presented by the Department and decided by this Court (Harold Greene, J.) under the Tunney Act. United States v. AT&T, 552 F. Supp. at 151.

Before the AT&T settlement was proposed, Judge Greene had heard the vast majority of the evidence—on all issues except remedy—and had denied AT&T's motion to dismiss on the merits after the close of the government's case-in-chief. United States v. AT&T, 524 F. Supp. 1336, 1380 (D.DC 1981). Following a wide-ranging Tunney Act process that included evidentiary hearings, third-party submissions, and several days of oral augment, Judge Greene declined to approve the decree as proposed—even though it required divestiture of the Bell system—because he concluded that it was substantively inadequate, precluded the Court from effective oversight and enforcement, and posed a risk of harming third parties.

The Judge insisted upon substantial modifications to the proposed decree before he would enter the settlement under the Tunney Act's public interest standard. In doing so, Judge Greene explained that ,47&T was “not an ordinary antitrust case.'' 552 F. Supp. at 151. Instead, in that case as in this one, the proposed decree was an ''enormous undertaking'' having ''significant consequences for an unusually large number of ratepayers [i.e., consumers], shareholders... and competitors.'' 552 F. Supp. at 152. In addition, and also like in this case, the Court would ''be able to render sound judgments'' because it ''ha[d] already heard what probably amounts to well over ninety percent of the parties'' evidence both quantitatively and qualitatively, as well as all of their legal arguments.'' Id. For these reasons, Judge Greene concluded that ''it does not follow that [the Court] must unquestionably accept a consent decree as long as it somehow, and, however inadequately, deals with the antitrust problems implicated in the lawsuit.'' Id. Instead, Judge Greene reasoned it was his responsibility to ensure the decree protected consumers, opened the relevant markets to effective competition in a timely manner, and would be readily enforceable. The Supreme Court affirmed. Maryland v. United States, 460 U.S. 1001 (1983) (per curiam); California v. United States, 464 U.S. 1013 (1983)(per curiam).

Like AT&T, this has been a long, exceedingly complex and very hard-fought case. Unlike AT&T, however, in this litigation the proposed settlement comes after the trial was completed and after the courts finally adjudicated the defendant's liability. Also'' unlike AT&T, moreover, here the government has not succeeded in obtaining via settlement anything close to the relief it sought on the merits from this Court. We have submitted our view that deference to the Department of Justice is inappropriate in this unique case. The A T&7 model provides a benchmark for the scope of Tunney Act judicial review which, if anything, should be exceeded given the far more advanced procedural posture here. This Court cannot err by following an expanded AT&T-like procedure. The converse may not be true.

In sum, the Litigating States must be allowed to proceed free from the interference that early Court approval of the proposed decree would entail. When the Court does assess and rule on the decree, it must undertake a thorough, independent analysis of whether the settlement protects the public interest and satisfies the DC Circuit's mandate for effective relief. Delegating this core judicial responsibility to the Department would violate the Tunney Act, raise serious separation-of-powers concerns and leave the public without effective redress against a proven monopolist.

III. THE PROPOSED FINAL JUDGMENT IS INSUFFICIENT UNDER ANTITRUST REMEDIES LAW AND DOES NOT MEET THE STANDARD ARTICULATED BY THE DEPARTMENT

The proposed settlement does not meet the DC Circuit's remedial standard, quoted above, to terminate the monopoly, deny the defendant its ill-gotten fruits, and ensure that monopoly practices cannot arise in the future. The CIS does not even cite, let alone argue that the PFJ meets the DC Circuit's remedial standard. Indeed, the PFJ does not even meet the lesser standard, articulated in the CIS, to ''(1) end the unlawful conduct; (2) ''avoid a recurrence of the violation'' and others like it; and (3) undo its anticompetitive consequences.'' CIS, 66 Fed. Reg. at 59465 (citations omitted).

In fact, the proposed settlement fails to undo the competitive harm from the core antitrust violations affirmed by the Court of Appeals, and does not even address a series of additional violations of the Sherman Act upheld by the Court of Appeals.

A. The Decree Does Not ''Undo'' the Competitive Harm Resulting from Microsoft's Anticompetitive Practices

Netscape's browser and Sun's Java were revolutionary middleware technologies which allowed Independent Software Vendors CISVs'') to write programs that would run on any operating system, thus potentially making hardware platforms—and correspondingly, operating systems—a matter of competitive and technological indifference. Microsoft both recognized and feared that this new model for software development would be an inflection point in the computer industry, [17] and accordingly launched a multi-faceted campaign to destroy the economic and technological viability of these forms of competing middleware.

In this case, Microsoft early on recognized middleware as the Trojan horse that, once having, in effect, infiltrated the applications barrier to entry, could enable rival operating systems to compete .... Alerted to this threat, Microsoft strove over a period of approximately four years to prevent middleware technologies from fostering the development of enough full-feature, cross-platform applications to erode the applications barrier to entry. United States v. Microsoft Corp., 87 F. Supp.2d 30, 38–39 (D.DC 2000) (Conclusions of Law), affirmed in part, 253 F.3d 34 (DC Cir.), cert. denied, 530 U.S. 1301 (2000).

The Court of Appeals affirmed the illegality of Microsoft's campaign to destroy the competitive threat of Internet browsers and cross-platform Java technology. Further, as the Court of Appeals explained, Sun's distribution arrangement with Netscape was key to .,''achiev[ing] the necessary ubiquity on Windows'' required for Java to serve ''as the ubiquitous platform for software development.'' Microsoft HI, 253 F.3d at 74, 75. By foreclosing Netscape from the market, Microsoft thus eliminated the ability of the Java runtime environment to develop into a ubiquitous, competitive alternative to Windows for applications development. [18] Today, the anticonsumer effects are even more clear because Microsoft has integrated its own Internet browsing and Java-like runtime technologies into Windows.

No other middleware technologies introduced since Netscape and Java have evolved to the point where they could directly challenge, and substitute for, Windows. While a variety of middleware is available today, most if not all presently lack the capability to serve as major platforms for software development. As Professor Arrow explains, no middleware entrant currently exists that offers the user base, head start and technological capability to supplant Windows, characteristics enjoyed by both Netscape and Java before Microsoft eliminated them as serious competitive threats. Arrow Decl. ¶¶25–30. Middleware is more often a short-run complement to the operating system rather than a substitute. It is only when particularly ''disruptive technologies'' can achieve the distribution scale and scope of exposed APIs to permit substitution among operating systems—the ''commoditized'' operating systems feared by

[17] Microsoft accepts the concept of inflection points in technology markets, and unsuccessfully argued to the DC Circuit that the possibility of inflection points meant that it did not enjoy monopoly power in the operating systems market. Brief of Appellant Microsoft Corporation, United States v. Microsoft Corp., at 16 (DC Cir. filed Nov. 27, 2000) (''Microsoft DC Circuit Brief').

[18] The CIS agrees that distribution of Java by Netscape ''creat[ed] the possibility that Sun's Java implementation would achieve the necessary ubiquity on Windows to pose a threat to the applications barrier to entry.'' CIS at 16, 66 Fed. Reg. at 59463

Microsoft—that middleware becomes a long-run competitive substitute for the operating systems. Id. ¶¶16–17, 33–34. Powerful middleware substitutes for Microsoft's operating systems monopoly just do not come along every week. Id. ¶18 (''Technological disruptions such as the middleware threat of the mid-1990s do not occur continually.'')

Microsoft's anticompetitive practices destroyed the prospect that middleware could effect such a fundamental change (sometimes called a ''paradigm shift') in the operating system market and, thus, have substantially entrenched its monopoly power. ''Microsoft's significantly enhanced ability to stem potential middleware threats is the result, in very substantial part, of its past anticompetitive campaign against Netscape.'' [19] As Professor Arrow explains, ''[a]t times of technological disruption, the forces of dynamic competition play an especially important role.'' Id. ¶18. See Findings of Fact ¶377 (''Microsoft ''successfully denied'' Netscape status of ''the standard software for browsing the Web''). [20]It will be ''exceedingly difficult now, even with the best of remedies, to re-establish middleware fully as the kind of competitive threat to Microsoft's monopoly power that it posed in the mid-1990s.'' Arrow Decl. 5, 18, 71. Thus, as Professor Arrow concludes, it is ''highly unlikely'' that ''market forces alone will lead to the development of innovative middleware that creates the same competitive risk to Microsoft that it faced from Navigator and Java in 1995.'' Id. ¶30.

Despite these compelling facts, the Department and the Settling States have proposed middleware provisions that ignore the core Internet browser and Java runtime technologies in favor of undefined, future middleware that may or may not present the same viable cross-platform capabilities. The Department's remedy ratifies the illegal acts that Microsoft committed, instead of moving the market forward to where it would be today had Netscape and Java been permitted to grow without illegal Section 2 constraint. [21] The Supreme Court, however, has squarely rejected the proposition that ''antitrust violators may not be required to do more than return the market to the status quo ante.'' Ford, 405 U.S. at 573 n.8.

Assistant Attorney General James explains that the settlement is designed ''to recreate the potential for the emergence of competitive alternatives to Microsoft's operating system monopoly through middleware innovations.'' [22] But without identifying any comparable middleware products today or predicting that truly competitive middleware will be introduced in the near-term future that could become substitutes for Windows, the Department does not have a verifiable basis to project that such a remedy will have any impact on competition. The Department's proposed settlement posits only hypothetical future entry to counteract the very real monopoly power of Windows today.

In addition, Microsoft's integration of Internet browsing and runtime environment technology into Windows allows Microsoft today to prevent any competing middleware technology from achieving ubiquity, thus preserving the applications barrier to entry.[23] Unlike the Netscape and Java technologies that Microsoft's unlawful practices eliminated as serious competitive threats, however, Microsoft middleware is not cross-platform. Consequently, by sanctioning Microsoft's integration of middleware into Windows and by failing to redress its illegal campaign against Netscape and Java, the proposed decree enhances, rather than reduces, Microsoft's operating systems monopoly power. In short, the PFJ does not undo the competitive harm resulting from Microsoft's unlawful assault on Netscape and Java, and therefore, fails to meet the requirements of established antitrust law and the lesser standard the Department has set.

B. The Proposed Settlement Fails to Deny Microsoft the Ill-gotten Fruits as Required by Established Antitrust Law

Equally importantly, in clear denial of the standards under established antitrust remedies law, the decree permits Microsoft to retain the fruits of its statutory violations. See United Shoe, 391 U.S. at 252. It ''would be inimical to the purpose of the Sherman Act to allow monopolists free rein to squash nascent, albeit unproven, competitors at will—particularly in industries marked by rapid technological advance and frequent paradigm shifts.'' Microsoft III, 253 F.3d at 79. Consequently, because the PFJ fails to ''deny to [Microsoft] the fruits of its statutory violation,'' id. at 103, it cannot be approved by this Court.

There are remedial alternatives available to restore Internet browsers and cross-platform runtime technology to the position they would have achieved—ubiquitous distribution without any ''lock-in'' to the Windows operating systems D in the absence of Microsoft's violations. The open source Internet Explorer licensing requirement proposed by the Litigating States does precisely that. A remedy that acts directly to undermine the applications barrier to entry, for instance by requiring ''porting'' of the Office suite to other operating system platforms, would act to commoditize the operating system and thus allow operating systems competition to occur on the basis of efficiency, technology and consumer demand.[24] See Arrow Decl. 46–49.[25]

In sharp contrast, the proposed decree is described in the CIS as encouraging the development of future technologies that ''over time could help lower the applications barrier to entry.'' CIS, 66 Fed. Reg. at 59467 (emphasis added). As no significant platform innovations with the characteristics necessary to substitute for Windows have developed since Microsoft's multi-faceted predatory campaign was launched, there is simply no reason to believe that new Netscape and Java-like middleware competition could flourish today, especially under the decree, which not only does not lower the applications barrier to entry—it actually preserves and strengthens. Therefore, the remedy fails to meet the standard set by established antitrust remedies law by refusing to deny Microsoft the fruits of its unlawful acts, or providing any viable alternative mechanism.

C. The Decree Does Not Terminate or Redress Numerous Practices that the Court of Appeals Found to Violate the Sherman Act

The decree now proposed by the government improperly permits Microsoft to continue some of the very exclusionary practices that the Court of Appeals explicitly held were illegal. Both established antitrust remedies law and the lesser standard articulated by the Department require that the settlement terminate and redress the unlawful conduct affirmed by the Court of Appeals. The settlement does not.

1. Integration of Windows and Middleware

The PFJ does not preclude Microsoft from integrating middleware software, or any other technology that could erode the applications barrier to entry, into its operating system products. Hence, the proposed decree not only does not end Microsoft's practice of binding competing technologies to Windows, but allows middleware integration to continue unabated in the future. This failure is impossible to square with the Court of Appeals'' decision. First, the Court specifically held that ''Microsoft's decision to bind IE to Windows 98'' by ''commingling of

[19] Henderson Decl., supra, ¶73.

[20] ''Microsoft's campaign succeeded in preventing—for several years, and perhaps permanently—Navigator and Java from fulfilling their potential to open the market for Intel-compatible PC operating systems to competition on the merits.'' United States I,. Microsoft Corp., 87 F.Supp.2d 30, 38 (2000) (Conclusions of Law).

[21] The Competitive Impact Statement explains that the objective of the proposed decree is ''to restore the competitive threat that middleware products posed prior to Microsoft's unlawful conduct.'' CIS, 66 Fed. Reg. at 59463–64.

[22] James Senate Testimony, supra, at 10.

[23] See Findings of Fact ¶397 (''By bundling its version of the Windows JVM with every copy of Internet Explorer and expending some of its surplus monopoly power to maximize the usage of Interact Explorer at Navigator's expense, Microsoft endowed its Java runtime environment with the unique attribute of guaranteed, enduring ubiquity across the enormous Windows installed base.'').

[24] Assistant Attorney General James has suggested that such relief would be improper because no ''essential facilities'' claim was made by the government. James Senate Testimony, supra, at 10 (emphasis added). But a monopoly maintenance ''must cant'' remedy designed to redress artificial applications barriers to entry does not need to be supported by an essential facilities claim. To the contrary, in its 1998 Complaint to this Court, the government expressly sought as one form of injunctive relief that Microsoft be required to ''include with [the Windows] operating system the most current version of the Netscape Internet browser.'' Complaint, § VII.2.e.1 (Prayer for Relief). Thus, the very ''must-carry'' obligations that the Department now opposes were the precise relief it initially sought.

[25] Professor Rebecca Henderson of the MIT Sloan School of Management, a remedies expert for the government, testified by affidavit in 2000 that ''[t]he availability of the world's most popular office productivity suite on alternative platforms would serve to reduce the barriers to entry protecting Microsoft's monopoly, which will, in turn, increase the potential for competition in the PC operating systems market.'' Declaration of Rebecca M. Henderson, United States v. Microsoft Corp., No. 98–1232 (TPJ), at ¶22 (D.DC filed April, 28, 2000).

code'' was an unlawfully ''exclusionary'' practice. Microsoft III, 253 F.3d at 64–67. The Court of Appeals'' discussion is worthy of close attention became it sheds light on the magnitude of the PFJ's failure with respect to product integration. The Court explained that ''[t]echnologically binding IE to Windows ... both prevented OEMs from pre-installing other browsers and deterred consumers from using them,'' Microsoft III, 253 F.3d at 64 (citing Findings of Fact ¶159), and thus that ''Microsoft's... commingling of browser and operating system code constitute[s] exclusionary conduct, in violation of ¶2.'' Id. at 67. Moreover, the Court of Appeals emphasized that its Section 2 holding rebuffed Microsoft's arguments ''not only that its integration of IE into Windows is innovative and beneficial, but also that it requires non-removal of IE.'' Id. at 89. Second, the Court summarily denied Microsoft's rehearing petition challenging both the factual basis and the legal sufficiency of the code commingling holding.[26] The Court denied without opinion Microsoft's rehearing petition, in which the defendant Microsoft argued that '''commingling of code'' is not ''per se pernicious or even suspicious''' and urged the DC Circuit to (1) reverse the applicable findings of fact, and (2) limit its liability holding with respect to bundling of Internet Explorer to Microsoft's refusal to permit ''[r]emoval of end-user access by OEMs.'' [27]

In spite of these repeated holdings, the PFJ reverses course and adopts the position for which Microsoft argued on rehearing. The proposed settlement allows OF. Ms to remove ''access to'' middleware—that is, icons w from the desktop and related areas of the Windows user interface. Conversely, it permits Microsoft to commingle any code and prohibits OEMs from deleting Microsoft middleware code from the operating system software. Thus, although the Court of Appeals expressly reiterated that technological integration of Interact Explorer violated Section 2, the PFJ fails to impose any limits whatsoever on current or future bundling of middleware and operating systems software.

Assistant Attorney General James has testified that ''[t]he court of appeals ruled that, albeit with some limits, Microsoft could lawfully integrate new functions into the operating system.''[28] This is a mischaracterization. The DC Circuit remanded the tying claim for rule of reason analysis, Microsoft III, 253 F.3d at 84–95, but did not conclude that any product integration litigated at trial was ''lawful.'' The only general statement the Court made was that the ''integration of additional software functionality into an operating systems'' is not a per se unlawful Section 1 offense.[29]

2. Coercion and Market Allocation

The DC Circuit affirmed that Microsoft's coercion of Apple, by threatening to withhold porting of Office to the Macintosh operating systems platform, was unlawful. The District Court likewise found that Microsoft attempted (this time without success) to coerce Apple into abandoning development of its QuickTime software, in order to limit ''the development of multimedia content that would run cross-platform.'' Findings of Fact ¶110.

Microsoft also coerced Intel—Microsoft's partner in the IBM-compatible PC market m into abandoning its work on creation of Java-compatible multimedia software.[30] Microsoft III, 253 F.3d at 77. In fact, the Court specifically ruled that ''Microsoft's threats to Intel were exclusionary, in violation of § 2 of the Sherman Act.'' Id. at 78 (emphasis added). And the District Court, again without objection by the Court of Appeals, also found that Microsoft pressured Intel to cease development of ''Native Signal Processing ('NSP') software, [which] would endow Intel microprocessors with substantially enhanced video and graphics performance,''[31] as well as ''using revenues from its microprocessor business to fund the development and distribution of free platform-level software,'' [32] in order to ''halt the development of software that presented developers with a set of operating-system-independent interfaces.'' [33]

The proposed decree does not constrain Microsoft's ability to engage in this sort of coercive conduct to impede competition from potential middleware or other software rivals. Section III.F of the PFJ precludes Microsoft only from ''retaliating'' against ISVs and IHVs that develop or use competing platform software and from entering into exclusive dealings with ISVs (but curiously not IHVs) for platform software. It does not, however, deal with the use of threats and coercion to compel adherence to Microsoft's objectives short of an actual agreement.[34] As both a legal and practical matter, the PFJ fails to redress the Court of Appeals'' holding that Microsoft's ''threats'' to its competitors and partners violated Section 2.

3. Deception and Product Sabotage

The Department recognizes that among the practices the DC Circuit ruled unlawful was Microsoft's ''attempt[s] to mislead and threaten software developers in order to contain and subvert Java middleware technologies that threatened Microsoft's operating system monopoly.'' [35] Yet the PFJ does not prohibit Microsoft from misleading developers or, as it did with Java, creating supposedly ''open'' software development tools that, in reality, are compatible only with Windows. See Microsoft III, 253 F.3d at 77. These sorts of practices are added in the Litigating States remedy proposal.[36] By preventing Microsoft from intentionally sabotaging competing applications or middleware products, and by requiring that if Microsoft implements open industry standards it not ''pollute'' those standards with proprietary, Windows-specific protocols and features, such relief would constrain the exclusionary conduct held unlawful by the DC Circuit. The Department's proposed settlement does not.

The Department's claim that the decree ''ends'' Microsoft's unlawful practices is incorrect. It is also wrong as a matter of remedies jurisprudence. Antitrust courts must ''start from the premise that an injunction against future violations is not adequate to protect the public interest.'' [37] In order to prevent ''a recurrence of the violation'' found, antitrust courts are not limited to imposing ''a simple proscription against the precise conduct [the violator] previously pursued.'' [38]

Yet Assistant Attorney General James recently testified that the government's remedy proposal is ''focused on the specific practices that the court [of appeals] had ruled unlawful.'' [39] This focus on specific practices does not eliminate those practices. In any event, it is settled that antitrust relief may prohibit even otherwise lawful conduct if it ''represents a reasonable method of eliminating the consequences of the illegal conduct'' or preventing its resumption.[40]

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[26] United States v. Microsoft Corp., No. 00–5212, Order (Aug. 2, 2001) (per curiam).

[27] Microsoft Corporation's Petition for Rehearing, United State v. Microsoft Corp., Nos. 00–5212, 5213, at 2, 4 (DC Cir. filed July 18, 2001) (quoting United States v. Microsoft Corp., 147 F.3d 935, 958 (DC Cir. 1998) (Wald, J., concurring in part and dissenting in part)) (''Microsoft DC Cir. Rehearing Petition'').

[28] James Senate Testimony, supra, at 14 (emphasis added).

[29] For Section I purposes, the DC Circuit ruled that technological innovation is subject to an efficiency-harm balancing test under the rule of reason. Microsoft II1, 253 F.3d at 90, 93. Given the lack of an efficiency justification by Microsoft for having commingled the browser with the operating system, it is highly likely that the Government would have prevailed on the Section I claim under the ''rule of reason'' test. See/d. at 66 (Microsoft does not ''argue that either excluding IE from the Add/Remove Programs utility of commingling code achieves any integrative benefit'').

[30] See also Findings of Fact ¶388 (''Gates told Intel's CEO in June 1996 that he did not want the Inter Architecture Labs cooperating with Sun to develop methods for calling upon multimedia interfaces in Windows.''); Id. ¶404 (''Microsoft used threats to withhold Windows operating-system support from Intel's microprocessors and often to include Intel technology in Windows in order to induce Intel to stop aiding Sun in the development of Java classes that would support innovative multimedia functionality.'').

[31] Findings of Fact ¶95.

[32] Findings of Fact ¶102.

[33] Findings of Fact ¶94.

[34] Under the antitrust laws, a firm has not as a matter of law entered into an ''agreement'' with a distributor or other party where it unilaterally declares its position and by virtue of its economic power compels distributors to adhere to those conditions. See Monsanto Co. v. Spray-Rite Svc. Corp., 465 U.S. 752, 764 ¶n.9 (1984).

[35] CIS, 66 Fed. Reg. at 59460. In related private antitrust litigation, courts similarly have found that Microsoft ''create[d] the illusion that [a competing product] was incompatible with Windows by inserting error messages conveying to the user that either [the competing product] was incompatible with Windows that [Microsoft's product] was the only environment in which Windows could properly function.'' Caldera, Inc. v. Microsoft Corp.. 72 F. Supp. 2d 1295, 1314 (D. Utah 1999).

[36] Litigating States'' Remedy Proposal, supra, at 12.

[37] Schine Chain Theatres, Inc. v. United States, 334 U.S. 110, 128 (1948).

[38] National Soc'y of Prof. Eng'rs v. United States, 435 U.S. 679, 698 (1978).

[39] James Senate Testimony, supra, at 6.

[40] National Soc'y of Prof Eng'rs, 435 U.S. at 698; United States v. U.S. Gypsum Co., 340 U.S. 76, 90 (1950) (Section 2 relief may ''go beyond the narrow limits of the proven violation''). Accord

IV. THE API DISCLOSURE AND OEM FLEXIBILITY PROVISIONS OF THE PROPOSED DECREE WILL NOT CREATE THE OPPORTUNITY FOR MIDDLEWARE COMPETITION

The proposed decree neither provides future middleware competitors with the API information needed to develop interoperable products nor opens the OEM distribution channel to effective competition from any such new entrants. To a surprisingly large degree, the PFJ's provisions simply memorialize Microsoft's current business practices. Indeed, the PFJ would not have thwarted Microsoft's 1995–98 unlawful campaign against Net. scape and Java had the decree been in place at that time.

As a consequence, the PFJ will discourage, rather than encourage, investment and innovation in new middleware technology. Future middleware competitors, faced with the very real prospect that they may not be able to obtain necessary API information from Microsoft or access to the OEM distribution channel, will have virtually no incentive to invest in time development of new and innovative middleware technology. Moreover, even if the PFJ actually did ''creat[e] the opportunity for software developers and other computer industry participants to develop new middleware products that compete directly with Microsoft,'' as the CIS states, the five-year term of the proposed decree is far too short to promote innovation and investment in middleware technology. In short, under the PFJ the status quo that prompted the Department of Justice and State Attorneys General to bring these actions against Microsoft will perpetuate.

As the Supreme Court emphasized in its landmark ruling in the DuPont antitrust case, ''It]he proper disposition of antitrust cases is obviously of great public importance, and their remedial phase, more often than not, is crucial. For the suit has been a futile exercise if the Government proves a violation but fails to secure a remedy adequate to redress it.'' United States v. E.I. du Pont de Nemours & Co., 366 U.S. 316, 323 (1961). Under any appropriate standard for judging the effectiveness of antitrust remedies, the key portions of the PFJ are just such an exercise in futility.

A. The Proposed Decree's Provisions for Information Disclosure Do Not Assure that Future Middleware Competitors Will Have Access to Necessary Interoperability Information The Department proclaims that the API disclosure provisions of the proposed decree will create middleware competition by requiring Microsoft to disclose all of the interfaces and related technical information that Microsoft's middleware uses to intemperate with the Windows operating system.'' CIS, 66 Fed. Reg. at 59460.[41] That is simply not accomplished by a literal reading of the proposed decree's API provisions. The proposed decree does not provide middleware competitors with the information needed to intemperate, but rather allows Microsoft itself to decide whether, when and which APIs to release to potential competitors.

There are four provisions of the proposed decree that seek to address the issues of information disclosure for the purposes of enabling interoperability. Section III.D addresses the disclosure of APIs and Section III.E addresses the disclosure of communications protocols with server operating systems products. These provisions need to be read in concert with Section HI J, which substantially narrows the scope of required disclosures, and Section HI.L5, which potentially undermines the information disclosure regime by granting to Microsoft rights to insist on cross licenses to intellectual property developed through the use of Microsoft's APIs. Lastly, these provisions are dependent on a multitude of definitions which include Sections VI.A ''APIs''; VI.B ''Communications Protocol''; VI.E ''Documentation''; VI.J ''Microsoft Middleware''; VI.R ''Timely Manner''; VI.T ''Trademarked''; and VI.U ''Windows Operating System Product.'' To understand the impact of the PFJ on information disclosure, all these provisions must be read together, along with their subordinate definitions and exceptions.

1. The API Provision's Scope is Far Too Narrow.

The PFJ falls short of requiting the disclosure of APIs that innovative middleware technologies might need. Section III.D requires only that Microsoft disclose: ''the APIs and related Documentation that are used by Microsoft Middleware to intemperate with a Windows Operating System Product.'' PFJ, 66 Fed. Reg. at 59454 (emphasis added). This obligation is plainly too narrow to support real middleware competition. If a potential competitor creates a new form of middleware that provides innovative functionalities, it will not be entitled to the necessary APIs, if those APIs are not ''used by Microsoft Middleware to interoperate with a Windows Operating System Product'' within the scope of Section III.D. This necessarily limits future innovation to the parameters set by the breadth of Microsoft's Middleware functionality, it creates a regime where competitors must always follow, as opposed to lead, middleware innovations. For example, when Netscape was attempting to achieve full 38 interoperability with the Windows operating system in 1995, Netscape required the APIs for Windows, not merely the APIs between Windows and Microsoft's browser, which was just in the process of development.[42]

Further, under Section III.D, Microsoft must disclose ''for the sole purpose of interoperating with a Windows Operating Systems Product... APIs and related documentation that are used by Microsoft Middleware to interoperate with a Windows Operating System Product.'' PFJ, 66 Fed. Reg. at 59454. Windows Operating Systems Products are defined in Section VI.U to include Windows 2000 Professional and Windows XP for the PC. Thus, Microsoft does not have to disclose APIs its middleware uses to interoperate with Microsoft operating systems on servers or handhelds. And for those APIs that Microsoft does disclose, Microsoft is permitted to limit their use by third parties ''solely for the purpose of interoperating with a Windows Operating System Product.'' Id. at 59454. Thus, Microsoft can distribute middleware products that interoperate with all of its client and server operating systems along with its applications such as Office, while competitors'' middleware products will be limited to using any disclosed APIs to intemperate only with PC versions of Windows. This limitation certainly does not provide a level playing field for competitive middleware.

2. The API Provision of the PFJ Constructs an Illusive Framework for Disclosure of Interoperability Information

Close review of the plain language of the API disclosure provision and its subordinate definitions reveals that the provision is quite illusory. A careful examination of these complex provisions of the proposed decree—represented graphically in Figure 1 on the next page reveals that, despite their length, they are nonetheless circular and illusory. ??

Section III.D sets forth the basic obligation that Microsoft must disclose to competitors ''the APIs and related Documentation that are used by Microsoft Middleware to interoperate with a Windows Operating System Product.'' The PFJ therefore establishes a regime where Microsoft must disclose the ''APIs,'' a defined tern, that are used by ''Microsoft Middleware,'' a defined term, to intemperate with a ''Windows Operating System Product,'' a defined term.

a. Defined Terms Within the API Disclosure Provision Leave All Material Disclosure Determinations to Microsoft.

The defined terms within Section III.D reveal that the PFJ's API disclosure obligations are without substance. As stated, the provision calls for the disclosure of ''APIs'' between ''Microsoft Middleware'' and the ''Windows Operating System Product.'' Taking those definitions in reverse order demonstrates that the Department cannot possibly predict precisely what information is required to be disclosed under Section III.D because most of the definitions are left to Microsoft.

First, Section VI.U provides the definition of a ''Windows Operating System Product.''

International Salt, 334 U.S. at 400; DuPont. 366 U.S. at 327.

[41] See also CIS, 66 Fed. Reg. at 59468 (decree ''requires Microsoft to disclose to ISV, IHVs, LAPs, ICPs and OEMs all of the interfaces and related technical information that Microsoft Middleware uses to intemperate with any Windows Operating System Product'').

[42] The district court's ''Internet Order'' did not suffer from this problem because Section 3.b of its API disclosure provisions broadly required the release of APIs that Microsoft employs to enable (i) Microsoft applications to interoperate with Microsoft Platform Software (defined as both operating systems and middleware), (ii) Microsoft middleware to interoperate with a Microsoft operating systems product (or Microsoft middleware distributed with a Microsoft operating systems product, and (iii)any Microsoft software installed on one computer to interoperate with a Microsoft operating systems or middleware product installed on another computer. The proposed decree's use of ''Microsoft Platform Software'' is confined to Sections III.A and III.F.I (retaliation) and Section III.F.2 and III.G.I (exclusivity), but has no application to API disclosure. United States v. Microsoft, Final Judgment (D.DC 2000) (''Interim Order'').

A Windows Operating System Product is defined as: the software code (as opposed to source code) distributed commercially by Microsoft for use with Personal Computers as Windows 2000 Professional, Windows XP Home, Windows XP Professional, and successors to the foregoing, including the Personal Computer versions of the products currently code named ''Longhorn'' and ''Blackcomb'' and their successors, including upgrades, bug fixes, service packs, etc. The software code that comprises a Windows Operating System Product shall be determined by Microsoft in its sole discretion. (emphasis added)

The CIS explains that, pursuant to the proviso in the final sentence, this definition means that ''the software code that comprises a Windows Operating System Product is determined by Microsoft's packaging decisions (i.e., by what it chooses to ship as ''Windows').'' CIS, 66 Fed. Reg. At 59459. Under this approach, therefore, Microsoft retains the unilateral discretion to determine what constitutes Windows for purposes of its API disclosure obligations. If middleware software is included with Windows, it is thus part of a Windows Operating System Product for the purposes of this definition. It follows that if Microsoft chooses ''at its sole discretion'' to include middleware as part of Windows it escapes the disclosure requirements of

Section III.D.

The other ''bookend'' of Microsoft's information disclosure requirement rests on definition VI.J, ''Microsoft Middleware.'' First, it is critical to understand that provision III.D does not invoke definition VI.K ''Microsoft Middleware Product,'' which clearly sets forth that ''Internet Explorer, Microsoft's Java Virtual Machine, Windows Media Player, Windows Messenger, Outlook Express and their successors'' are ''Microsoft Middleware Products.'' Id. Rather, the provision rests on the far more ambiguous definition of ''Microsoft Middleware.'' Under definition VI.J, Microsoft Middleware means: software code that

1. Microsoft distributes separately from a Windows Operating System Product to update that Windows Operating System Product;

2. Is Trademarked;

3. Provides the same or substantially similar functionality as a Microsoft Middleware Product; and

4. Includes at least the software code that controls most or all of the user interface elements of that Microsoft Middleware.

Software code described as part of, and distributed separately to update, a Microsoft Middleware Product shall not be deemed Microsoft Middleware unless identified as a new major version of that Microsoft Middleware Product. A major version shall be identified by a whole number or by a number with just a single digit to the right of the decimal point.

The weakness of this definition is immediately apparent. The first prong of the definition requires Microsoft middleware to be distributed ''separately from a Windows Operating System Product.'' Therefore, if Microsoft decides to include middleware as part of Windows as it is entitled to do ''in its sole discretion'' it cannot possibly be Microsoft Middleware because it will not be ''distributed separately.'' Alternatively, because middleware is ''Microsoft Middleware'' only if it is distributed ''to update'' Windows, Microsoft can as easily avoid any API disclosure obligations by distributing middleware as a separate application rather than as a Windows update.[43]

Second, in order to qualify as Microsoft Middleware, the middleware must also be ''Trademarked.'' Section VI.T of the PFJ defines '''Trademarked'' in two ways. The first clause of the definition states:

''Trademarked'' means distributed in commerce and identified as distributed by a name other than Microsoft?? or Windows?? that Microsoft has claimed as a trademark or service mark by (i) marking the name with trademark notices, such as ?? or TM, in connection with a product distributed in the United States; (ii) filing an application for trademark protection for the name in the United States Patent and trademark Office; or (iii) asserting the name as a trademark in the Unites States in a demand letter or lawsuit.

PFJ, 66 Fed. Reg. 59459.

We cannot fathom the rationale for resting the definition of Middleware on whether or not a particular technology is trademarked. The Department contends that the definition is ''designed to ensure that the Microsoft Middleware ... that Microsoft distributes (either for free or for sale) to the market as commercial products are covered by the Proposed Final Judgment.'' CIS, 66 Fed. Reg. at 59465. Yet, again it appears that exactly the opposite is true based on the second part of the ''Trademarked'' definition, which states:

Any product distributed under descriptive or generic terms or a name comprised of the Microsoft?? or Windows?? trademarks together with descriptive or generic terms shall not be Trademarked as that term is used in this Final Judgment. Microsoft hereby disclaims any trademark fights in such descriptive or generic terms apart from the Microsoft?? or Windows?? trademarks and hereby abandons any such rights it may acquire in the future. PFJ, 66 Fed. Reg. at 59459 (emphasis added).

Under this definition, if the product is distributed as ''Windows?? Media Player'' as opposed to ''Windows Media?? Player'' it would not be covered. That is because the formulation of the name ''Windows?? Media Player'' would be ''comprised of the ... [Windows??] trademarks together with a descriptive or generic term [Media Player].''

An analysis of each of Microsoft's Middleware Products demonstrates the problem. ''Microsoft Internet Explorer'' could easily be distributed as Microsoft?? plus the generic or descriptive term ''Internet Explorer'' or ''Windows Messenger'' as Windows?? plus the generic or descriptive term ''Messenger.'' As a factual matter, ''Microsoft Internet Explorer,'' ''Microsoft Java Virtual Machine,'' ''Windows Media Player'' and. ''Windows Messenger'' are not currently distributed under either ?? or m nor are they registered with the United States Patent and Trademark Office.[44] Thus, in stark contrast to its purported effect, Section VI.T either currently excludes or provides a roadmap to exclude each of Microsoft's major Middleware Products from the disclosure requirements of III.D.

When the ''Trademarked'' provision is taken in conjunction with the additional requirement that the Middleware must be ''distributed separately from a Windows Operating System Product to update that Windows Operating System Product,'' it is apparent that Microsoft can completely escape coverage under Definition VI.J by either altering its distribution or the nomenclature of its products. In sum, the set of ''Microsoft Middleware'' that interoperates with ''Windows Operating System Products'' appears to be a null set.

The final definition implicated by Provision III.D is that of ''Application Programming Interfaces.'' ''APIs'' are defined in Definition VI.A as follows: the interfaces, including any associated callback interfaces, that Microsoft Middleware running on a Windows Operating System Product uses to call upon that Windows Operating System Product in order to obtain any services from that Windows Operating System Product. PFJ, 66 Fed. Reg. at 59458. (emphasis added). Thus, ''interfaces'' means ''interfaces'' because the basic API definition rests once on the Microsoft Middleware definition (described above) and three times on the definition of Windows Operating System Product, which is defined by Microsoft in its ''sole discretion.'' The Department has proclaimed the API disclosure remedies to be the centerpiece of the PFJ. That the definition of ''API'' will be exclusively determined by Microsoft highlights the seriously flawed nature of the entire proposed device.

In sum, we do not believe it is possible for the Department of Justice, Microsoft or any party to know with any degree of certainty exactly what must be disclosed under Provision III.D. But there is no question that these definitional issues will be before the Court in numerous enforcement actions and dominate this Court's docket for the next five years.

3. The API Disclosure Provision Also Leaves Critical Terms Undefined. Focusing on the terms of Provision III.D that are not defined yields some striking conclusions.

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[43] The Competitive Impact Statement flatly mischaracterizes this section in contending that the definition of Microsoft Middleware captures what it calls '''redistributable[s]'' associated with Microsoft Middleware Products.'' CIS, 66 Fed. Reg. at 59464. The Department claims that ''[i]f such a redistributable exists, as they currently do for most Microsoft Middleware Products, then the redistributable is Microsoft Middleware'' because it is ''distributed separately'' from Windows. Id. This explanation, however, ignores the clause specifying that separate distribution must be ''to update'' Windows under Section VI.J.

[44] A complete list of Microsoft trademarks is posted on the Web at http://www.microsoft.com/trademarks/docs/mstmark.rtf. The description in the test is taken from the document at that location titled ''Microsoft Corporate Trademarks,'' dated December 2001. That document advises that other companies should ''not use any trademark symbols ... for those products that are not listed above as trademarks, such as 'Microsoft?? Excel,'' 'Microsoft?? Internet Explorer.'''

First, the critical term ''interoperate'' is left undefined by the PFJ. Moreover, despite the Department's claim in the CIS that the decree's API provisions require the release of all ''interfaces and related technical information,'' [45] these terms are neither defined nor employed in the language of Section III.D. In fact, the phrase ''technical information'' does not even appear in the proposed decree. In contrast, the Interim Order included a detailed definition of ''Technical Information'' (Section 7.dd) that the Department and Microsoft have without explanation eliminated from the proposed decree.[46] Inexplicably the PFJ has lowered the standard of interoperability supported by disclosed APIs in the Interim Order from information that software developers ''require'' to ''interoperate effectively'' with Windows to information ''used by Microsoft'' to ''interoperate.''

These terms are not peripheral. They go to the core meaning of the API disclosure provisions of the proposed decree. An injunction designed to require Microsoft to disclose interoperability information to rivals cannot possibly be effective where the scope of the information to be released is not defined with specificity. The elimination of the definition of Technical Information is thus particularly revealing, because it illustrates that the Department has crafted a remedy that is, at best, a subset of the Interim Order on which the Department claims it relied. It also demonstrates that the Department affirmatively made a determination not to define a term which was clearly central to the disclosures mandated by the Interim Order.

4. Under Provision III.D, APIs Will Never be disclosed in a Timely Manner

Finally, Section III.D does not ensure simultaneous API access for Microsoft and its competitors.

While the Interim Order required disclosure of APIs at the same time they were made available to Microsoft applications developers, the PFJ does not. Instead, the proposed decree uses the very ambiguous standard that, for a ''new major version'' of Microsoft middleware, API disclosure ''shall occur no later than the last major beta test release.'' PFJ, 66 Fed. Reg. at 59454. Yet ''last major beta test release'' is not defined, and the provision in any case begs the question of how to decide which beta release is the ''last.''

No less problematic are the requirements for timely disclosure of APIs exposed by new versions of Windows. Here, the proposed decree provides in Section III.D that for ''a new version of a Windows Operating System Product,'' disclosure ''shall occur in a Timely Manner.'' Here the definition of ''Timely Manner'' provides little, if any, protection for ISVs. Definition VI.R provides that Timely Manner is ''the time Microsoft first releases a beta test version of a Windows Operating System Product that is distributed to 150,000 or more beta testers.'' We do not believe that Microsoft has ever had 150,000 ''beta testers'' as opposed to 150,000 ''beta copies'' of its new product. Regardless, all Microsoft has to do is limit distribution to 149,000 beta testers in order to frustrate the timeliness of the required disclosures.

5. The Exceptions from and Preconditions to API Disclosure Further Narrow the Scope of an Already Unworkable Disclosure Provision

The proposed decree also contains several broad exemptions from and preconditions to API disclosure by Microsoft. These provisions undermine whatever strength, if any, remains in Section III.D in light of the scope and definitional failings addressed above. Section III.J of the PFJ exempts Microsoft from disclosing ''portion of APIs or Documentation'' related interface information ''which would compromise the. security'' of a ''particular installation or group of installations'' of any ''anti-piracy, anti-virus, software licensing, digital rights management, encryption or authentication systems.'' 66 Fed. Reg. at 59455. These exceptions to API disclosure are extremely broad.

First, the scope of this provision implicates nearly all of Microsoft's Middleware products. For example, digital rights management is encompassed in all multimedia applications (e.g., Windows Media Player). Authentication is a function embedded in Windows software (e.g., Outlook Express and Microsoft Passport) and is required for access to Windows server operating systems. Encryption likewise is a technology that is used by Internet browsers (e.g., Internet Explorer) for e-commerce and by instant messaging middleware (e.g., Windows Messenger). Second, because the Department acknowledges that this provision permits Microsoft to withhold from disclosure certain APIs, CIS, 66 Fed. Reg. at 59472, it must also acknowledge that this provision both narrows an already limited scope of disclosures and ensures that an alternative middleware product will never be fully interoperable in the same way as Microsoft's middleware.[47]

Third, the CIS either misstates the implications of the provision or the Department does not understand what was agreed to in the PFJ. For example, there is no such thing as an API that is relevant to a ''particular installation [PC] or group of installations [network of PCs].'' APIs are standard across all Windows installations. Moreover, the provision does not refer to ''keys and tokens particular to a given installation'' as stated in the CIS, 66 Fed. Reg. at 59472, but rather states that Microsoft may withhold ''APIs ... the disclosure of which would compromise the security of a particular installation or group of installations ... including without limitation, keys, authorization tokens or enforcement criteria.'' PFJ, 66 Fed. Reg. at 59455. Therefore, the way the provision appears in the PFJ as opposed to the CIS, is that it is not limited to the user-specific security duties protecting specific computer networks that no one argument should be disclosed publicly.

Section III.J.2 also imposes onerous preconditions on ISVs for the receipt from Microsoft of APIs ''related to'' encryption, authentication and other security matters. In order to receive relevant APIs that relate to security technologies, competitors must meet a subjective standard of ''reasonableness'' which the decree appears to consign to Microsoft's discretion. Thus, an ISV is only entitled to the APIs if the competitor (1) ''has a reasonable business need'' for the information ''for a planned or shipping product,'' (2) satisfies ''reasonable, objective standards established by Microsoft'' for ''certifying the authenticity and viability of its business,'' and (3) submits its software for Microsoft testing to ''ensure verification and compliance with Microsoft specifications for use of the API or interface.''

None of these limitations seems appropriate, because they unduly rely on Microsoft to determine ''reasonable business'' need. As one example, Microsoft clearly views ''open source'' software, or a threat, but will no doubt continue to claim that it is not a ''viable business''.

6. Cross-Licensing of Middleware APIs

The API section must also be read in conjunction with Section III.I of the proposed decree. This portion of the proposed decree contains a provision (Section III.5) that grants Microsoft the right to require ISVs and other API recipients to cross-license their own intellectual property back to Microsoft if it relates ''to the exercise of their options or alternatives provided by this Final Judgment.'' PFJ, 66 Fed. Reg. at 59455. Under this approach, Microsoft can, at is own discretion, require that the products developed with APIs and related interface information—for instance, a competing middleware program—be licensed back to Microsoft, because they ''relate[] to the exercise'' of an ISV's ''options or alternatives'' under the proposed decree. That is not a new issue in the industry. For years Microsoft has attempted to extract

[45] CIS, 66 Fed. Reg. at 59460, 59468.

[46] The Interim Order defined ''Technical Information'' as ''all information regarding the identification and means of using APIs and Communications Interfaces that competent software developers require to make their products running on any computer interoperate effectively with Microsoft Platform Software running on a Personal Computer. Technical information includes but is not limited to reference implementations, communications protocols, file formats, data formats, syntaxes and grammars, data structure definitions and layouts, error codes, memory allocation and deallocation conventions, threading and synchronization conventions, functional specifications and descriptions, algorithms for data translation or reformatting (including compression/decompression algorithms and encryption/decryption algorithms), registry settings, and field contents.'' In contrast, the PFJ requires only disclosure of related ''Documentation,'' defined in Section VI.E as ''information'' that is ''of the sort and to the level of specificity, precision and detail that Microsoft customarily provides for APIs it documents in the [MSDN].'' PFJ, 66 Fed. Reg. at 59459.

[47] The CIS appears to limit the extent of Microsoft's ability to withhold APIs under Section 1113 of the PFJ. But the CIS description is either unclear or inconsistent with the terms of Section III.J. At a minimum, the Department should reconcile these two documents in order to mitigate the risk of future anticompetitive conduct and litigation over the interpretation of this section. There is no reason to believe that Microsoft will endorse the CIF interpretation, and no doubt Microsoft will argue in any future action that where these two documents conflict, the plain language of the PFJ controls.

cross-licensing requirements and most in the industry have successfully resisted. If this provision is exercised, Provision III.D will simply not be utilized if the result is a requirement that intellectual property resulting from competitors'' own investments in software research and development. Again, the CIS purports to limit the plain meaning of Section III.I by opining that the intellectual property cross-licenses are only available if Microsoft ''is required to disclose interfaces that might be used by others to support a similar feature in the same fashion.'' CIS, 66 Fed. Reg. at 59472. But that does not appear to be consistent with the language of the PFJ.

7. Timing of API Disclosure Obligation Finally, under Section III.D, the requirement for Microsoft to release APIs and Documentation to competitors does not commence for one year. This delay means that Microsoft's own middleware will continue to be preferred in terms of its interoperability with the Windows operating system. The one-year period in which competitors must wait for API releases is one-fifth of the decree's five-year term. Nothing in the CIS discusses or explains a rationale for this substantial delay. B. The Communications Protocol Provisions of the Decree Do Not Require Release of any Server APIs and are Based on Terms the Department Failed to Include in the Settlement The Competitive Impact Statement claims that the server provisions in Section III.E of the proposed decree will ''prevent Microsoft from incorporating into its Windows Operating System Products features or functionality with which its own server software can intemperate, and then refusing to make available information about those features that non-Microsoft servers need in order to have the same opportunities to interoperate with the Windows Operating System Product.'' [48] Like the decree's API disclosure provisions, this obligation is ephemeral.

First, Section III.E is designed only to support interoperability between Windows PCs and non-Windows servers. See CIS, 66 Fed. Reg. at 59469 (interoperability between ''Windows Operating System Products and non-Microsoft servers on a network''). It expressly does not cover interoperability between Windows servers and non-Windows PCs. Thus, Apple, Linux and all other desktop operating systems competitors have no right under the proposed decree to obtain any of the technical information needed to allow PCs running such competing operating systems to intemperate with Windows servers.

Second, as with the API disclosure requirements, Microsoft can easily avoid Communications Protocol disclosure through product design. For example, Microsoft can implement protocols in other software on the desktop, such as Office, or from software it downloads over the Internet from its servers to its Windows Operating Systems Product rather than implementing those protocols directly in the Windows Operating Systems Product.[49] Indeed, we understand that with Microsoft's new .Net offering, Microsoft plans to download code from the Internet to effect communications between clients and Microsoft's .Net servers. This will require no disclosure under Section III.E.

Third, the definition of ''Communications Protocols'' itself is extraordinarily ambiguous. The decree defines Communications Protocol in Section VI.B as: the set of rules for information exchange to accomplish predefined tasks between a Windows Operating System Product and a server operating system product connected via a network, including, but not limited to, a local area network, a wide area network or the Internet. These rules govern the format, semantics, timing, sequencing, and error control of messages exchanged over a network.

PFJ, 66 Fed. Reg. 59458. This definition does not prescribe what ''predefined tasks'' are encompassed, and the phrase ''format, semantics, sequencing, and error control of messages'' can just as easily be read to apply only to the physical means of sending information to or from a server (the rules for transmitting information packets over a network) rather then the content of such information (the rules for structuring and interpreting information within such packets). Thus, Microsoft competitors wilt be able to learn how to construct messages that can be passed to or from Microsoft severs, but will not learn the substance of the information necessary to invoke the features and functionalities of the server.

Fourth, like the PFJ's API disclosure provisions, the key terms of Section III.E are undefined. We have addressed Windows Operating System Product, which allows Microsoft itself to define the term, above. The corresponding prong of Section III.E is that Communications Protocols are disclosable when used by a Windows Operating System Product to interoperate with ''a Microsoft server operating system product.'' The CIS claims that [t]he term ''server operating system product'' includes, but is not limited to, the entire Windows 2000 Server product families and any successors. All software code that is identified as being incorporated within a Microsoft server operating system and/or is distributed with the server operating system (whether or not its installation is optional or is subject to supplemental license agreements) is encompassed by the term. For example, a number of server software products and functionality, including Internet Information Server (a ''web server'') and ActiveDirectory (a ''directory server''), are included in the commercial distributions of most versions of Windows 2000 Server and fall within the ambit of ''server operating system product.'' CIS, 66 Fed. Reg. at 59468–69. Amazingly, this term is nowhere defined in the PFJ, despite the fact that this language is what bounds the scope of Microsoft's obligation to disclose crucial information to rivals. Based on the plain language of the PFJ alone, there is no reason to believe that, for example, Internet Information Server is covered by the undefined PFJ term ''server operating system product.'' Although the Department attempts to clarify this definition in the CIS, as noted above there is no reason to expect Microsoft to accept the Department's CIF definition.

Fifth, a large share of PC interactions with servers occur via the Interact browser. (For instance, all Web browsing, e-commerce and other Web functionalities are a result of the browser interoperating with a server.) Section III.E does not cover protocols that are implemented in Internet Explorer to support interoperability with Microsoft's server operating systems products. Therefore, Microsoft can easily evade the scope of this provision—whatever that may be—by incorporating proprietary interfaces and protocols into IE rather than Windows. Sixth, the obligations of Section III.E appear to only apply to Communications Protocols that are ''implemented ... on or after the date this Final Judgment is submitted to the Court.'' Read literally, all of the Communications Protocols built into Windows 2000 and Windows XP are exempt from disclosure because they were implemented before the proposed decree was submitted.

Finally, Section III.J constrains the Communications Protocol provisions of Section III.E in the same way it limits the API disclosure provisions of Section III.D. Thus, any Communications Protocols that ''would compromise the security'' of authentication, encryption or related technologies are exempt from disclosure. Because the heart of sever-based network interoperability is authentication and encryption, these exemptions once again swallow the rule. For all these reasons, the decree's provisions for server interface information disclosure do not provide Microsoft competitors with the interface or protocol information necessary to enable interoperability between Windows PCs and non-Windows servers. Section III.E does not even cover interoperability between non-Windows PCs and Windows servers. The central terms establishing the scope of Microsoft's obligations are undefined and subject to Microsoft's unilateral control. In short, the PFJ has created another Venn Diagram with no intersecting circles, because the Communications Protocol provisions of the decree require nothing at all. C. The Proposed Decree's Provisions for OEM Flexibility Do Not Open the PC Manufacturing Channel to Future Middleware Competitors

The Department explains that the personal computer manufacturer (''OEM'') provisions of the proposed decree support ''the ability for computer manufacturers and consumers to customize, without interference or reversal, their personal computers as to the middleware they install, use and feature.'' CIS, 66 Fed. Reg. at 59460, 59471. In reality, these measures hardly change anything in existing Microsoft-OEM relations, and do not appreciably alter the dynamics of the OEM

[48] CIS, 66 Fed. Reg. at 59469. See also CIS, 66 Fed. Reg. at 59460 (decree ''prevent[s] Microsoft from incorporating into the Windows operating system features or functionality with which only its own servers can interoperate by requiring Microsoft to disclosure the communications protocols that are necessary for software located on a computer server to interoperate with the Windows operating system'').

[49] The CIS makes clear that this ploy avoids the Section III.E obligations, stating that disclosure is not required if Microsoft ''only distributes code that implements that protocol along with its server software or otherwise separately from the client operating system ...'' CIS, 66 Fed. Reg. At 59469.

distribution channel. Most important, Sections III.C and III.H cannot, by their very design, provide an opportunity for rival middleware products—as compared to Microsoft's middleware—to attract sufficient distribution to have any impact at all on the applications barrier to entry. The OEM sections may actually make matters worse for middleware rivals. The PFJ limits what OEMs can remove from their PC products to just the middleware icons, euphemistically referred to as ''access to'' middleware in Sections III.C and III.H. In other words, OEMs are not permitted to remove the code for Microsoft Internet Explorer, Windows Media Player or any other Microsoft middleware, and the proposed decree allows Microsoft to commingle and integrate middleware with its Windows operating system software. The fact that the flexibility guaranteed to OEMs is limited to removing icons, and not the middleware itself, has major competitive significance and actually guarantees perpetuation of the applications barrier protecting Microsoft's operating systems monopoly.

1. The OEM Provisions Place Sole Responsibility for Introducing Middleware Competition on PC Manufacturers

To achieve its goal of ''recreating the potential for the emergence'' of middleware alternatives to Microsoft's monopoly operating system, the PFJ delegates the role of competitive gatekeepers to OEMs. Instead of requiting the monopolist itself to unfetter the market for entry by competitors, here the PFJ imposes that obligation on third-parties who are partners with, not competitors of, the defendant. If PC manufacturers do not act on the desktop flexibility powers provided by Sections III.C or III.H of the PFJ, there will, by definition, be no OEM-based remedy. Walter Mossberg, Personal Technology columnist for the Wall Street Journal, captured the problem elegantly. ''Much'' of the DOJ settlement, he explained, ''pertains to the company's relations with the hapless makers of PCs, which aren't in any position to defy Microsoft.''[50]

OEMs are captives of Microsoft for a number of reasons, beginning with the obvious fact that there are no commercially viable alternatives to the Windows operating system; there are no real alternatives to Microsoft's Office suite of personal productivity applications (Word Processing, Spreadsheets, E-Mail, etc.); and there is de minimis competition for Interact browsers. The fact that OEMs find themselves in a sole source relationship with the defendant provides Microsoft with innumerable avenues to exercise its leverage over the OEM channel. These complex relationships are built more on the subtleties of a sole source relationship than on written contracts, or overt retaliation, and thus are hardly resolved by the uniform Windows pricing obligation provided for in Section III.B.

It must also be understood that personal computer manufacturers are in the business of producing low margin commodity equipment, a business characterized by very minimal (and shrinking) R&D budgets. It is unrealistic to expect any Windows-centric OEM to develop, test, and pre-install packages of rival middleware, because that would require substantial expenditures in technical software expertise and customer support which would further narrow already shrinking profit margins in a business where competitors are currently engaged in a major price war to gain market share.

The financial burden of customer support, where a single end user service call can eliminate an OEM's profit margin on a PC, creates powerful disincentives to the inclusion of non-Microsoft middleware. See Microsoft III, 253 F.3d at 62. Judge Jackson found and the Court of Appeals affirmed that in light of their customer support obligations, which are ''extremely expensive,'' Microsoft III, 253 F.3d at 61 (citing Findings of Fact ¶210), OEMs are disinclined to install multiple versions of middleware. Since OEMs ''have a strong incentive to minimize costs,'' id., the customer confusion resulting from duplicative middleware is sufficient to preclude OEMs from installing competitive programs where comparable Microsoft middleware is included with Windows.

Under the proposed decree, however, these are precisely the circumstances faced by OEMs. There are no restrictions in the PFJ on Microsoft's ability to integrate middleware technologies into Windows; in fact Microsoft is allowed to do so at its ''sole discretion.'' Even if an OEM wants to install a competitive non-Microsoft middleware program, it will be required to deal with the fact that the corresponding Microsoft middleware product is already present on its PCs, which it is not permitted to remove. Consequently, just as OEMs'' cost minimization requirements forced them not to pre-install Netscape where IE was included with Windows, so too will these same profit pressures force OEMs to decline to install competing middleware programs under the PFJ.

This is in stark contrast to the provision of the Interim Order on which the Department claims to have based its settlement. Both the Interim Order and the remedy proposed by the Litigating States would require Microsoft to ship a version of the operating system without any middleware included, if requested by an OEM. That scheme makes it possible for an OEM to truly offer a differentiated product suite without the burden of having Microsoft's corresponding technology present on the system as well.

Even if they had an independent economic incentive to support middleware competition, however, Windows OEMs are still held captive under the proposed decree's retaliation provisions. Section III.A prohibits ''retaliation'' (another undefined term) by Microsoft against OEMs for developing, distributing or supporting competitive middleware or exercising their desktop icon flexibility rights.

Despite their relative length, the retaliation provisions do not at all effectively preclude retaliation. Retaliation is only prohibited under Section III.A where ''it is known to Microsoft'' that an OEM is undertaking a permitted, competitive action. This subjective, actual knowledge standard will be difficult if not impossible to enforce. In addition:

. Microsoft is not prohibited from retaliating if an OEM removes the code for a Microsoft Middleware Product from its retail PCs.

. Nor does this provision prevent retaliation if an OEM removes either icons or code for Microsoft software that does not qualify as a ''Microsoft Middleware Product'' (for instance, Microsoft Movie Maker).

. And Microsoft is not prohibited from retaliating against OEMs for promoting products that fall outside of the Section III.A terms. By way of example, Microsoft could retaliate against OEMs for promoting non-Microsoft Internet services, server operating systems, server middleware or server applications. Microsoft could even retaliate against OEMs for distributing or promoting middleware that does not yet compete with Microsoft Middleware Products.

Section III.A also limits the prohibited forms of retaliation to ''altering Microsoft's commercial relations with that OEM, or by withholding newly introduced forms of non-monetary Consideration (including but not limited to new versions of existing forms of non-monetary Consideration).'' PFJ, 66 Fed. Reg. 59453. Microsoft is not precluded from denying new monetary consideration to OEMs as a means of retaliation, as that is neither an ''alter[ed] commercial relation'' nor a ''newly introduced form of non-Monetary Consideration.'' Similarly, Microsoft can also reward compliant OEMs by providing concessions on license fees for non-Windows Microsoft software, including applications such as Office, server operating system software and server applications, as well as Microsoft Middleware Products. None of these types of software is covered by the pricing parity requirements of Section III.B, which apply only to ''Microsoft Operating System Products.'' Id.

Finally, as a general matter there is no practical way to identify and prohibit all the subtle ways Microsoft can preferentially favor some OEMs, and harm others, depending on their degree of support for Windows. For instance, the definition of Consideration in Section VI.C covets ''product information'' and ''information about future plans.'' Id. at 59458. Yet Microsoft could retaliate against OEMs by denying them sufficient technical information regarding important, upcoming Windows features, for example by not inviting them to internal development conferences or presentations. Likewise, Microsoft could assign fewer or less knowledgeable technical support personnel to a specific OEM's account team, a form of retaliatory discrimination that would be difficult to detect and virtually impossible to prove. In sum, the anti-retaliation provisions offer little shelter for OEMs desiring to respond to legitimate demands by their customers for choice among competing software products. If there is any doubt about this analysis of Sections III.C and III.H above, the Court should took no further than the OEMs'' treatment of Microsoft Internet Explorer. On July 11, 2001 Microsoft announced that OEMs would be free to remove access to Internet Explorer, which

[50] Walter S. Mossberg, Microsoft Has Good Year, At Expense of Customers, Wall Street J., Dec. 27, 2001, at B1.

they had previously been prohibited from doing.[51] Since this announcement was made more than six months ago, not one OEM has actually taken advantage of this provision and removed the icon for Internet Explore from retail PCs This real-world market test is an accurate gauge of how many OEMs will likely take advantage of the exact same flexibility provided in Section III.H of the decree, albeit for a somewhat wider range of middleware products: none.

2. The Provisions Allowing OEM Flexibility Do Not Address the Key Issue of Microsoft's Ubiquitous Middleware Development Platform

The core of the case against Microsoft rests on the theory that Netscape and Java provided an alternative development platform (middleware) for applications developers, which, if applications developers began writing applications to the middleware, would undermine the applications barrier to entry and thus Microsoft's Windows monopoly. For this to occur, developers need to view rival middleware as a more attractive development platform than Windows. Unfortunately, the PFJ provides a solution to the wrong problem and actually ensures that rival middleware applications will never be able to attract a critical mass of developers.

Sections III.C and III.H of the decree allow OEMs to install competing middleware and to ''enable or remove access to'' Microsoft Middleware Products from the desktop of Windows PCs that they sell to end users. However, as noted, these provisions do not authorize OEMs to delete the Microsoft middleware itself, and Microsoft is not prohibited from retaliating against OEMs that attempt to delete Microsoft middleware code from its configured PCs.

This distinction between icons and code is competitively decisive. The applications barrier exists because developers write to Windows-centric APIs. Under the terms of the decree, however, the APIs exposed by Microsoft middleware remain on every Windows PC even if OEMs and end-users exercise all of the flexibility provided by Section III.H. It is crucial to understand that an application developer can write to Microsoft middleware regardless of whether ''access'' to that software is removed. In other words, Microsoft's middleware APIs remain ubiquitously available on all Windows PCs under the proposed decree. The best a rival middleware provider can hope for is to be ''carried'' alongside Microsoft's middleware on some lesser portion of personal computers.

A critical lesson learned in this case is that, as with Netscape and Java, ubiquity trumps technology in network effects markets. Professor Arrow explains that no middleware competitor can expect any economically significant chance to compete on the merits if, as permitted under the decree, Microsoft middleware is ubiquitous. Arrow Decl. ¶26. The important distinction between icons and code was explained by the DC Court of Appeals in 1998. The court emphasized that removal of end user access ''do[es] not remove the IE software code, which indeed continues to play a role in providing non-browser functionality for Windows. In fact, browser functionality itself persists, and can be summoned up by ... running any application (such as Quicken) that contains the code necessary to invoke the functionality.'' Microsoft II, 147 F.3d at 941.

Consequently, by limiting its effect to the removal of icons only, the proposed decree cannot achieve any appreciable effect in eroding the applications barrier. They cannot ''recreate the potential for the emergence'' of middleware alternatives in a way that provides an economically realistic opportunity for operating systems competition. 3. The OEM Provisions Do Not Create a Level Playing Field for Middleware Desktop Competition

We explained above why it is unlikely that OEMs will expend resources to promote rival middleware products. The alternative model is that rival middleware providers would pay an OEM to feature its software and delete end-user access to Microsoft's middleware. This is consistent with the CIS, which explains that the function of the OEM provisions is to allow OEMs to ''feature and promote'' non-Microsoft middleware. CIS, 66 Fed. Reg. at 59460.

Section III.H does not achieve this goal, for two primary reasons. First, as detailed above, the ''value'' of the PC desktop is diminished by the fact that an OEM is not permitted to remove the Microsoft middleware code, and thus cannot offer a rival exclusivity.

Second, Section III.H.3 does not guarantee that a rival's middleware icon will even remain on the desktop. As the Department explains the theory of this remedy, it is to create a ''marketplace'' on the desktop where OEMs can ''stand in the shoes'' of consumers and exercise choices in which middleware technologies to feature based on price and performance. Yet, the PFJ permits Microsoft to ''sweep'' competing middleware icons placed on the Windows desktop by OEMs.

That is, Windows may automatically remove the icons featured by an OEM just fourteen days ''after the initial boot-up of a new Personal Computer.'' True, this section contains a proviso stating that Microsoft may not do so absent end user ''confirmation,'' but neither the text of this provision nor the Competitive Impact Statement require that confirmation be based on any objective notice or alert by Microsoft. CIS, 66 Fed. Reg. at 59471.

The fourteen-day desktop sweep proviso directly contradicts the objective of fostering OEM flexibility to feature and promote non-Microsoft middleware, because it undermines the ability of OEMs to sell desktop placement an ISV can count on. Under Section III.H.5, the best an OEMs can offer is a guarantee of desktop placement for fourteen days.

This is critically important for the reasons stated above. As rival middleware vendors attempt to attract developers to write applications to their platforms, as opposed to Microsoft's platform, they will have to make representations as to how many PC desktops actually have the rival middleware installed and available to consumers. With the fourteen day ''sweep'' provision included in the PFJ, ISVs will simply not be able to make any accurate projections, which will further reduce the price they might be willing to pay for desktop placement. 4. Additional OEM Provisions Further Undermine the Crucial Ability of ISVs to Differentiate Competing Middleware Products

In order to displace Microsoft middleware and encourage applications developers to write to their APIs, competing ISVs will need to differentiate their middleware products from Windows Media Player, Windows Messenger and the other Microsoft middleware products that are bundled with Windows. The OEM provisions affirmatively undermine the ability of ISVs to achieve any meaningful degree of product differentiation.

First, Section III.C.3 permits OEMs to launch automatically non-Microsoft middleware only at boot-up or upon making a connection to the Interact. This constrains the ability of manufacturers to configure competing middleware products and reduces the value of this flexibility for (and hence potential OEM revenues from) ISVs.

Second, auto-launch of competing middleware is permissible under Section III.C.3 only (a) ''if a Microsoft Middleware Product that provides similar functionality would otherwise be launched automatically at that time,'' PFJ, 66 Fed. Reg. 59454, and (b) if the non-Microsoft Middleware ''displays on the desktop no user interface or a user interface of similar size and shape to the user interface displayed by the corresponding Microsoft middleware product.'' Id. These limitations allow Microsoft to gate middleware competition by reducing the role of non-Microsoft middleware to only those instances in which Microsoft's own products are launched. If Microsoft decides that its middleware products will not have a user interface, or will utilize a window of a specific size, those decisions are binding on competitors'' product designs as well. Indeed, the PFJ surprisingly appears not even to contemplate a situation where Microsoft's competitors develop a middleware product for which there is no ''corresponding'' Microsoft middleware. Third, the PFJ empowers Microsoft to limit the freedom of ISVs in their product design and functionality decisions on its competitors. Microsoft can also limit the placement of icons and shortcuts may appear on the desktop and elsewhere, id. at 59454, 59455, the ''functionality'' of middleware products whose icons and shortcuts may be included by the OEM, and the ability of end users to designate non-Microsoft middleware as default middleware on their computers. Id. at 59455.

Each of these provisions has a similar, substantial effect. By allowing middleware to be substituted by an OEM only when (a) it performs similarly to Microsoft middleware, (b) exhibits functionality defined by Microsoft, or (c) includes the same user interface as Microsoft middleware, the PFJ allows Microsoft to ''gate'' competition. There is no competitive justification for these provisos, all of which serve to eliminate opportunities for product differentiation and

[51] We note that at the time of the announcement, Microsoft had already achieved significantly greater than 80 percent of the browser market as a result of its six-year anticompetitive campaign, so it is hard to view this as a concession.

permit Microsoft to constrain middleware competition to the scope, location and even ''look and feel'' it determines for its own products.

5. The OEM Provisions Contain Other Superfluous Terms that Substantially Limit Any Potential Market Impact

Section III.H of the proposed decree allows Microsoft twelve months to modify Windows XP in order to permit OEMs to remove Microsoft middleware icons or change default settings for invoking middleware functionalities. Yet the modification necessary to allow removal of icons via the ''Add/Remove Programs'' utility is a trivial exercise. Demonstrable proof of this fact is that Microsoft was able to modify the beta version of Windows XP to permit removal of the Interact Explorer icon within weeks of its July 11, 2001 announcement. We can not fathom why Microsoft is now given twelve months to accomplish the same task.

Section VI.N of the decree also provides that a ''Non-Microsoft Middleware Product'' is software with certain functionalities ''of which at least one million copies were distributed in the United States within the previous year.'' Because the Section III.H obligations requiring modification of Windows XP to permit addition and removal of competing middleware apply to ''Non-Microsoft Middleware Products,'' OEMs are foreclosed from the ability to feature and promote small middleware start-up competitors in Windows XP, Section VLN is a very veal impediment to achievement of the innovative middleware market the PFJ is purportedly designed to promote. 6. The OEM Provisions Have No Impact on Java.

Sections III.C and III.H also do not apply to Microsoft's Java Virtual Machine (''JVM''), or Microsoft's equivalent of the JVM, its Common Language Runtime. Despite the fact that the ''Microsoft Middleware Product'' definition includes the Microsoft Java Virtual Machine, it appears there is no competitive consequence to its inclusion in this definition in any of the provisions of the decree. First, Microsoft no longer ships its JVM with Windows, so there is nothing for OEMs to remove. Second, even if they did continue to ship a JVM, there is no ''icon'' or ''end-user access'' to Java. Rather, Java is invoked automatically by programs that rely on its presence.

7. The OEM Provisions Largely Codify Microsoft's Existing Business Practices. Users today enjoy the flexibility—without the benefit of the PFJ—to add, delete or customize their own PC desktops. Users may delete icons by simply ''dragging'' the icon to the ''recycle bin'' or ''right-clicking'' on the icon and simply choosing ''delete.''

Thus, the decree's OEM provisions allowing OEM removal of icons only codify Microsoft's current business practices. In response to the Court of Appeals'' opinion, Microsoft on July 11, 2001 announced that ''it is offering computer manufacturers greater flexibility in configuring desktop versions of the Windows operating system in light of the recent ruling by the U.S. Court of Appeals for the District of Columbia.'' [52] According to the Microsoft press release, under this policy OEMs can ''remove the Start menu entries and icons that provide end users with access to the Interact Explorer components of the operating system,'' and ''Microsoft will include Internet Explorer in the Add/Remove programs feature in Windows XP.'' Id. Thus, Microsoft stressed that ''Microsoft has always made it easy for consumers to delete the icons for Interact Explorer, but will now offer consumers this additional option in Windows XP.'' Id.

This announcement is revealing because it confirms, from Microsoft itself, that the ''flexibility'' provided to end users by Section III.H of the decree has always existed. And by revising Windows XP to permit OEMs to remove the Interact Explorer icon, Microsoft has already done precisely what the decree requires. Thus, the OEM provisions of the decree succeed mostly in codifying Microsoft's current business practices and achieve minimal, if any, remedial purpose.

In sum, the relief provided by Sections III.C and III.H is fundamentally at odds with the theory of the case. These OEM ''desktop'' remedies will not provide any opportunity for alternative middleware platforms to attract developers and thus to challenge the applications barrier to entry.

They are economically irrational since Microsoft's middleware will continue to be ubiquitously available on all PCs, regardless of the choices exercised by OEMs. These provisions allow Microsoft to dictate product design features to its rivals, to limit product differentiation and to restrict OEM deals with rivals to a brief, fourteen-day exclusivity period. And at bottom, they cannot change the economic structure of the PC distribution channel because OEMs are sole-source partners of Microsoft, not competitors.

D. The Proposed Decree Does Not Effectively Preclude Microsoft's Exclusive Dealings Although the proposed decree purports to ban exclusive dealing by Microsoft with respect to Windows software, Section III.G expressly permits Microsoft to establish favored or exclusive relations with certain OEMs, ISVs, etc., if the parties enter into ''any bona fide joint venture or ... any joint development or joint services arrangement.'' This exception all but vitiates the supposed prohibition, for it allows Microsoft to enter into the identical distribution agreements that were held unlawful at trial merely by denoting them as ''nt'' activities.

E. Current Market and Economic Realities Demonstrate that the PFJ is Incapable of Having Any Substantial Procompetitive Impact

The Department recognizes explicitly that relief in this case must '''ensure that there remain no practices likely to result in monopolization in the future.''' Microsoft Ill, 253 F.3d at 103 (citations omitted); see CIS, 66 Fed. Reg. at 59465 (monopolization remedy should ''avoid a recurrence of the violation'' in the future). Yet by failing to address significant market and technological developments that have occurred in the period since the trial record closed, the narrow remedies of the proposed decree do not provide relief that comes even close to ensuring that Microsoft's unlawful practices will not be repeated in the future.

1. New Monopolies Enable Microsoft to Protect its Operating System Monopoly Despite the PFJ Since the trial, Microsoft has solidified three new chokeholds with which it can easily perpetuate its monopoly power:

Microsoft's monopoly power over Internet browsers and its integration of IE into Windows allow it to replicate many of the prohibited practices through IE.

Microsoft's monopoly power over the Office suite and its anticompetitive use of Office porting allow it to replicate many of the prohibited practices through Office.[53]

Microsoft is fast acquiring monopoly power in the operating systems for low-end servers used in local or wide area networks. Microsoft can just as easily exploit the APIs exposed by the operating system on the network to perpetuate the applications barrier to entry.

However, the PFJ does not require the disclosure of APIs exposed by IE, Office the low-end server operating systems. Microsoft can develop middleware programs that utilize these APIs—which are as ubiquitous as the Windows APIs themselves—and thus evade the API disclosure provisions of the PFJ. Similarly, although Section III.E of the PFJ requires the disclosure of Communications Protocols used for interoperability with Microsoft server operating systems, by controlling the client (IE), Microsoft can control the server irrespective of these provisions.[54] That is, Microsoft's monopoly control over IE allows it unilaterally to implement proprietary standards and protocols within IF, that are not disclosable under the PFJ because they are not ''implemented in a Windows Operating System Product installed on a client computer'' within the scope of Section III.E.

2. The Proposed Settlement Ignores the Likely Tactics Microsoft Will Use to Eliminate the Next Significant Threat to its Monopoly Position

The primary competitive threat to the Windows OS/IE platform is the emergence of applications and services provided over the Internet, where the application or service is independent of the computing platform employed by the user. The recent spread of high-speed Internet service has further spurred the development of this category of

[52] Available at www.microsoft.com/MSCorp/presspass/Press/2001/Jul01/07–11OEMFlexibilityPR.asp.

[53] Microsoft's resulting power over Internet browsers and personal productivity applications provides it with alternative vehicles with which to achieve the same anticompetitive foreclosure of middleware threats that it accomplished in 1995–98 through Windows itself.

[54] As Microsoft executive (and trial witness) Paul Maritz put it, ''the most important thing we can do is not lose control of the Web client,'' because ''[b]y controlling the client, you also control the server.'' Gov't Ex. 498. Microsoft can suppress competition by adding proprietary features and protocols to the IE browser that are necessary to generate actions by its server operating systems products or by refusing to add features and protocols that would similarly support a competitor. Professor Schmalensee acknowledged this incentive at trial: ''[I]f one company controlled the browser and its look and feel and how it presented applications, it could severely enhance or detract from the application functionality of programs or applications running on the server.'' 6/24/99 (p.m.) Tr. 46–47; see also id. at 48; Henderson Decl. ¶82 (quoting Rasmussen Dep., 12/15/98 (a.m.), at 67–68).

distributed applications or web services that take advantage of Internet's underlying architecture.

Two features of distributed applications in particular constitute a revolutionary change from the previous ''client-server'' model. First, rather than residing principally on one machine (either a client or a server), distributed applications effectively reside on the network itself. It is therefore possible to access these services from any computer or device connected to the Internet. From the user's perspective, although the application itself resides on the network, it is accessible as rapidly and seamlessly as if it resided on the user's own PC.

Second, because the applications and data are accessible from different machines, access to these services depends critically upon being able to establish the identity of the user seeking access to those services. Web identity and authentication services accordingly take on extraordinary importance in the world of distributed applications.

These changes in the market reveal a picture of today's PC industry that is radically different from the Department's placid vision of ''recreating the potential'' for middleware competition by opening the OEM channel to possible future middleware innovations. The critical question, however, is whether distributed web-based applications, which do not need to be compliant with any particular operating system, will be able to remain independent of Windows and in the process bring down the applications barrier to entry.

The PFJ does not protect the Internet-based competition for the Windows operating systems monopoly in the future because the proposed decree does nothing to prevent Microsoft from continuing to shift from one anticompetitive activity to another in order to maintain its monopoly. Instead of bundling middleware code into Windows and creating exclusive dealing arrangements with ISVs and OEMs, Microsoft today is attempting to defeat the threat from Web-based services by bundling its Web services technologies into Windows and entering into exclusive vertical distribution arrangements with Web-based content and e-commerce providers.

See Passport to Monopoly: Windows XP, Passport, and the Emerging World of Distributed Applications at 25 (ProComp June 21, 2001) and Microsoft's Expanding Monopolies: Casting A Wider .Net (ProComp May 15, 2001).

As would be expected, Microsoft now attempts to create a proprietary equivalent to the distributed applications paradigm by bundling its latest operating system with certain applications and technologies in order to secure dominance in distributed applications. For example, Microsoft Passport, a proprietary authentication technology built on the .NET Framework, is bundled with Windows XP. This bundling allows Microsoft's own authentication services to have a ubiquitous distribution base—and deny rival technologies ubiquity—in the same way that its bundling practices extinguished the middleware threats from Netscape and Java. A monopoly in web identity services will enable Microsoft to control the means by which users access distributed applications from the Internet. Nonetheless, the PFJ does nothing to restrict Microsoft's practices in this area. The API disclosure provisions only mandate the release (if at all) of APIs used by a Microsoft Operating System product to interoperate with Microsoft Middleware, which excludes Passport.

Similarly, Microsoft's broader .NET initiative is replacement of the Java and Netscape technologies that it unlawfully crippled with Microsoft proprietary technology. Microsoft defines .NET as its ''platform for XML web services.'' [55] The services which .NET offers are a combination of pre-designed applications, some of which come under the rubric ''Hailstorm,'' and a set of tools, under the rubric of Visual Studio Integration Program, designed to allow developers to create web applications which rely on the all-important APIs exposed by Microsoft programs. At the core of .NET stands the Common Language Runtime environment (''CLR'').

CLR is Microsoft's answer to the Java runtime environment, with a key difference. CLR provides the developer with a device that is similar to the JVM, but that lacks the element so destructive to Microsoft's hegemony—freedom from reliance on Microsoft's APIs. Of course, CLR will take full advantage of Microsoft's vast distribution network via bundling with future versions of Windows (including Windows XP) as well as with IE and Microsoft Network.

Microsoft's monopolization strategy has not changed at all. Bill Gates has explained that ''there's a very strong analogy here between what we're doing now [with Web-based services] and what we did with Windows.'' [56] Since Microsoft will pursue the same tactics and strategies found unlawful in the instant case, any remedy that does not prohibit a repeat of these practices in new markets and new contexts is facially flawed.

In sum, the proposed decree fails to address identifiable market and technological developments since the trial record closed that allow Microsoft both to protect its operating systems monopoly against current potential rivals and to engage in the same types of conduct adjudged unlawful by the Court of Appeals. Consequently, the proposed decree does not and cannot ''ensure that there remain no practices likely to result in monopolization in the future,'' Microsoft III, 253 F.3d at 103 (citations omitted), and must be rejected by this Court.

F. The Decree Increases Microsoft's Market Dominance and Actually, Worsens Competitive Conditions in the Relevant Software Markets

The proposed settlement not only does not achieve the procompetitive effects that the Department claims, it increases Microsoft's dominance of the operating systems market and actually worsens competitive conditions across the entire software industry. Among other things, the proposed decree rewards Microsoft for its illegalities, promoting future defiance of antitrust laws and intransigent tactics by dominant firms. Many of the deficiencies of the proposed decree have been outlined in this submission. These deficiencies will allow Microsoft to perpetuate its monopoly position. In addition, the decree represents a step back from the current state of affairs notably because it sanctions continued bundling or commingling by Microsoft of middleware technologies with Windows, thus increasing rather than decreasing Microsoft's power to sustain the applications barrier to entry protecting its operating systems monopoly while disadvantaging non-Microsoft middleware providers. By enhancing Microsoft's ability to buttress the applications barrier to entry, the proposed settlement harms competition, and increases, rather than terminates, Microsoft's monopoly power.

G. The Settlement Would Not Have Prevented Microsoft's Unlawful Campaign Against Netscape and Java

One appropriate measure for assessing whether the PFJ is adequate is whether it would preclude today the same conduct Microsoft used to foreclose Netscape and Java, and thus preserve its monopoly power, in 1995–98. It would not.

As a fundamental matter, this is because Microsoft is not required to disclose the APIs needed for new and innovative forms of middleware. When Netscape was launched in late 1994, Microsoft did not have an Internet browser and was focused on Chairman Gates'' vision of interactive television, rather than the Internet. Thus, there were no APIs exposed by Windows that were ''used by Microsoft Middleware to interoperate'' within the scope of Section III.D of the proposed decree. Had the decree been in place when Jim Barksdale, former CEO of Netscape, met with Microsoft in 1995, Netscape would not have been entitled to APIs or any other interoperability information under the express terms of the decree. ''For the same reasons, no interoperability information would have been disclosable to Sun in order to enable interoperability of Java runtime technology with Windows.

Most of the distribution tactics Microsoft used to cut off Netscape's air supply and to ''pollute the market for cross-platform Java'' are also permissible under the decree. Microsoft can still force OEMs to take its own middleware through bundling. Microsoft can still coerce or threaten partners like Intel and rivals like Apple and can still refuse to port its monopoly Office suite in order to protect the applications barrier to entry. Microsoft can still throttle middleware innovations because the PFJ gives it the ability to ''gate'' the functionality and product design of rival middleware products. Microsoft can still prohibit OEMs from removing its middleware, or applications, and is free to retaliate against OEMs that do so. Microsoft can still deceive middleware developers and can still introduce application development tools that pollute open standards by producing only Windows-compatible

[55] .NET Defined. available at www.Microsoft.com/net/whatis.asp.

[56] ''So for every element of Windows—user interface, the APIs .–.–. for each one of those things there's an analogy here.'' Bill Gates, Forum 2000 Keynote, Bill Gates Speaks About the .NET Platform. (Available at www.microsoft.com/BUSINESS/vision/gates.asp)

programs. And Microsoft can still protect the applications barrier by utilizing the very same practices through its monopoly IE and Office products that the PFJ purportedly outlaws for Windows.

In short, the PFJ does not even foreclose the means of foreclosure that were proved at trial and affirmed by the Court of Appeals. Under any Tunney Act standard of review, it must be rejected.

V. THE PROPOSED DECREE IS HOPELESSLY VAGUE AND INHERENTLY UNENFORCEABLE

The proposed decree is fiddled with ambiguities and loopholes and grants unilateral, essentially unreviewable, power to Microsoft to define the scope of its own ambiguous obligations. As such, the PFJ is an illusory contract, and unenforceable as a matter of well-settled contract law.

As the Court emphasized in Microsoft I, a proposed settlement cannot be entered, at least without substantive modification, if it is ambiguous or if there are ''foresee[able] difficulties in implementation.'' 56 F.3d at 1462. The proposed decree here is the epitome of such a case.

Twenty-four different sections of the PFJ provide that specific actions by Microsoft, or standards for assessing whether its practices are permissible, must be ''reasonable.'' [57] In a decree purportedly drafted to provide a ''certain'' remedy, this is anything but. As just two examples, in addition to the reasonable scope of ''bona fide,'' exclusive joint ventures discussed in the preceding section, Microsoft is expressly permitted to adopt ''reasonable technical requirements'' on which to override an OEM's or end user's choice of non-Microsoft middleware (Section III.H) and to enter into concerted refusals to deal with ISVs—requiring them not to develop software for competing platforms—that are ''of reasonable scope and duration'' (Section III.F.2). Consent decrees are interpreted as contracts, and it is black letter contract law that illusory contracts, those that give one party the fight to decide the scope of its own obligations, are not enforceable. See Rest. Contracts 2d § 77.

The judge in the first instance for all of these reasonableness clauses is Microsoft itself. In short, it is difficult to conceive of a more loosely drafted decree than the PFJ, which allows the defendant, without any practical constraint except lengthy contempt proceedings, to establish unilaterally the extent of its own decree obligations. Due to the inherent ambiguity in ''reasonableness'' terms, these disputes will be complex, tedious and time-consuming exercises for the Court.

The ''Technical Committee'' and so-called ''Crown Jewel'' provisions are equally inefficacious. The Technical Committee (''TC'') established by Section IV.B of the proposed decree does not help enforcement matters appreciably. Most significantly, nothing that the Technical Committee does is binding and nothing that it investigates, analyzes or recommends is permitted to see the light of day. The TC reports only to the plaintiffs (Section IV.B.8.e) and ''all information'' gathered by the TC is subject to confidentiality and non-disclosure agreements and a protective order (Section IV.B.9). The members of the TC may ''communicate'' with third-parties, but only about ''how their complaints or inquiries might be resolved with Microsoft'' (Section IV.B.8.g). Furthermore, ''[n]o work product, findings or recommendations by the TC may be admitted in any enforcement proceeding before the Court for any purpose, and no member of the TC shall testify by deposition, in court or before any other tribunal regarding any matter related to the decree'' (Section IV.D.4.d).

Rather than a vehicle for prompt resolution of enforcement disputes, the TC provisions are a charter for delay and obfuscation. By denying the Court any access—whether or not in camera—to the work product of the TC, the proposed decree simply creates another hoop through which third-party complainants, and the government itself, must pass in order to enforce violations of the decree b5, the defendant It also denies the Court the benefit of the unbiased, objective technical expertise of the TC, which is the principal criterion on which its members are to be selected. Coupled with the sheer number of ''reasonableness'' provisions in the decree itself, the TC process will therefore delay enforcement and make clean resolution of decree interpretation issues more costly and burdensome for all affected parties and non-parties.

Finally, Section V.B of the PFJ provides that if the Court finds Microsoft ''has engaged in a pattern of willful and systematic violations,'' on application of the plaintiffs a ''one-time extension'' of the decree may be granted, for up to two years. Although presented as a ''Crown Jewel'' provision, this section does little to ensure compliance. The function of a Crown Jewel clause is to provide such an onerous penalty that the defendant's compliance with its substantive obligations can be coerced, and deliberate evasion avoided, without ever having to invoke the penalty. Here, the ''threat'' Microsoft is being presented with is that of being forced for two more years to decide at its ''sole discretion'' what constitutes Windows, to constrain exclusive joint ventures to ''reasonable'' duration, to gain access to intellectual property developed by middleware competitors, and to dictate to those competitors the functionality and user interface of their products. This is plainly something Microsoft should welcome with open arms rather than fear.

The vagueness of the terms, the ineffectiveness of the Technical Committee and the lack of a meaningful deterrent Crown Jewel provision will plague the courts for years to come. In the absence of any deterrent, Microsoft will no doubt interpret the ''reasonableness'' standards generously incorporated in the proposed settlement in its own favor. The enforcement agencies and numerous competitors will witness the ill effects of future Microsoft actions and challenge these practices. However, without the proper dispute resolution mechanisms in place, it will be up to the courts to resolve all these ''reasonableness'' issues arising out of the proposed settlement.

VI. DIVESTITURE REMAINS THE PREFERABLE AND MOST EFFECTIVE REMEDY FOR MICROSOFT'S SECTION 2 VIOLATIONS

ProComp and its members have consistently supported structural relief in this case. In our view, divestiture remains the most effective remedy for Microsoft's wide-ranging unlawful practices. Conduct remedies like the proposed decree are a second-best solution, because they rely on the defendants good will to comply. An injunctive decree in a Section 2 monopolization case ''does no more than encourage the monopolist to look for some new way of exercising its dominance that is not covered by the current injunction.'' [58] Comprehensive behavioral decrees inevitably require interpretation and application as the defendant introduces new products, moves into new markets, or changes its business strategies in its traditional markets.

That does not mean, however, that conduct remedies will necessarily be ineffective here, but rather that they must be targeted and broad enough to redress the core practices used to maintain Microsoft's monopoly and to eliminate the barriers to entry protecting that monopoly power. The proposed decree does not even purport to satisfy this goal, which we submit is compelled by the Ford/United Shoe standard required for assessing relief in this case. The relief proposed by the Litigating States achieves these objectives. We respectfully submit that the Court adopt a crown jewel divestiture provision to deter Microsoft from engaging in further unlawful conduct.

VII. THE COURT SHOULD CONDUCT A RIGOROUS TUNNEY ACT EXAMINATION OF THE DECREE, THE COMPETITIVE IMPACT STATEMENT AND THE DEPARTMENT'S UNSUBSTANTIATED PROJECTIONS OF FUTURE COMPETITIVE EFFECT

There are several circumstances in which it is established that district courts must engage in rigorous scrutiny of proposed antitrust settlements under the Tunney Act. This case epitomizes those circumstances. If ever there was a case in which a full, independent judicial assessment should be conducted, it is this one.

A. The Complexity and Substantial National Importance of this Case, the Government's Flat Reversal of Position and its Disregard of Clear Tunney Act Obligations All Dictate the Necessity of Critical Judicial Oversight in this Landmark Proceeding

[57] Substantive ''reasonable'' provisions are III.B.2, III.C.5, III.E, III.F2 (two), III.G, III.H.2, III.I, III.J.2.b and III.J.2.C. Procedural ''reasonable'' provisions are IV.A.2, IV.A.2.b, IV.A.2.c, IV.A.4, IV.A.6, IV.A.7 (two), IV.A.8.b (three), IV.A.8.h and IV.A.8.l (three).

[58] 3 P. AREEDA & H. HOVENKAMP ANTITRUST LAW ¶704.3, at 213 (1999 Supp). See William K. Kovacic, Designing Antitrust Remedies for Dominant Firm Misconduct, 31 Conn. L. Rev. 1285, 1311 (1999) (''By blockading recourse to certain commercial tactics, a remedial decree will inspire the defendant to pursue other paths that circumvent the judicially imposed constraints.''). As the Supreme Court cautioned in the landmark DuPont antitrust case, ''the policing of an injunction would probably involve the courts and the Government in regulation of private affairs more deeply than the administration of a simple order of divestiture. United States v. E.I. du Pont de Nemours & Co., 366 U.S. 316, 334 (1961); accord, AT&T, 552 F.Supp. at 167–68.

Even in the pretrial context with its more limited review, Tunney Act courts will rigorously scrutinize proposed settlements when an antitrust case is complex, subject to considerable controversy, and affects large segments of the public.[59] Especially rigorous scrutiny is also undertaken when the proposed decree departs substantially from the relief sought in the government's complaint,[60] or otherwise represents a sharp reversal in the government's prior position.[61] Each of these situations is present in this case

1. This Complex, Controversial, Nationally Important Antitrust Prosecution Demands Serious Judicial Oversight

This is certainly a highly complex case that has preoccupied the political, technology and business communities for years. These are precisely the circumstances in which the Tunney Act's genesis reveals a major policy concern with the appearance of the government settling for too little ''because of the powerful influence of antitrust defendants and the complexity and importance of antitrust litigation.'' SENATE REPORT, supra, at 147 (statement of Judge J. Skelly Wright).

Microsoft plainly ''wield[s] great influence and power'' and has brought ''significant pressure to bear on [the] Government'' throughout the litigation. Id. Thus, the Court needs to consider whether this is a case, such as Cascade, where the Department ''knuckled under'' to an economically and politically powerful antitrust defendant. Cascade Natural Gas Corp. v. El Paso Natural Gas Co., 386 U.S. 129, 136, 142 (1967).[62]

2. Heightened Scrutiny is Needed Because Neither the Department Nor Microsoft Complied With their Respective Tunney Act Obligations

Courts have also refused to enter proposed antitrust consent decrees where the Government or the defendant did not comply with its procedural responsibilities under the Tunney Act. Even technical and formalistic failures have been deemed grounds to deny entry of a proposed judgment. United States v. Central Contracting Co., 527 F. Supp. 1101 (E.D. Va. 1981).

The procedural irregularities in this case are far greater, and are of substantive importance to the Court's review. First, the Tunney Act requires the Department to provide an explanation of ''alternatives'' to the proposed decree considered in evaluating a settlement proposal. 15 U.S.C. § 16(b)(6). Here, however, the Department simply offers a laundry list of other conduct remedies proposed by third-parties, dismissing all of them collectively with the terse statement that the PFJ ''provide[s] the most effective and certain relief in the most timely manner.'' CIS, 66 Fed. Reg. at 59475. The Department's assertion is unexplained.

The CIS recites only that the Department considered intervening changes ''in the computer industry, as well as the decision of the Court of Appeals, which reversed certain of the District Court's liability findings.'' [63] Nothing in the CIS offers any useful guidance to the Court, or the public, as to why the rejected conduct remedies are inappropriate; thus, the Department fails to come forward with the ''detailed notice to the public'' the Tunney Act was intended to require.[64] This violates the Government's duty not just to ''describe'' the alternatives (which the CIS does), but also to provide an ''explanation'' of their adequacy (which the CIS does not). This is an improperly narrow view of the government's Tunney Act responsibilities is incompatible with the purpose of the Tunney Act to ensure that all relevant issues are subject to maximum ''ventilation.'' [65]

The government's ''predictive judgments'' about market structure and competitive effect should be accorded a presumption of regularity, Microsoft I, 56 F.3d at 1460 (quoting United States v. Western Elec. Co., 993 F.2d 1572, 1577 (DC Cir.), cert. denied 510 U.S. 984 (1993), but on& when tile circumstances are regular. Where, as here, the Department's exposition of the reasons for its settlement and its legal interpretation of the Court of Appeals'' mandate are woefully lacking, such a presumption of regularity should not apply. In these circumstances, the Court cannot ''carefully consider the explanations of the government in the competitive impact statement.'' CIS, 66 Fed. Reg. at 59476 (citation omitted).

Second, the Tunney Act mandates that the government make available all ''materials and documents which the [it] considered determinative in formulating [a settlement] proposal.'' 15 U.S.C. § 16(b). The CIS responds to this requirement with a blanket statement that [n]o materials and documents of the type described in the [Tunney Act] were considered in formulating the Proposed Final Judgment. Consequently, none are being filed with this Competitive Impact Statement.

CIS, 66 Fed. Reg. at 59476. That cannot be accurate. Even in antitrust cases that are not the length and complexity of the Microsoft litigation, courts have found similar disclaimers ''to be almost incredible.'' Central Contracting Co., 527 F. Supp. at 1104. It defies credulity to suggest that there does not exist even one document, memorandum or analysis that the Department considered ''determinative'' in selecting the relief package presented to this Court.

Third, the CIS misstates many provisions of the PFJ. We address these in detail in Section III above, and will not repeat that analysis here. Where, as here, the government presents a document that seeks to justify provisions that on close examination arc illusory, it has in effect challenged the legitimacy of statute. Under even the strictest interpretations of Tunney Act deference, this Court cannot permit the Tunney Act process to ''make a mockery of judicial power.'' Microsoft I, 56 F.3d at 1462.

Fourth, the Tunney Act requires that the defendant file a list of ''all'' written or oral communications ''by or on behalf of such defendant .–.–. with any officer or employee of the United States concerning or relevant to such proposal, except [for] communications made by counsel of record alone with the Attorney General or the employees of the Department of Justice alone.'' 15 U.S.C. § 16(g). Remarkably, Microsoft's Section 16(g) filing indicates that only two such communications occurred, both in connection with negotiations together with Microsoft and the Court-appointed mediator. This cannot be true It has been publicly confirmed by numerous public officials, and acknowledged by Microsoft, that a large number of Microsoft-retained lawyers and lobbyists have advocated its position on this case before countless officials in Congress and the Executive Branch. The Court should require Microsoft to fully comply with Section 16(g).[66]

3. The Court Should Closely Examine the Government's Reversal of Position on Relief

The government's about-face on its remedy proposals provides another reason why heightened judicial scrutiny is required. While the government now says that the PFJ will provide effective relief, this reflects a marked abandonment of its earlier position. Indeed, the Justice Department's position just 18 months ago was that only structural relief was adequate, and conduct decrees like the proposed PFJ were inherent failures. As emphasized in one of the cases cited by the

[59] Cascade Natural Gas Corp. v. El Paso Natural Gas Co., 356 U.S. 129, 136, 141 (1967); AT&T, 552 F. Supp. at 152; Associated Milk Producers, 394 F. Supp. 35, 42 (W.D. Mo. 1975).

[60] United States v. Automobile Mfrs. Ass'n, 307 F. Supp. 617, 621 (C.D. Cal. 1969), aff'd mem. sub nom. New York v. United States, 90 S. Ct. 1105 (1970).

[61] Cascade, 386 U.S. at 137; Automobile Mfrs. Ass'n, 307 F. Supp. at 621.

[62] In Cascade, the Department refused to implement an antitrust divestiture decree affirmed on appeal by the Supreme Court. The Court eventually directed the Department to oversee ''divestiture without delay'' and instructed the district court to prepare ''meticulous findings .–.–. in light of the competitive requirements'' of the remedy. 386 U.S. at 137.

[63] CIS, 66 Fed. Reg. at 59475.

[64] The CIS was intended, rather, to be ''detailed notice to the public what the case is all about. Further than that, the public impact statement makes the lawyers for the Department of Justice go through the process of thinking and addressing themselves to the public interest consideration in the proposed decree. There is no better exercise for determining whether you are right or not than trying to put it down on paper to see how it writes.'' SENATE REPORT, supra, at 8 (remarks of Judge J. Skelly Wright).

[65] See Central Contracting. 527 F. Supp. at 1103 (quoting 119 Cong. Rec. 24597 (1973) (remarks by Senator Tunney)).

[66] The company apparently takes the unsupportable position that lobbying communications on the subject of the Microsoft litigation occurring before the September 2001 negotiations resumed are not ''relevant'' to the settlement. Microsoft also claims many communications were protected by the ''counsel of record'' exception. ''Counsel of record'' for purposes of these disclosures is intended to differentiate between lawyers actively appearing before the trial court and those undertaking related, but non-judicial ''lobbying'' functions. Central Contracting Co., 527 F. Supp. at 1105. The House Report discusses Congress's intent to distinguish ''lawyering contacts,'' which warrant protection, from ''lobbying contacts,'' which must be disclosed. It states that a lobbying contact is performed by ''counsel of record accompanied by corporate officers; or by attorneys not counsel of record.'' HOUSE REPORT, supra, at 6 (emphasis added). Congress requires their disclosure in order to guarantee ''that the Government and its employees in fact avoid practicing political justice.'' Id. (quoting Civil Service Comm'n, 414 U.S. 906 (1973)).

Justice Department, less deference is warranted when ''the government has requested broad relief at the outset, represented to the courts that nothing less would do, and then abruptly knuckled under.'' United States v. National Broad. Co., 449 F. Supp. 1127, 1144 (C.D. Cal. 1978).

The point is not that the Department has decided not to seek divestiture, but instead that the conduct remedies it now proposes contradict its prior representations to this Court on their effectiveness. The earlier DOJ position was also consistent with its prior settlement decisions in this litigation itself. In the mediations supervised by Chief Judge Richard Posner in March 2000, the Department and the State plaintiffs demanded settlement terms that would have gone far beyond the limited provisions of the PFJ in eradicating Microsoft's ability to act anticompetitively. Indeed, the plaintiffs'' last settlement proposal in the mediations—dubbed ''Mediator's Draft 18 (Attachment B)—would have included provisions requiring Microsoft to license the actual source code for Windows, to permit ISVs to modify Windows itself, and to allow OEMs to ''display[] a middleware user interface'' in lieu of the Windows desktop. None of these or similar provisions is included in the proposed decree. Thus, the PFJ is considerably weaker in several key respects than the very conduct relief which the Department demanded in settlement before Microsoft's Sherman Act liability had been established. [67]

Given the importance of this case, and Court's obligation to look to the Supreme Court and the DC Circuit for guidance rather than the Justice Department, the Court must decide for itself whether the settlement would give the public effective relief against Microsoft's proven wrongdoing.

B. Live Evidence is Needed on the Technical and Economic Complexities of the Software Industry and the Profound Failings of, and Harms Caused by, the PFJ The drafting of an antitrust decree necessarily ''involves predictions and assumptions concerning future economic and business events.'' [68] It is a ''cardinal principle'' of our system of justice that ''factual disputes must be heard in open court and resolved through trial-like evidentiary proceedings.'' Microsoft III, 253 F.3d at 101. This mandate for evidentiary hearings applies not just to liability determinations, but also to determinations concerning the ''appropriate [form of] relief.'' Id.; see also, id. at 107 (vacating and remanding Judge Jackson's remedy decree in large part due to his ''fail[ure] to hold an evidentiary hearing despite the presence of remedies-specific factual disputes,'' and holding that a remedies decree must be vacated whenever there is ''a bona fide disagreement concerning the substantive items of relief which could be resolved only by trial'' Id. (quoting Interim Order at 62).

The Tunney Act contemplates an evidentiary hearing in these circumstances. As the Justice Department recognizes, this court must permit the use of the ''additional procedures'' authorized by 15 U.S.C. § 16(f)''—which include live hearings with fact and expert testimony—if ''the [public] comments have raised significant issues and .–.–. further proceedings would aid the court in resolving those issues.'' CIS, 66 Fed. Reg. at 59476. It strains credulity to suggest, as the Justice Department does, that the remedial phase of the most complicated antitrust case in decades will not involve ''significant issues'' that would benefit from ''further proceedings.'' Evidentiary hearings are critically important in complex antitrust cases because the assessment of antitrust remedies necessarily requires the Court to determine a number of facts relevant to both the degree of anticompetitive harm and the likely future condition of the market in which competition must be restored. United States v. United States Gypsum Co., 340 U.S. 76, 89 (1950); see also United States v. Glaxo Group, Ltd., 410 U.S. 52, 64 (1973). In particular, any proposed settlement decree must reach forward in time to ''assure the public freedom from'' continuance of the monopolistic practices. Id. As such, this Court must make '''predictions and assumptions concerning future economic and business events.''' Microsoft III, 253 F.3d at 102 (quoting Ford, 405 U.S. at 578). Although courts retain wide discretion in fashioning such forward-looking relief, they must base that relief on a sound evidentiary record. International Salt, 332 U.S. at 401.

In this case it is especially important to heed Congress's instruction to ''resort to calling witnesses for the purpose of eliciting additional facts,'' HOUSE REPORT, supra, at 5, because the record has not yet been developed on remedies. See Associated Milk Producers, Inc., 394 F. Supp. 34 (W.D. Mo. 1975).[69] Indeed, the procedural posture that the Court now faces is more closely akin to a contested summary judgment motion or administrative consent decree, for which hearings are the standard method of resolution. E.g., Celotex Corp. v. Catrett, 477 U.S. 317 (1986); Citizens for a Better Environment v. Gorsuch, 718 F.2d 1117 (DC Cir. 1983); United States v. Trucking Employers, Inc., 561 F.2d 313 (DC Cir. 1977).[70]

Only by permitting third parties, such as ProComp and its members, to participate fully in such a proceeding can the Court assure that there will be adequate evidentiary attention to facts and circumstances that contradict the Department's views on the market, competition and other issues relevant for remedy purposes. Otherwise, this Court would repeat the very error that led the DC Circuit to reverse the last judgment in this case.

VIII. CONCLUSION

For all the foregoing reasons, the Court must find that the Proposed Final Judgment is not in the public interest. At a minimum, the Court should defer any judgment on the PFJ until the upcoming remedies hearing in the ongoing litigation is conducted. This is necessary to avoid inconsistent remedies. Indeed, many of the remedies proposed by the Litigating States are irreconcilable with those proposed by the PFJ. When the Court does consider the PFJ, it is obliged in the discharge of its Article III duties to make an independent determination whether the PFJ adequately fulfills the mandate of the DC Circuit.

Attachment A

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA, Plaintiff,
v. Civil Action No. 98–1232 (CKK)
MICROSOFT CORPORATION,
Defendant.

STATE OF NEW YORK, et al.,
Plaintiffs,
v. Civil Action No. 98–1233 (CKK)
MICROSOFT CORPORATION,
Defendant.

DECLARATION OF KENNETH J. ARROW

Kenneth J. Arrow declares under penalty of perjury as follows:

I. INTRODUCTION

1. I am the Joan Kenney Professor of Economics Emeritus and Professor of Operations Research Emeritus at Stanford University. I received the degrees of B.S. in Social Science from The City College in 1940, M.A. in mathematics from Columbia University in 1941, and Ph.D. in economics from Columbia University in 1951. I have taught economics, statistics, and operations research at the University of Chicago, Harvard University, and Stanford University,

[67] The barrier to introduction into evidence of settlement offers under Rule 408 of the Federal Rules of Evidence does not apply where the settlement is not used to show liability but instead, as here, to illuminate the policy considerations governing fashioning of a remedy. E.g., Carney v. American Univ., 151 F.3d 1090, 1095 (DC Cir. 1998). Rule 408 precludes proof of settlements and settlement offers only ''to prove liability for or invalidity of'' a claim. Fed. R. Evid. 408. Indeed, evidence of settlements is expressly permitted by Rule 408 ''when the evidence is offered for another purpose.'' Id.

[68] Ford, 405 U.S. at 578.

[69] To the contrary, the DC Circuit reversed and remanded precisely because the prior District Judge did not permit an evidentiary hearing on remedies. The court stressed that ''a full exploration of the facts is usually necessary to properly draw an antitrust decree so as to prevent future violations and eradicate existing evils,'' and remanded for such an exploration of facts. Microsoft III, 253 F.3d at 101 (quoting United States v. Ward Baking Co., 376 U.S. 327, 330–31 (1964) (internal quotations and brackets omitted)).

[70] In summary judgment practice, complex legal issues are frequently presented to courts on the basis of affidavits and other ''paper'' evidence. But, unless the papers reveal no ''genuine issue'' of ''material fact,'' a standard that cannot be met here, summary judgment motions must be denied and a case set for trial so that the Court can adduce whether the parties have met their respective burdens of proof on the disputed factual issues. E.g., Celotex Corp., 477 U.S. at 323; Thompson Everett, Inc. v. National Cable Adver., 57 F.3d 1317, 1322 (4th Cir. 1995) (applying Celotex to review of a motion for summary judgment of antirust conspiracy claim). Indeed, where the credibility of an affiant is at issue, as it undoubtedly will be here with respect to the reliability of expert opinions and projections of future economic and technological developments, it is difficult to conceive of any basis on which the Court would be permitted to resolve such controverted issues without availing itself of ordinary, trial-type evidentiary procedures.

and I have written more than 200 books and articles in economics and operations research. I am the recipient of numerous awards and degrees, including the Nobel Memorial Prize in Economic Science (1972). A significant part of my writing and research has been in the area of economic theory, including the economics of innovation and its relation to industrial organization. My curriculum vitae is attached.

2. I have been asked by ProComp to comment on various economic issues related to the Revised Proposed Final Judgment (''PFJ'' or the ''decree'') proposed by the United States, various settling States and Microsoft Corporation (''Microsoft'').

3. My review of the PFJ begins with the fact that Microsoft has been found liable for violating Section 2 of the Sherman Act by engaging in a widespread series of practices that illegally maintained its monopoly in Intel-compatible PC operating systems. These practices were focused on eliminating the threat posed to Microsoft's PC operating system monopoly by the combination of Netscape Navigator and cross-platform Java technology (''middleware competition'').

4. Given that Microsoft has been found liable for illegal monopoly maintenance, the remedies in this case should be designed to eliminate the benefits to Microsoft from its illegal conduct. To the extent possible, the remedies should be designed to restore the possibility of competition in the market where monopoly was illegally maintained (i.e., the market for PC operating systems). In addition, the remedies should strengthen the possibilities for competition and deter the exercise of monopoly power in the present and future, taking account of the special problems of an industry in which network effects are important.

5. It is my opinion that the PFJ fails to accomplish these objectives. First, the PFJ is unduly focused on attempting to re-create an opportunity for future middleware competition. Because of network effects and path dependencies, Microsoft's monopoly power in PC operating systems is more entrenched than it was in the mid-1990s. It will be exceedingly difficult now, even with the best of remedies, to re-establish middleware fully as the kind of competitive threat to Microsoft's monopoly power that it posed in the mid-1990s. Additional remedial steps need to be taken to ensure that Microsoft does not benefit from its illegal conduct and the consequences of that conduct on dynamic competition in the OS market. Second, the PFJ does not address the fact that no effort to restore competition in the market for PC operating systems will be successful without measures designed to lower the applications barrier to entry that currently protects Microsoft's position in this market. Third, the enforcement mechanism described in the PFJ seems likely to be ineffective, even with respect to the inadequate remedies in the PFJ. Fourth, the PFJ pays insufficient attention to the ways in which Microsoft is currently attempting to protect its monopoly power by using its illegally maintained monopoly in PC operating systems against current and future competitive threats, such as server operating systems and Web services.

6. This affidavit has six pans and is organized as follows. After this introduction (Part I), Part II reviews the threat that Netscape, Java and the Internet posed in the mid-1990s to Microsoft's monopoly power in PC operating systems. Part HI then reviews the illegal conduct that Microsoft used in defeating this threat. Part III also analyzes the state of the computer industry today following this illegal conduct and explains why it seems unlikely, at this stage, that the middleware threat can be re-created. With this as background, Parts IV and V review and assess the remedies proposed in the PFJ. Part IV critiques the remedies designed to restore middleware competition. In addition, Part IV discusses the lack of attention in the PFJ to the applications barrier to entry that protects Microsoft's monopoly power in PC operating systems. It also notes certain deficiencies in the enforcement mechanism proposed in the PFJ. Part V follows with a discussion of Microsoft's efforts to protect its existing monopoly power by using its illegally maintained monopoly in PC operating systems to gain advantages in other markets that threaten to reduce the scope of its current market power. Part V explains that the PFJ gives insufficient attention to this important subject—a subject that bears on the future of competition in the computing industry. The affidavit concludes in Part VI with a summary of conclusions.

II. MICROSOFT'S MONOPOLY POWER AND THE THREAT POSED BY NETSCAPE, JAVA AND THE INTERNET

A. NETWORK EXTERNALITIES

7. Network externalities have been central to Microsoft's ability to maintain its monopoly power in the market for PC operating systems. Both the District Court and the U.S. Court of Appeals for the District of Columbia Circuit referred to the ''applications barrier to entry,'' the process by which a large installed base induces the development of applications and other complementary goods designed for the dominant operating system, which further reinforces the position of the dominant operating system. I described this process in a declaration that I submitted in 1995 on behalf of the government in a prior settlement with Microsoft:

A software product with a large installed base has several advantages relative to a new entrant. Consumers know that such a product is likely to be supported by the vendor with upgrades and service. Users of a product with a large installed base are more likely to find that their products are compatible with other products. They are more likely to he able successfully to exchange work products with their peers, because a large installed base makes it more likely that their peers will use the same product or compatible products. Installed base is particularly important to the economic success of an operating system software product. The value of the operating system is in its capability to run application software. The larger the installed base of a particular operating system, the more likely it is that independent software vendors will write programs that run on that operating system, and, in this circular fashion, the more valuable the operating system will be to consumers.

8. The applications barrier to entry implies that it is likely that a single platform (or programming environment) will dominate broad segments of the computer software industry at any point in time. This does not necessarily imply that there will be monopoly; that depends on the extent to which the dominant platform is proprietary or closed. However, if the dominant platform is proprietary (which is certainly the case with Windows), then the interdependence of applications and operating systems creates a barrier against any new entrant. A new entrant would need to create both an operating system and the applications that make it useful.

9. In addition, any customer of a new entrant would have to incur considerable costs in switching to a new system. In the first place, the customer would have to learn new operating procedures. Second, there would be a problem of compatibility of files. These factors constitute a natural obstacle to change, so that a system with a large installed base will have a tendency to retain its users.

10. The special nature of operating systems and software also gives Microsoft, because of its large installed base of operating system, a great advantage in the markets for complementary software. Specifically, it can distribute the software much more easily than its competitors. Since virtually every new PC ships with Windows, Microsoft can put its software into the hands of users by including it with the operating system. Any other vendor of complementary software that wanted to distribute through OEMs would have to cut a separate deal with each OEM, and would face the task of persuading OEMs to carry software products that may be directly competitive with products offered by Microsoft. As a result, complementary software from other vendors typically either has to be downloaded (which imposes added costs on users) or distributed separately to users in ''shrink wrap.'' In addition, Microsoft has the ability to allow Microsoft developers of complementary software access to ''hidden APIs''—application programming interfaces in the PC operating system that Microsoft developers know about but which are not disclosed fully to competing developers of complementary software. of the OEM distribution channel. Most important, Sections III.C and III.H cannot, by their very design, provide an opportunity for rival middleware products—as compared to Microsoft's middleware—to attract sufficient distribution to have any impact at all on the applications barrier to entry.

The OEM sections may actually make matters worse for middleware rivals. The PFJ limits what OEMs can remove from their PC products to just the middleware icons, euphemistically referred to as ''access to'' middleware in Sections III.C and III.H. In other words, OEMs are not permitted to remove the code for Microsoft Interact Explorer, Windows Media Player or any other Microsoft middleware, and the proposed decree allows Microsoft to commingle and integrate middleware with its Windows operating system software. The fact that the flexibility guaranteed to OEMs is limited to removing icons, and not the middleware itself, has major competitive

significance and actually guarantees perpetuation of the applications barrier protecting Microsoft's operating systems monopoly.

1. The OEM Provisions Place Sole Responsibility for Introducing Middleware Competition on PC Manufacturers

To achieve its goal of ''recreating the potential for the emergence'' of middleware alternatives to Microsoft's monopoly operating system, the PFJ delegates the role of competitive gatekeepers to OEMs. Instead of requiring the monopolist itself to unfetter the market for entry by competitors, here the PFJ imposes that obligation on third-parties who are partners with, not competitors of, the defendant. If PC manufacturers do not act on the desktop flexibility powers provided by Sections III.C or III.H of the PFJ, there will, by definition, be no OEM-based remedy. Walter Mossberg, Personal Technology columnist for the Wall Street Journal, captured the problem elegantly. ''Much'' of the DOJ settlement, he explained, ''pertains to the company's relations with the hapless makers of PCs, which aren't in any position to defy Microsoft.'' [50]

OEMs are captives of Microsoft for a number of reasons, beginning with the obvious fact that there are no commercially viable alternatives to the Windows operating system; there are no real alternatives to Microsoft's Office suite of personal productivity applications (Word Processing, Spreadsheets, E-Mail, etc.); and there is de minimis competition for Internet browsers. The fact that OEMs find themselves in a sole source relationship with the defendant provides Microsoft with innumerable avenues to exercise its leverage over the OEM channel. These complex relationships are built more on the subtleties of a sole source relationship than on written contracts, or overt retaliation, and thus are hardly resolved by the uniform Windows pricing obligation provided for in Section III.B.

It must also be understood that personal computer manufacturers are in the business of producing low margin commodity equipment, a business characterized by very minimal (and shrinking) R&D budgets. It is unrealistic to expect any Windows-centric OEM to develop, test, and pre-install packages of rival middleware, because that would require substantial expenditures in technical software expertise and customer support which would further narrow already shrinking profit margins in a business where competitors are currently engaged in a major price war to gain market share.

The financial burden of customer support, where a single end user service call can eliminate an OEM's profit margin on a PC, creates powerful disincentives to the inclusion of non-Microsoft middleware. See Microsoft III, 253 F.3d at 62. Judge Jackson found and the Court of Appeals affirmed that in light of their customer support obligations, which are ''extremely expensive,'' Microsoft III, 253 F.3d at 61 (citing Findings of Fact ¶210), OEMs are disinclined to install multiple versions of middleware. Since OEMs ''have a strong incentive to minimize costs,'' id., the customer confusion resulting from duplicative middleware is sufficient to preclude OEMs from installing competitive programs where comparable Microsoft middleware is included with Windows.

Under the proposed decree, however, these are precisely the circumstances faced by OEMs. There are no restrictions in the PFJ on Microsoft's ability to integrate middleware technologies into Windows; in fact Microsoft is allowed to do so at its ''sole discretion.'' Even if an OEM wants to install a competitive non-Microsoft middleware program, it will be required to deal with the fact that the corresponding Microsoft middleware product is already present on its PCs, which it is not permitted to remove. Consequently, just as OEMs'' cost minimization requirements forced them not to pre-install Netscape where IE was included with Windows, so too will these same profit pressures force OEMs to decline to install competing middleware programs under the PFJ.

This is in stark contrast to the provision of the Interim Order on which the Department claims to have based its settlement. Both the Interim Order and the remedy proposed by the Litigating States would require Microsoft to ship a version of the operating system without any middleware included, if requested by an OEM. That scheme makes it possible for an OEM to truly offer a differentiated product suite without the burden of having Microsoft's corresponding technology present on the system as well.

Even if they had an independent economic incentive to support middleware competition, however, Windows OEMs are still held captive under the proposed decree's retaliation provisions. Section III.A prohibits ''retaliation'' (another undefined term) by Microsoft against OEMs for developing, distributing or supporting competitive middleware or exercising their desktop icon flexibility fights.

Despite their relative length, the retaliation provisions do not at all effectively preclude retaliation. Retaliation is only prohibited under Section III.A where ''it is known to Microsoft'' that an OEM is undertaking a permitted, competitive action. This subjective, actual knowledge standard will be difficult if not impossible to enforce. In addition:

Microsoft is not prohibited from retaliating if an OEM removes the code for a Microsoft Middleware Product from its retail PCs.

Nor does this provision prevent retaliation if an OEM removes either icons or code for Microsoft software that does not qualify as a ''Microsoft Middleware Product'' (for instance, Microsoft Movie Maker).

And Microsoft is not prohibited from retaliating against OEMs for promoting products that fall outside of the Section III.A terms. By way of example, Microsoft could retaliate against OEMs for promoting non-Microsoft Interact services, server operating systems, server middleware or server applications. Microsoft could even retaliate against OEMs for distributing or promoting middleware that does not yet compete with Microsoft Middleware Products.

Section III.A also limits the prohibited forms of retaliation to ''altering Microsoft's commercial relations with that OEM, or by withholding newly introduced forms of non-monetary Consideration (including but not limited to new versions of existing forms of non-monetary Consideration).'' PFJ, 66 Fed. Reg. 59453. Microsoft is not precluded from denying new monetary consideration to OEMs as a means of retaliation, as that is neither an ''alter[ed] commercial relation'' nor a ''newly introduced form of non-Monetary Consideration.'' Similarly, Microsoft can also reward compliant OEMs by providing concessions on license fees for non-Windows Microsoft software, including applications such as Office, server operating system software and server applications, as well as Microsoft Middleware Products. None of these types of software is covered by the pricing parity requirements of Section III.B, which apply only to ''Microsoft Operating System Products.'' Id.

Finally, as a general matter there is no practical way to identify and prohibit all the subtle ways Microsoft can preferentially favor some OEMs, and harm others, depending on their degree of support for Windows. For instance, the definition of Consideration in Section VI.C covers ''product information'' and ''information about future plans.'' Id. at ''59458. Yet Microsoft could retaliate against OEMs by denying them sufficient technical information regarding important, upcoming Windows features, for example by not inviting them to internal development conferences or presentations. Likewise, Microsoft could assign fewer or less knowledgeable technical support personnel to a specific OEM's account team, a form of retaliatory discrimination that would be difficult to detect and virtually impossible to prove.

In sum, the anti-retaliation provisions offer little shelter for OEMs desiring to respond to legitimate demands by their customers for choice among competing software products. If there is any doubt about this analysis of Sections III.C and III.H above, the Court should look no further than the OEMs'' treatment of Microsoft Internet Explorer. On July 11, 2001 Microsoft announced that OEMs would be free to remove access to Internet Explorer, which they had previously been prohibited from doing.[51] Since this announcement was made more than six months ago, not one OEM has actually taken advantage of this provision and removed the icon for Internet Explore from retail PCs This real-world market test is an accurate gauge of how many OEMs will likely take advantage of the exact same flexibility provided in Section III.H of the decree, albeit for a somewhat wider range of middleware products: none.

2. The Provisions Allowing OEM Flexibility Do Not Address the Key Issue of Microsoft's Ubiquitous Middleware Development Platform

The core of the case against Microsoft rests on the theory that Netscape and Java provided an alternative development

[50] Waiter S. Mossberg, Microsoft Has Good Yea); At Expense of Customers, Wall Street J., Dec. 27, 2001, at B1.

[51] We note that at the time of the announcement, Microsoft had already achieved significantly greater than 80 percent of the browser market as a result of its six-year anticompetitive campaign, so it is hard to view this as a concession.

platform (middleware) for applications developers, which, if applications developers began writing applications to the middleware, would undermine the applications barrier to entry and thus Microsoft's Windows monopoly. For this to occur, developers need to view rival middleware as a more attractive development platform than Windows. Unfortunately, the PFJ provides a solution to the wrong problem and actually ensures that rival middleware applications will never be able to attract a critical mass of developers.

Sections III.C and III.H of the decree allow OEMs to install competing middleware and to ''enable or remove access to'' Microsoft Middleware Products from the desktop of Windows PCs that they sell to end users. However, as noted, these provisions do not authorize OEMs to delete the Microsoft middleware itself, and Microsoft is not prohibited from retaliating against OEMs that attempt to delete Microsoft middleware code from its configured PCs.

This distinction between icons and code is competitively decisive. The applications barrier exists because developers write to Windows-centric APIs. Under the terms of the decree, however, the APIs exposed by Microsoft middleware remain on every Windows PC even if OEMs and end-users exercise all of the flexibility provided by Section III.H. It is crucial to understand that an application developer can write to Microsoft middleware regardless of whether ''access'' to that software is removed. In other words, Microsoft's middleware APIs remain ubiquitously available on all Windows PCs under the proposed decree. The best a rival middleware provider can hope for is to be ''carried'' alongside Microsoft's middleware on some lesser portion of personal computers.

A critical lesson learned in this case is that, as with Netscape and Java, ubiquity trumps technology in network effects markets. Professor Arrow explains that no middleware competitor can expect any economically significant chance to compete on the merits if, as permitted under the decree, Microsoft middleware is ubiquitous. Arrow Decl. ¶26. The important distinction between icons and code was explained by the DC Court of Appeals in 1998. The court emphasized that removal of end user access ''do[es] not remove the IE software code, which indeed continues to play a role in providing non-browser functionality for Windows. In fact, browser functionality itself persists, and can be summoned up by .–.–. running any application (such as Quicken) that contains the code necessary to invoke the functionality.'' Microsoft II, 147 F.3d at 941.

Consequently, by limiting its effect to the removal of icons only, the proposed decree cannot achieve any appreciable effect in eroding tile applications barrier. They cannot ''recreate the potential for the emergence'' of middleware alternatives in a way that provides an economically realistic opportunity for operating systems competition.

3. The OEM Provisions Do Not Create a Level Playing Field for Middleware Desktop Competition

We explained above why it is unlikely that OEMs will expend resources to promote rival middleware products. The alternative model is that rival middleware providers would pay an OEM to feature its software and delete end-user access to Microsoft's middleware. This is consistent with the CIS, which explains that the function of the OEM provisions is to allow OEMs to ''feature and promote'' non-Microsoft middleware. CIS, 66 Fed. Reg. at 59460.

Section III.H does not achieve this goal, for two primary reasons. First, as detailed above, the ''value'' of the PC desktop is diminished by the fact that an OEM is not permitted to remove the Microsoft middleware code, and thus cannot offer a rival exclusivity.

Second, Section III.H.3 does not guarantee that a rival's middleware icon will even remain on the desktop. As the Department explains the theory of this remedy, it is to create a ''marketplace'' on the desktop where OEMs can ''stand in the shoes'' of consumers and exercise choices in which middleware technologies to feature based on price and performance. Yet, the PFJ permits Microsoft to ''sweep'' competing middleware icons placed on the Windows desktop by OEMs.

That is, Windows may automatically remove the icons featured by an OEM just fourteen days ''after the initial boot-up of a new Personal Computer.'' True, this section contains a proviso stating that Microsoft may not do so absent end user ''confirmation,'' but neither the text of this provision nor the Competitive Impact Statement require that confirmation be based on any objective notice or alert by Microsoft. CIS, 66 Fed. Reg. at 59471.

The fourteen-day desktop sweep proviso directly contradicts the objective of fostering OEM flexibility to feature and promote non-Microsoft middleware, because it undermines the ability of OEMs to sell desktop placement an ISV can count on. Under Section III.H.5, the best an OEMs can offer is a guarantee of desktop placement for fourteen days.

This is critically important for the reasons stated above. As rival middleware vendors attempt to attract developers to write applications to their platforms, as opposed to Microsoft's platform, they will have to make representations as to how many PC desktops actually have the rival middleware installed and available to consumers. With the fourteen day ''sweep'' provision included in the PFJ, ISVs will simply not be able to make any accurate projections, which will further reduce the price they might be willing to pay for desktop placement.

4. Additional OEM Provisions Further Undermine the Crucial Ability of ISVs to Differentiate Competing Middleware Products

In order to displace Microsoft middleware and encourage applications developers to write to their APIs, competing ISVs will need to differentiate their middleware products from Windows Media Player, Windows Messenger and the other Microsoft middleware products that are bundled with Windows. The OEM provisions affirmatively undermine the ability of ISVs to achieve any meaningful degree of product differentiation.

First, Section III.C.3 permits OEMs to launch automatically non-Microsoft middleware only at boot-up or upon making a connection to the Internet. This constrains the ability of manufacturers to configure competing middleware products and reduces the value of this flexibility for (and hence potential OEM revenues from) 1SVs.

Second, auto-launch of competing middleware is permissible under Section III.C.3 only (a) ''if a Microsoft Middleware Product that provides similar functionality would otherwise be launched automatically at that time,'' PFJ, 66 Fed. Reg. 59454, and (b) if the non-Microsoft Middleware ''displays on the desktop no user interface or a user interface of similar size and shape to the user interface displayed by'' the corresponding Microsoft middleware product.'' Id. These limitations allow Microsoft to gate middleware competition by reducing the role of non-Microsoft middleware to only those instances in which Microsoft's own products are launched. If Microsoft decides that its middleware products will not have a user interface, or will utilize a window of a specific size, those decisions are binding on competitors'' product designs as well. Indeed, the PFJ surprisingly appears not even to contemplate a situation where Microsoft's competitors develop a middleware product for which there is no ''corresponding'' Microsoft middleware.

Third, the PFJ empowers Microsoft to limit the freedom of ISVs in their product design and functionality decisions on its competitors. Microsoft can also limit the placement of icons and shortcuts may appear on the desktop and elsewhere, id. at 59454, 59455, the ''functionality'' of middleware products whose icons and shortcuts may be included by the OEM, and the ability of end users to designate non-Microsoft middleware as default middleware on their computers. Id. at 59455.

Each of these provisions has a similar, substantial effect. By allowing middleware to be substituted by an OEM only when (a) it performs similarly to Microsoft middleware, (b) exhibits functionality defined by Microsoft, or (c) includes the same user interface as Microsoft middleware, the PFJ allows Microsoft to ''gate'' competition. There is no competitive justification for these provisos, all of which serve to eliminate opportunities for product differentiation and permit Microsoft to constrain middleware competition to the scope, location and even ''look and feel'' it determines for its own products.

5. The OEM Provisions Contain Other Superfluous Terms that Substantially Limit Any Potential Market Impact

Section III.H of the proposed decree allows Microsoft twelve months to modify Windows XP in order to permit OEMs to remove Microsoft middleware icons or change default settings for invoking middleware functionalities. Yet the modification necessary to allow removal of icons via the ''Add/Remove Programs'' utility is a trivial exercise. Demonstrable proof of this fact is that Microsoft was able to modify the beta version of Windows XP to permit removal of the Internet Explorer icon within weeks of its July 11, 2001 announcement. We can not fathom why Microsoft is now given twelve months to accomplish the same task.

Section VI.N of the decree also provides that a ''Non-Microsoft Middleware Product'' is software with certain functionalities ''of which at least one million copies were distributed in the United States within the previous year.'' Because the Section III.H obligations requiting modification of Windows XP to permit addition and removal of competing middleware apply to ''Non-Microsoft Middleware Products,'' OEMs are foreclosed from the ability to feature and promote small middleware start-up competitors in Windows XP, Section VI.N is a very real impediment to achievement of the innovative middleware market the PFJ is purportedly designed to promote.

6. The OEM Provisions Have No Impact on Java.

Sections III.C and III.H also do not apply to Microsoft's Java Virtual Machine (''JVM''), or Microsoft's equivalent of the JVM, its Common Language Runtime. Despite the fact that the ''Microsoft Middleware Product'' definition includes the Microsoft Java Virtual Machine, it appears there is no competitive consequence to its inclusion in this definition in any of the provisions of the decree. First, Microsoft no longer ships its JVM with Windows, so there is nothing for OEMs to remove. Second, even if they did continue to ship a JVM, there is no ''icon'' or ''end-user access'' to Java. Rather, Java is invoked automatically by programs that rely on its presence.

7. The OEM Provisions Largely Codify Microsoft's Existing Business Practices.

Users today enjoy the flexibility—without the benefit of the PFJ—to add, delete or customize their own PC desktops. Users may delete icons by simply ''dragging'' the icon to the ''recycle bin'' or ''right-clicking'' on the icon and simply choosing ''delete.''

Thus, the decree's OEM provisions allowing OEM removal of icons only codify Microsoft's current business practices. In response to the Court of Appeals'' opinion, Microsoft on July 11, 2001 announced that ''it is offering computer manufacturers greater flexibility in configuring desktop versions of the Windows operating system in light of the recent ruling by the U.S. Court of Appeals for the District of Columbia.'' [52] According to the Microsoft press release, under this policy OEMs can ''remove the Start menu entries and icons that provide end users with access to the Internet Explorer components of the operating system,'' and ''Microsoft will include Internet Explorer in the Add/Remove programs feature in Windows XP.'' Id. Thus, Microsoft stressed that ''Microsoft has always made it easy for consumers to delete the icons for Internet Explorer, but will now offer consumers this additional option in Windows XP.'' Id.

This announcement is revealing because it confirms, from Microsoft itself, that the ''flexibility'' provided to end users by Section III.H of the decree has always existed. And by revising Windows XP to permit OEMs to remove the Internet Explorer icon, Microsoft has already done precisely what the decree requires. Thus, the OEM provisions of the decree succeed mostly in codifying Microsoft's current business practices and achieve minimal, if any, remedial purpose. In sum, the relief provided by Sections III.C and III.H is fundamentally at odds with the theory of the ease. These OEM ''desktop'' remedies will not provide any opportunity for alternative middleware platforms to attract developers and thus to challenge the applications barrier to entry.

They are economically irrational since Microsoft's middleware will continue to be ubiquitously available on all PCs, regardless of the choices exercised by OEMs. These provisions allow Microsoft to dictate product design features to its rivals, to limit product differentiation and to restrict OEM deals with rivals to a brief, fourteen-day exclusivity period. And at bottom, they cannot change the economic structure of the PC distribution channel because OEMs are sole-source partners of Microsoft, not competitors.

D. The Proposed Decree Does Not Effectively Preclude Microsoft's Exclusive Dealings

Although the proposed decree purports to ban exclusive dealing by Microsoft with respect to Windows software, Section III.G expressly permits Microsoft to establish favored or exclusive relations with certain OEMs, ISVs, etc., if the parties enter into ''any bona fide joint venture or .–.–. any joint development or joint services arrangement.'' This exception all but vitiates the supposed prohibition, for it allows Microsoft to enter into the identical distribution agreements that were held unlawful at trial merely by denoting them as ''joint'' activities.

E. Current Market and Economic Realities Demonstrate that the PFJ is Incapable of Having Any Substantial Procompetitive Impact

The Department recognizes explicitly that relief in this case must ''ensure that there remain no practices likely to result in monopolization in the future.'' Microsoft III 253 F.3d at 103 (citations omitted); see CIS, 66 Fed. Reg. at 59465 (monopolization remedy should ''avoid a recurrence of the violation'' in the future). Yet by failing to address significant market and technological developments that have occurred in the period since the trial record closed, the narrow remedies of the proposed decree do not provide relief that comes even close to ensuring that Microsoft's unlawful practices will not be repeated in the future.

1. New Monopolies Enable Microsoft to Protect its Operating System Monopoly Despite the PFJ Since the trial, Microsoft has solidified three new chokeholds with which it can easily perpetuate its monopoly power:

Microsoft's monopoly power over Interact browsers and its integration of IE into Windows allow it to replicate many of the prohibited practices through IE.

Microsoft's monopoly power over the Office suite and its anticompetitive use of Office porting allow it to replicate many of the prohibited practices through Office.[53]

Microsoft is fast acquiring monopoly power in the operating systems for low-end servers used in local or wide area networks. Microsoft can just as easily exploit the APIs exposed by the operating system on the network to perpetuate the applications barrier to entry.

However, the PFJ does not require the disclosure of APIs exposed by IE, Office the low-end server operating systems. Microsoft can develop middleware programs that utilize these APIs—which are as ubiquitous as the Windows APIs themselves—and thus evade the API disclosure provisions of the PFJ. Similarly, although Section III.E of the PFJ requires the disclosure of Communications Protocols used for interoperability with Microsoft server operating systems, by controlling the client (IE), Microsoft can control the server irrespective of these provisions.[54]

That is, Microsoft's monopoly control over IE allows it unilaterally to implement proprietary standards and protocols within IE that are not disclosable under the PFJ because they are not ''implemented in a Windows Operating System Product installed on a client computer'' within the scope of Section III.E.

2. The Proposed Settlement Ignores the Likely Tactics Microsoft Will Use to Eliminate the Next Significant Threat to its Monopoly Position

The primary competitive threat to the Windows OS/IE platform is the emergence of applications and services provided over the Internet, where the application or service is independent of the computing platform employed by the user. The recent spread of high-speed Internet service has further spurred the development of this category of distributed applications or web services that take advantage of Internet's underlying architecture.

Two features of distributed applications in particular constitute a revolutionary change from the previous ''client-server'' model. First, rather than residing principally on one machine (either a client or a server), distributed applications effectively reside on the network itself. It is therefore possible to access these services from any computer or device connected to the Internet. From the user's perspective, although the application itself resides on the network, it is accessible as rapidly and seamlessly as if it resided on the user's own PC.

Second, because the applications and data are accessible from different machines,

[52] Available at www.microsoft.com/MSCorp/presspass/Press/2001/Jul01/07–11OEMFlexibilityPR.asp.

[53] Microsoft's resulting power over Internet browsers and personal productivity applications provides it with alternative vehicles with which to achieve the same anticompetitive foreclosure of middleware threats that it accomplished in 1995–98 through Windows itself.

[54] As Microsoft executive (and trial witness) Paul Maritz put it, ''the most important thing we can do is not lose control of the Web client,'' because ''[b]y controlling the client, you also control the server.'' Gov't Ex. 498. Microsoft can suppress competition by adding proprietary features and protocols to the IE browser that are necessary to generate actions by its server operating systems products or by refusing to add features and protocols that would similarly support a competitor. Professor Schmalensee acknowledged this incentive at trial: ''[I]f one company controlled the browser and its look and feel and how it presented applications, it could severely enhance or detract from the application functionality of programs or applications running on the server.'' 6/24/99 (p.m.) Tr. 46–47; see also id. at 48; Henderson Decl. ¶82 (quoting Rasmussen Dep., 12/15/98 (a.m.), at 67–68).

access to these services depends critically upon being able to establish the identity of the user seeking access to those services. Web identity and authentication services accordingly take on extraordinary importance in the world of distributed applications.

These changes in the market reveal a picture of today's PC industry that is radically different from the Department's placid vision of ''recreating the potential'' for middleware competition by opening the OEM channel to possible future middleware innovations. The critical question, however, is whether distributed web-based applications, which do not need to be compliant with any particular operating system, will be able to remain independent of Windows and in the process bring down the applications barrier to entry.

The PFJ does not protect the Internet-based competition for the Windows operating systems monopoly in the future because the proposed decree does nothing to prevent Microsoft from continuing to shift from one anticompetitive activity to another in order to maintain its monopoly. Instead of bundling middleware code into Windows and creating exclusive dealing arrangements with ISVs and OEMs, Microsoft today is attempting to defeat the threat from Web-based services by bundling its Web services technologies into Windows and entering into, exclusive vertical distribution arrangements with Web-based content and e-commerce providers. See Passport to Monopoly: Windows XP, Passport, and the Emerging World of Distributed Applications at 25 (ProComp June 21, 2001) and Microsoft ''s Expanding Monopolies: Casting A Wider .Net (ProComp May 15, 2001).

As would be expected, Microsoft now attempts to create a proprietary equivalent to the distributed applications paradigm by bundling its latest operating system with certain applications and technologies in order to secure dominance in distributed applications. For example, Microsoft Passport, a proprietary authentication technology built on the .NET Framework, is bundled with Windows XP. This bundling allows Microsoft's own authentication services to have a ubiquitous distribution base—and deny rival technologies ubiquity—in the same way that its bundling practices extinguished the middleware threats from Netscape and Java. A monopoly in web identity services will enable Microsoft to control the means by which users access distributed applications from the Interact. Nonetheless, the PFJ does nothing to restrict Microsoft's practices in this area. The API disclosure provisions only mandate the release (if at all) of APIs used by a Microsoft Operating System product to intemperate with Microsoft Middleware, which excludes Passport.

Similarly, Microsoft's broader .NET initiative is replacement of the Java and Netscape technologies that it unlawfully crippled with Microsoft proprietary technology. Microsoft defines .NET as its ''platform for XML web services.'' [55] The services which .NET offers are a combination of pre-designed applications, some of which come under the rubric ''Hailstorm,'' and a set of tools, under the rubric of Visual Studio Integration Program, designed to allow developers to create web applications which rely on the all-important APIs exposed by Microsoft programs. At the core of .NET stands the Common Language Runtime environment (''CLR'').

CLR is Microsoft's answer to the Java runtime environment, with a key difference. CLR provides the developer with a device that is similar to the JVM, but that lacks the element so destructive to Microsoft's hegemony—freedom from reliance on Microsoft's APIs. Of course, CLR will take full advantage of Microsoft's vast distribution network via bundling with future versions of Windows (including Windows XP) as well as with IE and Microsoft Network.

Microsoft's monopolization strategy has not changed at all. Bill Gates has explained that ''there's a very strong analogy here between what we're doing now [with Web-based services] and what we did with Windows.'' [56] Since Microsoft will pursue the same tactics and strategies found unlawful in the instant case, any remedy that does not prohibit a repeat of these practices in new markets and new contexts is facially flawed.

In sum, the proposed decree fails to address identifiable market and technological developments since the trial record closed that allow Microsoft both to protect its operating systems monopoly against current potential rivals and to engage in the same types of conduct adjudged unlawful by the Court of Appeals. Consequently, the proposed decree does not and cannot ''ensure that there remain no practices likely to result in monopolization in the future,'' Microsoft III, 253 F.3d at 103 (citations omitted), and must be rejected by this Court.

F. The Decree Increases Microsoft's Market Dominance and Actually Worsens Competitive Conditions in the Relevant Software Markets

The proposed settlement not only does not achieve the procompetitive effects that the Department claims, it increases Microsoft's dominance of the operating systems market and actually worsens competitive conditions across the entire software industry. Among other things, the proposed decree rewards Microsoft for its illegalities, promoting future defiance of antitrust laws and intransigent tactics by dominant firms. Many of the deficiencies of the proposed decree have been outlined in this submission. These deficiencies will allow Microsoft to perpetuate its monopoly position. In addition, the decree represents a step back from the current state of affairs notably because it sanctions continued bundling or commingling by Microsoft of middleware technologies with Windows, thus increasing rather than decreasing Microsoft's power to sustain the applications barrier to entry protecting its operating systems monopoly while disadvantaging non-Microsoft middleware providers. By enhancing Microsoft's ability to buttress the applications barrier to entry, the proposed settlement harms competition, and increases, rather than terminates, Microsoft's monopoly power.

G. The Settlement Would Not Have Prevented Microsoft's Unlawful Campaign Against Netscape and Java One appropriate measure for assessing whether the PFJ is adequate is whether it would preclude today the same conduct Microsoft used to foreclose Netscape and Java, and thus preserve its monopoly power, in 1995–98. It would not.

As a fundamental matter, this is because Microsoft is not required to disclose the APIs needed for new and innovative forms of middleware. When Netscape was launched in late 1994, Microsoft did not have an Internet browser and was focused on Chairman Gates'' vision of interactive television, rather than the Interact. Thus, there were no APIs exposed by Windows that were ''used by Microsoft Middleware to interoperate'' within the scope of Section III.D of the proposed decree. Had the decree been in place when Jim Barksdale, former CEO of Netscape, met with Microsoft in 1995, Netscape would not have been entitled to APIs or any other interoperability information under the express terms of the decree. ''For the same reasons, no interoperability information would have been disclosable to Sun in order to enable interoperability of Java runtime technology with Windows.

Most of the distribution tactics Microsoft used to cut off Netscape's air supply and to ''pollute the market for cross-platform Java'' are also permissible under the decree. Microsoft can still force OEMs to take its own middleware through bundling. Microsoft can still coerce or threaten partners like Intel and rivals like Apple and can still refuse to port its monopoly Office suite in order to protect the applications barrier to entry. Microsoft can still throttle middleware innovations because the PFJ gives it the ability to ''gate'' the functionality and product design of rival middleware products. Microsoft can still prohibit OEMs from removing its middleware, or applications, and is free to retaliate against OEMs that do so. Microsoft can still deceive middleware developers and can still introduce application development tools that pollute open standards by producing only Windows—compatible programs. And Microsoft can still protect the applications barrier by utilizing the very same practices through its monopoly IE and Office products that tile PFJ purportedly outlaws for Windows.

In short, the PFJ does not even foreclose the means of foreclosure that were proved at trial and affirmed by the Court of Appeals. Under any Tunney Act standard of review, it must be rejected.

V. THE PROPOSED DECREE IS HOPELESSLY VAGUE AND INHERENTLY UNENFORCEABLE

The proposed decree is riddled with ambiguities and loopholes and grants unilateral, essentially unreviewable, power to Microsoft to define the scope of its own ambiguous obligations. As such, the PFJ is an

[55] .NET Defined, available at www.Microsoft.com/net/whatis.asp.

[56] ''So for every element of Windows—user interface, the APIs ... for each one of those things there's an analogy here.'' Bill Gates, Forum 2000 Keynote, Bill Gates Speaks About the .NET Platform. (Available at www.microsoft.corn/BUSINESS/vision/gates.asp)

illusory contract, and unenforceable as a matter of well-settled contract law. As the Court emphasized in Microsoft I, a proposed settlement cannot be entered, at least without substantive modification, if it is ambiguous or if there are ''foresee[able] difficulties in implementation.'' 56 F.3d at 1462. The proposed decree here is the epitome of such a case.

Twenty-four different sections of the PFJ provide that specific actions by Microsoft, or standards for assessing whether its practices are permissible, must be ''reasonable.'' [57] In a decree purportedly drafted to provide a ''certain'' remedy, this is anything but. As just two examples, in addition to the reasonable scope of ''bona fide,'' exclusive joint ventures discussed in the preceding section, Microsoft is expressly permitted to adopt ''reasonable technical requirements'' on which to override an OEM's or end user's choice of non-Microsoft middleware (Section III.H) and to enter into concerted refusals to deal with ISVs—requiring them not to develop software for competing platforms—that are ''of reasonable scope and duration'' (Section III.F.2). Consent decrees are interpreted as contracts, and it is black letter contract law that illusory contracts, those that give one party the right to decide the scope of its own obligations, are not enforceable. See Rest. Contracts 2d § 77.

The judge in the first instance for all of these reasonableness clauses is Microsoft itself. In short, it is difficult to conceive of a more loosely drafted decree than the PFJ, which allows the defendant, without any practical constraint except lengthy contempt proceedings, to establish unilaterally the extent of its own decree obligations. Due to the inherent ambiguity in ''reasonableness'' terms, these disputes will be complex, tedious and time-consuming exercises for the Court.

The ''Technical Committee'' and so-called ''Crown Jewel'' provisions are equally inefficacious. The Technical Committee (''TC'') established by Section IV.B of the proposed decree does not help enforcement matters appreciably. Most significantly, nothing that the Technical Committee does is binding and nothing that it investigates, analyzes or recommends is permitted to see the light of day. The TC reports only to the plaintiffs (Section IV.B.8.e) and ''all information'' gathered by the TC is subject to confidentiality and non-disclosure agreements and a protective order (Section IV.B.9). The members of the TC may ''communicate'' with third-parties, but only about ''how their complaints or inquiries might be resolved with Microsoft'' (Section W.B.8.g).

Furthermore, ''[n]o work product, findings or recommendations by the TC may be admitted in any enforcement proceeding before the Court for any purpose, and no member of the TC shall testify by deposition, in court or before any other tribunal regarding any matter related to the decree'' (Section IV.D.4.d).

[57] Substantive ''reasonable'' provisions are III.B.2, III.C.5, III.E, III.F2 (two), III.G, III.H.2, III.I, lll.J.2.b and III.J.2.C. Procedural ''reasonable'' provisions are IV.A.2, IV.A.2.b, IV.A.2.c, IV.A.4, IV.A.6, IV.A.7 (two), IV.A.8.b (three), IV.A.8.h and IV.A.8.1 (three).

Rather than a vehicle for prompt resolution of enforcement disputes, the TC provisions are a charter for delay and obfuscation. By denying the Court any access—whether or not in camera—to the work product of the TC, the proposed decree simply creates another hoop through which third-party complainants, and the government itself, must pass in order to enforce violations of the decree by the defendant. It also denies the Court the benefit of the unbiased, objective technical expertise of the TC, which is the principal criterion on which its members are to be selected. Coupled with the sheer number of ''reasonableness'' provisions in the decree itself, the TC process will therefore delay enforcement and make clean resolution of decree interpretation issues more costly and burdensome for all affected parties and non-parties.

Finally, Section V.B of the PFJ provides that if the Court finds Microsoft ''has engaged in a pattern of willful and systematic violations,'' on application of the plaintiffs a ''one-time extension'' of the decree may be granted, for up to two years. Although presented as a ''Crown Jewel'' provision, this section does little to ensure compliance. The function of a Crown Jewel clause is to provide such an onerous penalty that the defendant's compliance with its substantive obligations can be coerced, and deliberate evasion avoided, without ever having to invoke the penalty. Here, the ''threat'' Microsoft is being presented with is that of being forced for two more years to decide at its ''sole discretion'' what constitutes Windows, to constrain exclusive joint ventures to ''reasonable'' duration, to gain access to intellectual property developed by middleware competitors, and to dictate to those competitors the functionality and user interface of their products. This is plainly something Microsoft should welcome with open arms rather than fear.

The vagueness of the terms, the ineffectiveness of the Technical Committee and the lack of a meaningful deterrent Crown Jewel provision will plague the courts for years to come. In the absence of any deterrent, Microsoft will no doubt interpret the ''reasonableness'' standards generously incorporated in the proposed settlement in its own favor. The enforcement agencies and numerous competitors will witness the ill effects of future Microsoft actions and challenge these practices. However, without the proper dispute resolution mechanisms in place, it will be up 1o the courts to resolve all these ''reasonableness'' issues arising out of the proposed settlement.

VI. DIVESTITURE REMAINS THE PREFERABLE AND MOST EFFECTIVE REMEDY FOR MICROSOFT'S SECTION 2 VIOLATIONS

ProComp and its members have consistently supported structural relief in this case. In our view, divestiture remains the most effective remedy for Microsoft's wide-ranging unlawful practices. Conduct remedies like the proposed decree are a second-best solution, because they rely on the defendants good will to comply. An injunctive decree in a Section 2 monopolization case ''does no more than encourage the monopolist to look for some new way of exercising its dominance that is not covered by the current injunction.'' [58] Comprehensive behavioral decrees inevitably require interpretation and application as the defendant introduces new products, moves into new markets, or changes its business strategies in its traditional markets.

That does not mean, however, that conduct remedies will necessarily be ineffective here, but rather that they must be targeted and broad enough to redress the core practices used to maintain Microsoft's monopoly and to eliminate the barriers to entry protecting that monopoly power. The proposed decree does not even purport to satisfy this goal, which we submit is compelled by the Ford/United Shoe standard required for assessing relief in this case.

The relief proposed by the Litigating States achieves these objectives. We respectfully submit that the Court adopt a crown jewel divestiture provision to deter Microsoft from engaging in further unlawful conduct.

VII. THE COURT SHOULD CONDUCT A RIGOROUS TUNNEY ACT EXAMINATION OF THE DECREE, THE COMPETITIVE IMPACT STATEMENT AND THE DEPARTMENT'S UNSUBSTANTIATED PROJECTIONS OF FUTURE COMPETITIVE EFFECT

There are several circumstances in which it is established that district courts must engage in rigorous scrutiny of proposed antitrust settlements under the Tunney Act. This case epitomizes those circumstances. If ever there was a case in which a full, independent judicial assessment should be conducted, it is this one.

A. The Complexity and Substantial National Importance of this Case, the Government's Fiat Reversal of Position and its Disregard of Clear Tunney Act Obligations All Dictate the Necessity of Critical Judicial Oversight in this Landmark Proceeding

Even in the pretrial context with its more limited review, Tunney Act courts will rigorously scrutinize proposed settlements when an antitrust case is complex, subject to considerable controversy, and affects large segments of the public.[59] Especially rigorous scrutiny is also undertaken when the proposed decree departs substantially from the relief sought in the government's complaint,[60] or otherwise represents a sharp

[58] 3 P. AREEDA & H. HOVENKAMP ANTITRUST LAW ¶704.3, at 213 (1999 Supp). See William K. Kovacic, Designing, Antitrust Remedies for Dominant Firm Misconduct, 31 Conn. L. Rev. 1285, 1311 (1999) (''By blockading recourse to certain commercial tactics, a remedial decree will inspire the defendant to pursue other paths that circumvent the judicially imposed constraints.''). As the Supreme Court cautioned in the landmark DuPont antitrust case, ''the policing of an injunction would probably involve the courts and the Government in regulation of private affairs more deeply than the administration of a simple order of divestiture. United States v. E.I. du Pont de Nemours & Co., 366 U.S. 316, 334 (1961); accord, AT&T, 552 F.Supp. at 167–68.

[59] Cascade Natural Gas Corp. v. El Paso Natural Gas Co., 386 U.S. 129, 136, 141 (1967); AT&T, 552 F. Supp. at 152; Associated Milk Producers, 394 F. Supp. 35, 42 (W.D. Mo. 1975).

[60] 60 United States v. Automobile Mfrs. Ass'n, 307 F. Supp. 617, 621 (C.D. Cal. 1969), aff'd mere.

Continued

reversal in the government's prior position.[61] Each of these situations is present in this case

1. This Complex, Controversial, Nationally Important Antitrust Prosecution Demands Serious Judicial Oversight

This is certainly a highly complex case that has preoccupied the political, technology and business communities for years. These are precisely the circumstances in which the Tunney Act's genesis reveals a major policy concern with the appearance of the government settling for too little ''because of the powerful influence of antitrust defendants and the complexity and importance of antitrust litigation.'' SENATE REPORT, supra, at 147 (statement of Judge J. Skelly Wright).

Microsoft plainly ''wield[s] great influence and power'' and has brought ''significant pressure to bear on [the] Government'' throughout the litigation. Id. Thus, the Court needs to consider whether this is a case, such as Cascade, where the Department ''knuckled under'' to an economically and politically powerful antitrust defendant. Cascade Natural Gas Corp. v. El Paso Natural Gas Co., 386 U.S. 129, 136, 142 (1967).[62]

2. Heightened Scrutiny is Needed Because Neither the Department Nor Microsoft Complied With their Respective Tunney Act Obligations

Courts have also refused to enter proposed antitrust consent decrees where the Government or the defendant did not comply with its procedural responsibilities under the Tunney Act. Even technical and formalistic failures have been deemed grounds to deny entry of a proposed judgment. United States 1,. Central Contracting Co., 527 F. Supp. 1101 (E.D. Va. 1981).

The procedural irregularities in this case are far greater, and are of substantive importance to the Court's review. First, the Tunney Act requires the Department to provide an explanation of ''alternatives'' to the proposed decree considered in evaluating a settlement proposal. 15 U.S.C. § 16(b)(6). Here, however, the Department simply offers a laundry list of other conduct remedies proposed by third-parties, dismissing all of them collectively with the terse statement that the PFJ ''provide[s] the most effective and certain relief in the most timely manner.'' CIS, 66 Fed. Reg. at 59475. The Department's assertion is unexplained.

The CIS recites only that the Department considered intervening changes ''in the computer industry, as well as the decision of the Court of Appeals, which reversed certain of the District Court's liability findings.''[63] Nothing in the CIS offers any useful guidance to the Court, or the public, as to why the rejected conduct remedies are inappropriate; thus, the Department fails to come forward with the ''detailed notice to the public'' the Tunney Act was intended to require.[64] This violates the Government's duty not just to ''describe'' the alternatives (which the CIS does), but also to provide an ''explanation'' of their adequacy (which the CIS does not). This is an improperly narrow view of the government's Tunney Act responsibilities is incompatible with the purpose of the Tunney Act to ensure that all relevant issues are subject to maximum ''ventilation.''[65]

The government's ''predictive judgments'' about market structure and competitive effect should be accorded a presumption of regularity, Microsoft I, 56 F.3d at 1460 (quoting United States v. Western Elec. Co., 993 F.2d 1572, 1577 (DC Cir.), cert. denied 510 U.S. 984 (1993), but only when the circumstances are regular. Where, as here, the Department's exposition of the reasons for its settlement and its legal interpretation of the Court of Appeals'' mandate are woefully lacking, such a presumption of regularity should not apply. In these circumstances, the Court cannot ''carefully consider the explanations of the government in the competitive impact statement.'' CIS, 66 Fed. Reg. at 59476 (citation omitted).

Second, tile Turnkey Act mandates that the government make available all ''materials and documents which the [it] considered determinative in formulating [a settlement] proposal.'' 15 U.S.C. § 16(b). The CIS responds to this requirement with a blanket statement that [n]o materials and documents of the type described in the [Tunney Act] were considered in formulating the Proposed Final Judgment. Consequently, none are being filed with this Competitive Impact Statement.

CIS, 66 Fed. Reg. at 59476. That cannot be accurate. Even in antitrust cases that are not the length and complexity of the Microsoft litigation, courts have found similar disclaimers ''to be almost incredible.'' Central Contracting Co., 527 F. Supp. at 1104. It defies credulity to suggest that there does not exist even one document, memorandum or analysis that the Department considered ''determinative'' in selecting the relief package presented to this Court.

Third, the CIS misstates many provisions of the PFJ. We address these in detail in Section III above, and will not repeat that analysis here. Where, as here, the government presents a document that seeks to justify provisions that on close examination are illusory, it has in effect challenged the legitimacy of statute. Under even the strictest interpretations of Tunney Act deference, this Court cannot permit the Tunney Act process to ''make a mockery of judicial power.'' Microsoft I, 56 F.3d at 1462.

Fourth, the Tunney Act requires that the defendant file a list of ''all'' written or oral communications ''by or on behalf of such defendant ... with any officer or employee of the United States concerning or relevant to such proposal, except [for] communications made by counsel of record alone with the Attorney General or the employees of the Department of Justice alone.'' 15 U.S.C. § 16(g). Remarkably, Microsoft's Section 16(g) filing indicates that only two such communications occurred, both in connection with negotiations together with Microsoft and the Court-appointed mediator. This cannot be true It has been publicly confirmed by numerous public officials, and acknowledged by Microsoft, that a large number of Microsoft-retained lawyers and lobbyists have advocated its position on this case before countless officials in Congress and the Executive Branch. The Court should require Microsoft to fully comply with Section 16(g).[66]

3. The Court Should Closely Examine the Government's Reversal of Position on Relief

The government's about-face on its remedy proposals provides another reason why heightened judicial scrutiny is required. While the government now says that the PFJ will provide effective relief, this reflects a marked abandonment of its earlier position. Indeed, the Justice Department's position just 18 months ago was that only structural relief was adequate, and conduct decrees like the proposed PFJ were inherent failures. As emphasized in one of the cases cited by the Justice Department, less deference is warranted when ???''the government has requested broad relief at the outset, represented to the courts that nothing less would do, and then abruptly knuckled under.'' United States v. National Broad. Co., 449 F. Supp. 1127, 1144 (C.D. Cal. 1978).

The point is not that the Department has decided not to seek divestiture, but instead that the conduct remedies it now proposes contradict its prior representations to this Court on their effectiveness. The earlier DOJ position was also consistent with its prior settlement decisions in this litigation itself. In the mediations supervised by Chief Judge

sub nom. New York v. United States, 90 S. Ct. 1105 (1970).

[61] Cascade, 386 U.S. at 137; Automobile Mfrs. Ass'n, 307 F. Supp. at 621.

[62] In Cascade, the Department refused to implement an antitrust divestiture decree affirmed on appeal by the Supreme Court. The Court eventually directed the Department to oversee ''divestiture without delay'' and instructed the district court to prepare ''meticulous findings ... in light of the competitive requirements'' of the remedy. 386 U.S. at 137.

[63] CIS, 66 Fed. Reg. at 59475.

[64] The CIS was intended, rather, to be ''detailed notice to the public what the case is all about. Further than that, the public impact statement makes the lawyers for the Department of Justice go through the process of thinking and addressing themselves to the public interest consideration in the proposed decree. There is no better exercise for determining whether you are right or not than trying to put it down on paper to see how it writes.'' SENATE REPORT, supra, at 8 (remarks of Judge J. Skelly Wright).

[65] 65 See Central Contracting. 527 F. Supp. at 1103 (quoting 119 Cong. Rec. 24597 (1973) (remarks by Senator Tunney)).

[66] The company apparently takes the unsupportable position that lobbying communications on the subject of the Microsoft litigation occurring before the September 2001 negotiations resumed are not ''relevant'' to the settlement. Microsoft also claims many communications were protected by the ''counsel of record'' exception. ''Counsel of record'' for purposes of these disclosures is intended to differentiate between lawyers actively appearing before the trial court and those undertaking related, but non-judicial ''lobbying'' functions. Central Contracting Co., 527 F. Supp. at 1105. The House Report discusses Congress's intent to distinguish ''lawyering contacts,'' which warrant protection, from ''lobbying contacts,'' which must be disclosed. It states that a lobbying contact is performed by ''counsel of record accompanied by corporate officers; or by attorneys not counsel of record.'' HOUSE REPORT, supra, at 6 (emphasis added). Congress requires their disclosure in order to guarantee ''that the Government and its employees in fact avoid practicing political justice.'' Id. (quoting Civil Service Comm'n, 414 U.S. 906 (1973)).

Richard Posner in March 2000, the Department and the State plaintiffs demanded settlement terms that would have gone far beyond the limited provisions of the PFJ in eradicating Microsoft's ability to act anticompetitively. Indeed, the plaintiffs'' last settlement proposal in the mediations—dubbed ''Mediator's Draft 18 (Attachment B)—would have included provisions requiring Microsoft to license the actual source code for Windows, to permit ISVs to modify Windows itself, and to allow OEMs to ''display[] a middleware user interface'' in lieu of the Windows desktop. None of these or similar provisions is included in the proposed decree. Thus, the PFJ is considerably weaker in several key respects than the very conduct relief which the Department demanded in settlement before Microsoft's Sherman Act liability had been established.[67]

Given the importance of this case, and Court's obligation to look to the Supreme Court and the DC Circuit for guidance rather than the Justice Department, the Court must decide for itself whether the settlement would give the public effective relief against Microsoft's proven wrongdoing.

B. Live Evidence is Needed on the Technical and Economic Complexities of the Software Industry and the Profound Failings of, and Harms Caused by, the PFJ

The drafting of an antitrust decree necessarily ''involves predictions and assumptions concerning future economic and business events.'' [68] It is a ''cardinal principle'' of our system of justice that ''factual disputes must be heard in open court and resolved through trial-like evidentiary proceedings.'' Microsoft III, 253 F.3d at 10l. This mandate for evidentiary hearings applies not just to liability determinations, but also to determinations concerning the ''appropriate [form of] relief.'' Id.; see also, id. at 107 (vacating and remanding Judge Jackson's remedy decree in large part due to his ''fail[ure] to hold an evidentiary hearing despite the presence of remedies-specific factual disputes,'' and holding that a remedies decree must be vacated whenever there is ''a bona fide disagreement concerning the substantive items of relief which could be resolved only by trial'' Id. (quoting Interim Order at 62).

The Tunney Act contemplates an evidentiary hearing in these circumstances. As the Justice Department recognizes, this court must permit the use of the ''additional procedures'' authorized by 15 U.S.C. § 16(t)''—which include live hearings with fact and expert testimony—if ''the [public] comments have raised significant issues and ... further proceedings would aid the court in resolving those issues.'' CIS, 66 Fed. Reg. at 59476. It strains credulity to suggest, as the Justice Department does, that the remedial phase of the most complicated antitrust case in decades will not involve ''significant issues'' that would benefit from ''further proceedings.''

Evidentiary hearings are critically important in complex antitrust cases because the assessment of antitrust remedies necessarily requires the Court to determine a number of facts relevant to both the degree of anticompetitive harm and the likely future condition of the market in which competition must be restored. United States v. United States Gypsum Co., 340 U.S. 76, 89 (1950); see also United States v. Glaxo Group, Ltd., 410 U.S. 52, 64 (1973). In particular, any proposed settlement decree must reach forward in lime to ''assure the public freedom from'' continuance of the monopolistic practices. Id. As such, this Court must make '''predictions and assumptions concerning future economic and business events.''' Microsoft III, 253 F.3d at 102 (quoting Ford, 405 U.S. at 578). Although courts retain wide discretion in fashioning such forward-looking relief, they must base that relief on a sound evidentiary record. International Salt, 332 U.S. at 401.

In this case it is especially important to heed Congress's instruction to ''resort to calling witnesses for the purpose of eliciting additional facts,'' HOUSE REPORT, supra, at 5, because the record has not yet been developed on remedies. See Associated Milk Producers, Inc., 394 F. Supp. 34 (W.D. Mo. 1975).[69] Indeed, the procedural posture that the Court now faces is more closely akin to a contested summary judgment motion or administrative consent decree, for which hearings are the standard method of resolution. E.g., Celotex Corp. v. Catrett, 477 U.S. 317 (1986); Citizens for a Better Environment v. Gorsuch, 718 F.2d 1117 (DC Cir. 1983); United States v. Trucking Employers, Inc., 561 F.2d 313 (DC Cir. 1977).[70]

Only by permitting third parties, such as ProComp and its members, to participate fully in such a proceeding can the Court assure that there will be adequate evidentiary attention to facts and circumstances that contradict the Department's views on the market, competition and other issues relevant for remedy purposes. Otherwise, this Court would repeat the very error that led the DC Circuit to reverse the last judgment in this case.

VIII. CONCLUSION

For all the foregoing reasons, the Court must find that the Proposed Final Judgment is not in the public interest. At a minimum, tile Court should defer any, judgment on the PFJ until the upcoming remedies hearing in the ongoing litigation is conducted. This is necessary to avoid inconsistent remedies. Indeed, many of the remedies proposed by the Litigating States are irreconcilable with those proposed by the PFJ. When the Court does consider the PFJ, it is obliged in the discharge of its Article Ill duties to make an independent determination whether the PFJ adequately fulfills the mandate of the DC Circuit.

Attachment A

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

(UNITED STATES OF AMERICA,)
(Plaintiff,)
(v.) Civil Action No. 98–1232 (CKK)
(MICROSOFT CORPORATION,)
(Defendant.)
(STATE OF NEW YORK, et al.,)
(Plaintiffs,)
(v.) Civil Action No. 98–1233 (CKK)
(MICROSOFT CORPORATION,)
(Defendant.)

DECLARATION OF KENNETH J. ARROW

Kenneth J. Arrow declares under penalty of perjury as follows:

I. INTRODUCTION

1. I am the Joan Kenney Professor of Economics Emeritus and Professor of Operations Research Emeritus at Stanford University. I received the degrees of B.S. in Social Science from The City College in 1940, M.A. in mathematics from Columbia University in 1941, and Ph.D. in economics from Columbia University in 1951. I have taught economics, statistics, and operations research at the University of Chicago, Harvard University, and Stanford University, and I have written more than 200 books and articles in economics and operations research. I am the recipient of numerous awards and degrees, including the Nobel Memorial Prize in Economic Science (1972). A significant part of my writing and research has been in the area of economic theory, including the economics of innovation and its relation to industrial organization. My curriculum vitae is attached.

2. I have been asked by ProComp to comment on various economic issues related to the Revised Proposed Final Judgment (''PFJ'' or the ''decree'') proposed by the United States, various settling States and Microsoft Corporation (''Microsoft'').

3. My review of the PFJ begins with the fact that Microsoft has been found liable for

[67] The barrier to introduction into evidence of settlement offers under Rule 408 of the Federal Rules of Evidence does not apply where the settlement is not used to show liability but instead, as here, to illuminate the policy considerations governing fashioning of a remedy. E.g., Carney v. American Univ., 151 F.3d 1090, 1095 (DC Cir. 1998). Rule 408 precludes proof of settlements and settlement offers only ''to prove liability for or invalidity of'' a claim. Fed. R. Evid. 408. Indeed, evidence of settlements is expressly permitted by Rule 408 ''when the evidence is offered for another purpose.'' Id.

[68] 68 Ford, 405 U.S. at 578.

[69] To the contrary, the DC Circuit reversed and remanded precisely because the prior District Judge did not permit an evidentiary hearing on remedies. The court stressed that ''a full exploration of the facts is usually necessary to properly draw an antitrust decree so as to prevent future violations and eradicate existing evils,'' and remanded for such an exploration of facts. Microsoft III, 253 F.3d at 101 (quoting United States v. Ward Baking Co., 376 U.S. 327, 330–31 (1964) (internal quotations and brackets omitted)).

[70] In summary judgment practice, complex legal issues are frequently presented to courts on the basis of affidavits and other ''paper'' evidence. But, unless the papers reveal no ''genuine issue'' of ''material fact,'' standard that cannot be met here, summary judgment motions must be denied and a case set for trial so that the Court can adduce whether the parties have met their respective burdens of proof on the disputed factual issues. E.g., Celotex Corp., 477 U.S. at 323; Thompson Everett, Inc. v. National Cable Adver., 57 F.3d 1317, 1322 (4 th Cir. 1995) (applying Celotex to review of a motion for summary judgment of antirust conspiracy claim). Indeed, where the credibility of an affiant is at issue, as it undoubtedly will be here with respect to the reliability of expert opinions and projections of future economic and technological developments, it is difficult to conceive of any basis on which the Court would be permitted to resolve such controverted issues without availing itself of ordinary, trial-type evidentiary procedures.

violating Section 2 of the Sherman Act by engaging in a widespread series of practices that illegally maintained its monopoly in Intel-compatible PC operating systems. These practices were focused on eliminating the threat posed to Microsoft's PC operating system monopoly by the combination of Netscape Navigator and cross-platform Java technology (''middleware competition'').

4. Given that Microsoft has been found liable for illegal monopoly maintenance, the remedies in this case should be designed to eliminate the benefits to Microsoft from its illegal conduct. To the extent possible, the remedies should be designed to restore the possibility of competition in the market where monopoly was illegally maintained (i.e., the market for PC operating systems). In addition, the remedies should strengthen the possibilities for competition and deter the exercise of monopoly power in the present and future, taking account of the special problems of an industry in which network effects are important.

5. It is my opinion that the PFJ fails to accomplish these objectives. First, the PFJ is unduly focused on attempting to re-create an opportunity for future middleware competition. Because of network effects and path dependencies, Microsoft's monopoly power in PC operating systems is more entrenched than it was in the mid-1990s. It will be exceedingly difficult now, even with the best of remedies, to re-establish middleware fully as the kind of competitive threat to Microsoft's monopoly power that it posed in the mid-1990s. Additional remedial steps need to be taken to ensure that Microsoft does not benefit from its illegal conduct and the consequences of that conduct on dynamic competition in the OS market. Second, the PFJ does not address the fact that no effort to restore competition in the market for PC operating systems will be successful without measures designed to lower the applications barrier to entry that currently protects Microsoft's position in this market. Third, the enforcement mechanism described in the PFJ seems likely to be ineffective, even with respect to the inadequate remedies in the PFJ. Fourth, the PFJ pays insufficient attention to the ways in which Microsoft is currently attempting to protect its monopoly power by using its illegally maintained monopoly in PC operating systems against current and future competitive threats, such as server operating systems and Web services.

6.]his affidavit has six pans and is organized as follows. After this introduction (Part I), Part II reviews the threat that Netscape, Java and the Internet posed in the mid-1990s to Microsoft's monopoly power in PC operating systems. Part III then reviews the illegal conduct that Microsoft used in defeating this threat. Part III also analyzes the state of the computer industry today following this illegal conduct and explains why it seems unlikely, at this stage, that the middleware threat can be re-created. With this as background, Parts IV and V review and assess the remedies proposed in the PFJ. Part IV critiques the remedies designed to restore middleware competition. In addition, Part IV discusses the lack of attention in the PFJ to the applications barrier to entry that protects Microsoft's monopoly power in PC operating systems. It also notes certain deficiencies in the enforcement mechanism proposed in the PFJ. Part V follows with a discussion of Microsoft's efforts to protect its existing monopoly power by using its illegally maintained monopoly in PC operating systems to gain advantages in other markets that threaten to reduce the scope of its current market power. Part V explains that the PFJ gives insufficient attention to this important subject—a subject that bears on the future of competition in the computing industry. The affidavit concludes in Part VI with a summary of conclusions.

II. MICROSOFT'S MONOPOLY POWER AND THE THREAT POSED BY NETSCAPE, JAVA AND THE INTERNET

A. NETWORK EXTERNALITIES

7. Network externalities have been central to Microsoft's ability to maintain its monopoly power in the market for PC operating systems. Both the District Court and the U.S. Court of Appeals for the District of Columbia Circuit referred to the ''applications barrier to entry,'' the process by which a large installed base induces the development of applications and other complementary goods designed for the dominant operating system, which further reinforces the position of the dominant operating system. 1 described this process in a declaration that I submitted in 1995 on behalf of the government in a prior settlement with Microsoft:

A software product with a large installed base has several advantages relative to a new entrant. Consumers know that such a product is likely to be supported by the vendor with upgrades and service. Users of a product with a large installed base are more likely to find that their products are compatible with other products. They are more likely to be able successfully to exchange work products with their peers, because a large installed base makes it more likely that their peers will use the same product or compatible products. Installed base is particularly important to the economic success of an operating system software product. The value of the operating system is in its capability to run application software. The larger the installed base of a particular operating system, the more likely it is that independent software vendors will write programs that run on that operating system, and, in this circular fashion, the more valuable the operating system will be to consumers.

8. The applications barrier to entry implies that it is likely that a single platform (or programming environment) will dominate broad segments of the computer software industry at any point in time. This does not necessarily imply that there will be monopoly; that depends on the extent to which the dominant platform is proprietary or closed. However, if the dominant platform is proprietary (which is certainly the case with Windows), then the interdependence of applications and operating systems creates a barrier against any new entrant. A new entrant would need to create both an operating system and the applications that make it useful.

9. In addition, any customer of a new entrant would have to incur considerable costs in switching to a new system. In the fast place, the customer would have to learn new operating procedures. Second, there would be a problem of compatibility of files. These factors constitute a natural obstacle to change, so that a system with a large installed base will have a tendency to retain its users.

10. The special nature of operating systems and software also gives Microsoft, because of its large installed base of operating system, a great advantage in the markets for complementary software. Specifically, it can distribute the software much more easily than its competitors. Since virtually every new PC ships with Windows, Microsoft can put its software into the hands of users by including it with the operating system. Any other vendor of complementary software that wanted to distribute through OEMs would have to cut a separate deal with each OEM, and would face the task of persuading OEMs to carry software products that may be directly competitive with products offered by Microsoft. As a result, complementary software from other vendors typically either has to be downloaded (which imposes added costs on users) or distributed separately to users in ''shrink wrap.'' In addition, Microsoft has the ability to allow Microsoft developers of complementary software access to ''hidden APIs''—application programming interfaces in the PC operating system that Microsoft developers know about but which are not disclosed fully to competing developers of complementary software.

B. THE MIDDLEWARE THREAT: NETSCAPE AND JAVA

11. A threat to Microsoft's monopoly in PC operating systems arose in the mid-1990s with the nearly simultaneous emergence of the Internet browser developed by Netscape and the Java programming environment. These are both examples of middleware—application software designed to run on multiple operating systems and which has its own set of APIs. Middleware that provides extensive functionality through a broad set of APIs has the potential to become an alternative platform for application development. If many applications valued by PC users were written to middleware APIs, and if the middleware were ported to other operating systems (existing or to be created), then the applications barrier to entry in the market for PC operating systems would be weakened.

12. Netscape Navigator was a browser that also had the potential to become a platform for application programs. Netscape's browser had its own set of APIs to which developers could write application programs.

13. The initial success of Netscape Navigator was dramatic. Netscape shipped its first browser in September 1994.[1] In July 1995, less than a year later, its share of the browser market was 74%.[2] By mid-1996, Netscape's Share had reached 85%.[3]

14. The threat that Netscape pored to Microsoft's monopoly power in PC operating

[1] ''A Software Giant's March Onto the Internet,'' New York Times (Jan. 12, 1998) at C4.

[2] ''Browser Usage: How It's Trending,'' Interactive Age (Jul. 31, 1995) (citing figures compiled by Interse Market Focus).

[3] ''Microsoft v Netscape: Freer than Free,'' The Economist (Aug. 17, 1996, U.S. Edition).

systems was made even greater by the nearly simultaneous development of Java. The Java technology has several pieces. It is a programming language that I understand has features well suited for writing ''distributed applications''dash;applications that run on networks, calling upon resources located on different computers in the network. Java technology also includes the Java Virtual Machine (''JVM'') and Java Class Libraries. The JVM and Java Class Libraries am forms of middleware.

They are software programs that have been implemented on Windows and many other operating systems. A JVM is software that converts Java code into instructions that can be processed by the operating system on which the JVM sits. The Java Class Libraries are software that performs specific functions that developers can call upon, and build into, their Java application programs.

The JVM and Java Class Libraries are sometimes referred to collectively as the ''Java runtime environment.'' The Java technology has been licensed in a way designed to encourage its implementation on a variety of different operating systems. The Java ideal was captured in the phrase, ''write once, run anywhere.''

15. Java added to the threat posed by Netscape because it extended the set of middleware APIs to which developers could write application programs. It increased the chances that developers could write sophisticated PC application programs written to middleware APIs instead of Windows APIs. Netscape also complemented Java by serving as a distribution mechanism. The Java technology could not succeed without widespread distribution of the Java runtime environment. Because Netscape supported Java and included the Java runtime environment with every copy of its browser, growth in the share of PCs that used the Netscape browser also meant growth in the share of PCs with a Java runtime environment that supported Java's ''write once, run anywhere'' ideal.

16. The economic relationship between middleware and the OS is unusual among the commodities that economic theory usually deals with. Middleware is a complement to any OS in the short run, but it facilitates substitution among operating systems in the long run. Middleware is a complement in the short run because it adds functionality to the existing OS, but it is in a sense a substitute in the long run, because applications can be written to it rather than to the OS. Middleware therefore permits substitution among operating systems, since the applications are not specific to any one OS. Therefore, an OS monopolist will have an incentive to control middleware in order to maintain its OS monopoly. The short-run complementarity becomes an instrument by which this incentive can be realized. The middleware has to be ported to the OS, and the OS producer's control of the needed APIs can be used to restrict the spread and use of the middleware.

17. Middleware is naturally thought of as a disruptive technology, and the emergence of middleware in 1995 created what is frequently referred to as an ''inflection point.'' Put simply, this means that the then well-defined organization of the software market for personal computers might be altered substantially, or at least such a risk existed. As that organization was centered on the Microsoft Windows operating system and its productivity application suite Microsoft Office, Microsoft had the most at risk from any disrupting change that resulted from middleware.

18. Technological disruptions such as the middleware threat of the mid-1990s do not occur frequently. They only arise when there is an important innovation that allows technology to evolve and create new products or functionality that has widespread appeal. At times of technological disruption, the forces of dynamic competition can play an especially important role. The Netscape browser and the cross-platform Java technology separately and in combination had the potential to develop into an alternative platform for application programs that could run on any operating system and which could transform PC operating systems into a commodity business. Bill Gates, in his memorandum of May 26, 1995 on the ''Internet Tidal Wave,'' described just this sort of dynamic competitive threat when he realized that, if successful, Netscape could ''commoditize'' the operating system.

19. There is no easy method by which an economist can determine exactly how significant a threat Java and Netscape actually represented to Microsoft's operating system monopoly. A precise determination of whether Netscape and Java could have succeeded in eroding Microsoft's monopoly power absent Microsoft's illegal conduct would require a counterfactual analysis that addressed a variety of complex interrelations. However, even without this kind of analysis, we have evidence that a reasonably expert onlooker felt the threat was serious, namely, the statements and behavior of Microsoft. Bill Gates, in his memorandum on the ''Internet Tidal Wave,'' explained:

A new competitor ''born'' on the Internet is Netscape. Their browser is dominant, with 70% usage share., allowing them to determine which network extensions will catch on. They are pursuing a multi-platform strategy where they move the key API into the client to commoditize the underlying operating system. ... One scary possibility being discussed by Internet fans is whether they should get together and create something far less expensive than a PC which is powerful enough for Web browsing.

20. In the same memorandum, Gates made clear that he understood how Microsoft should leverage its Windows advantage to bolster its Internet position:

We need to move all of our Internet value added from the Plus pack into Windows 95 as soon as we possibly can with a major goal to get OEMs shipping our browser preinstalled. This follows directly from the plan to integrate the MSN and Interact clients. Another place for integration is to eliminate today's Help and replace it with the format our browser accepts including exploiting our unique extensions so there is another reason to use our browser.

21. To summarize, in an industry marked by network externalities, there is a strong tendency to monopoly (at least when the dominant platform is proprietary or closed). The consumer welfare and efficiency losses associated with monopoly are well known, but the one most relevant here is the decreased incentive to technological innovation. It is all the more important to encourage what may be called dynamic competition, the entry of new firms and new products. At certain periods, whether due to technological innovation or to a transient situation in which the tendency to monopoly has not yet worked to its completion, the market will be confronted with alternative lines of development; Netscape Navigator and Java as against Microsoft products in 1995, client-server networks and web services today. At these periods, there may be opportunities for a new platform to compete with and possibly take over from the existing one. In view of the strong tendency to monopoly in this industry (because of network externalities), it is all the more important to keep the competition as viable as possible when the opportunity presents itself. In particular, illegal anticompetitive steps by existing monopolists should be prevented to the maximum extent possible. Such a policy prevents the stagnation of existing monopolists and encourages the expansion of the number of alternatives among which the buyers can choose.

III. MICROSOFT DEFEATED THE THREAT POSED BY NETSCAPE AND JAVA

A. MICROSOFT'S ILLEGAL PRACTICES

22. Microsoft made a concerted effort to eliminate the threat from middleware competition. Microsoft was found to have engaged in illegal conduct exactly at the moment that dynamic competition might have flourished. As the DC Circuit concluded, Microsoft took illegal steps to exclude the middleware threat, and in particular, took anticompetitive actions directed against Netscape Navigator and Java. In particular, the DC Circuit judged illegal significant elements of Microsoft's strategy:

a) By barring original equipment manufacturers (''OEMs'') from removing access to Microsoft's Internet Explorer (''IE'') browser from the Windows desktop, Microsoft prevented many OEMs from installing Navigator or other browsers, and that in turn protected Microsoft's OS monopoly by reducing potential middleware competition. This violated Sec. 2 of the Sherman Act.

b) By preventing OEMs from altering the initial boot sequence for Windows, Microsoft prevented OEMs from promoting Internet access providers, many of whom were using and distributing Navigator to their customers. Again, this reduced competition with IE and protected Microsoft's OS market power in violation of Sec. 2.

c) Through commingling software code for Windows with that of Internet Explorer, Microsoft deterred OEMs from installing Navigator. That, in turn, reduced Navigator's usage share, and thereby protected the applications barrier to entry by reducing developer's interest in the APIs exposed by Navigator. Microsoft also removed Internet Explorer from its Add/Remove utility, further entrenching Internet Explorer and further discouraging OEMs from distributing Navigator. The DC Circuit found these

actions to be anticompetitive and to support a finding of liability for exclusionary conduct and therefore monopolization under Section 2.

d) By entering into contracts with Internet access providers that foreclosed Navigator's access to an economically significant share of the Internet access provider (''IAP'') market, Microsoft engaged in exclusionary conduct in protection of its OS monopoly, again in violation of See. 2

e) By entering into contracts with independent software vendors that required those independent software vendors (''ISVs'') to use Internet Explorer if the ISV need web display, Microsoft further foreclosed distribution of Navigator, again in protection of its OS monopoly, in violation of Sec. 2.

f) By entering into an exclusive distribution contract with Apple for Internet Explorer after Microsoft had threatened to cancel the Macintosh version of Office, Microsoft engaged in exclusionary conduct in protection of its OS monopoly in violation of Sec. 2.

g) Through a number of exclusionary actions directed at Java, Microsoft limited Java's viability as a cross-platform threat and did so in violation of Sec. 2. Those actions included: limiting distribution of ''write once, run anywhere'' JVMs directly through exclusionary contracts with ISVs and indirectly through Microsoft's actions against Netscape; deceiving developers who wanted to develop pure Java code into writing code with Windows-specific extensions that would make the code Windows dependent; and threatening Intel and inducing it to stop developing Intel multimedia software for Java.

B. THE STATE OF THE MARKET TODAY

23. As of 1995, Microsoft's share was of the installed base of PC operating systems was 870% [4] while its share of the Internet browser market was less than 5%.[5] Today, those figures stand at 92% for PC operating systems [6] and 91% for browsers.[7] Thus Microsoft's position in PC operating systems remains strong, while its share in Internet browsers has risen dramatically.

24. Microsoft's illegal practices were successful in helping to minimize the threat that middleware posed for the creation of a programming environment outside of Microsoft's control. I am aware of no middleware today that poses a risk to Microsoft comparable to that posed by Navigator and Java in 1995. Nor does the government's Competitive Impact Statement suggest that such a threat exists today or is likely to emerge over the five-year duration of the PFJ.

C. MICROSOFT'S MIDDLEWARE ADVANTAGES

25. Microsoft today has substantial advantages in middleware that make it unlikely the market itself will generate new entrants into middleware capable of re-creating the competitive risk faced by Microsoft in 1995. As noted earlier, through its control over Windows, Microsoft has had—and under the PFJ will continue to have—an enormous advantage in the distribution of software that is complementary to Windows. Since every new PC ships with Windows, Microsoft has a very easy way to get software into the hands of users: it can include it with the operating system. Microsoft can simply bundle the middleware with Windows or it can integrate the code into Windows itself.

26. This ensures the ubiquity of Microsoft middleware and operates as a barrier to entry for competing middleware. Any entrant would have to make a substantial investment to achieve comparable widespread distribution. A firm considering entry should understand that its inability to guarantee a universally exposed set of APIs means that, all other things equal, developers would prefer to write to the APIs exposed by Microsoft middleware. The ubiquity of Microsoft middleware and its ability to integrate middleware into Windows—which the PFJ does not constrain—therefore operate as economic disincentives for the development of competing middleware by potential entrants.

27. Microsoft also has complete freedom in how it prices its middleware. In bundling middleware with Windows, Microsoft need not charge an incremental price for the middleware. It can simply fold into the price of Windows whatever price it would charge for the middleware were it distributed separately. This would not be an option available for a potential entrant who will expect that it would need to establish a separate, discrete positive price for any middleware that it might create. The ability of Microsoft to set an apparent price of zero for its middleware operates as a barrier to entry in middleware.

28. Even if competing middleware were created, the ubiquity of Microsoft middleware would operate as a direct barrier of the distribution of that middleware. As the DC Circuit affirmed, OEMs are reluctant to install two products that perform the same function, as this raises support costs. Twice as many products will be supported for the same function, plus consumers may be confused by the presence of both products.

29. Moreover, Microsoft's ability to ''embrace and extend'' any middleware created by an entrant also operates as a barrier to entry. Again, it will take a substantial amount of time for an entrant to distribute innovative middleware. During that time, Microsoft will likely be able to imitate that middleware and distribute updated'' versions of Microsoft middleware over the Internet to end users through its Windows Update feature. Given this, entry into middleware is less likely and this may reduce innovation in and development of middleware.

30. In sum, Microsoft took substantial steps to eliminate the threat posed to it by Netscape and Java. The DC Circuit affirmed that a substantial number of those actions constituted impermissible monopoly maintenance and therefore monopolization in violation of Section 2 of the Sherman Act. Today, Microsoft's illegally maintained monopoly operates as a substantial barrier to new entry into middleware. The monopoly operates as a disincentive for entry and thereby likely reduces innovation in middleware. Given this market structure, it is highly unlikely that market forces alone will lead to the development of innovative middleware that creates the same competitive risk to Microsoft that it faced from Navigator and Java in 1995.

IV. THE RESTRICTIONS ON MICROSOFT'S BEHAVIOR CONTAINED IN PFJ ARE INSUFFICIENT TO RESTORE THE COMPETITIVE THREAT THAT MIDDLEWARE POSED IN 199'5

31. No remedy can turn back the clock to 1995 and re-create the competitive threat that existed at that crucial time of technological disruption. Technological disruptions of the magnitude that Bill Gates called ''the Internet tidal wave'' cannot be created by judicial proceedings. Even so, one of the objectives of the remedies should be to attempt to restore, to whatever extent possible, the possibility of competition in the market where the illegal monopoly was maintained (i.e., the market for PC operating systems). The restrictions on Microsoft's behavior in the PFJ fall well short of this objective.

A. PROBLEMS WITH THE MIDDLEWARE REMEDIES

32. Following its years of illegal conduct, Microsoft's position in the core middleware products (Internet browsers and Java technology) is totally different today than it was in 1995. Microsoft has a dominant share of the browser market, IE has caught up to and surpassed Navigator's technical capabilities, and the prospect of large numbers of desktop applications written in ''write once, run anywhere'' Java seems remote.

33. There are two features of the industry that made the threat from Netscape and Java so significant. First, the technological disruption of the Internet made the functionality of the browser sufficiently important that it could become a platform for large numbers of applications. Second, the head start that Netscape and Java had over Microsoft middleware provided a substantial first-mover advantage, a particularly important element for competitive success in network industries prone to ''tipping.'' Probably the only chance a competitor has to overcome the inherent advantages that Microsoft has in distribution is to create a large installed base of users before Microsoft can develop and launch a competitive product.

34. The market position that Microsoft has today makes it difficult for any set of conduct remedies to lead to significant middleware competition. Neither the PFJ nor any other set of conduct remedies can re-create the technological disruption or competitive head start that existed before Microsoft acted illegally. However, for the reasons explained below, the middleware remedies in the PFJ seem especially likely to be ineffective.

1. The Reliance in the PFJ on OEMs to Distribute Competing Middleware

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[4] Dataquest, ''All Platform Operating Systems Sales History and Forecast Summary,'' Table 12 (Mar. 1997).

[5] ''Microsoft v Netscape: Freer than Free,'' The Economist (Aug. 17, 1996, U.S. Edition).

[6] IDC, ''Worldwide Client and Server Operating Environments, Market Forecast and Analysis, 2001–2005'' (Aug. 2001).

[7] ''AOL Files Suit Against Microsoft For Damages Inflicted on Netscape,'' Wall Street Journal (Jan. 23, 2002) (citing data compiled by WebSideStory, a market research firm).

35. The PFJ relies heavily on competition in the OEM distribution channel as the key mechanism for overcoming the competitive harm created by Microsoft's actions. The same was true in the government's prior settlement with Microsoft, as I noted in my 1995 declaration:

Despite the importance of natural advantages [referring to the installed base discussion above] in the market for IBM-compatible PCs, the complaint and proposed remedies addressed competitive issues that are critical to the success of new competition in this market. The most effective and economic point of entry for sales of IBM-compatible PC operating systems is the OEM distribution channel. New operating system software products should have unimpeded access to this channel. The Government's complaint and proposed settlement provide needed relief to facilitate the entry of new competitors, such as IBM's OS/2.

36. Seven years later, it is clear that little was accomplished in the prior consent decree in relying on the OEM channel to facilitate competition in PC operating systems. Unimpeded access to this channel may indeed be necessary for effective competition. However, it is far from sufficient to create effective competition for middleware given the current state of the industry.

37. One obstacle to competition in middleware, which the PFJ does not address, is the applications barrier that now protects the position of Microsoft middleware. ISVs have a strong incentive to write applications to Microsoft middleware, since Microsoft middleware will be present on every Windows machine that is shipped. The PFJ does not restrict Microsoft's ability to commingle code and include middleware APIs in with its Windows operating system. The PFJ permits OEMs to remove Microsoft middleware icons, but the middleware itself, and its associated API set, will remain. Thus, the ubiquity of Microsoft's middleware will encourage ISVs to write applications to these APIs.

38. The PFJ restricts Microsoft's ability to discriminate against OEMs that also ship competing middleware, but this does not create an incentive for OEMs to ship competing middleware. For the reasons explained by the District Court and the Court of Appeals, OEMs are reluctant to include software that provides similar functionality to other software on the machine—it increases confusion among users and raises support costs.

39. If ISVs do not write applications to the competing middleware, OEMs will not distribute it. If OEMs do not distribute it, ISVs will not write applications to it. The current dominance of Microsoft middleware thus makes it very unlikely that this circle can be broken by the non-discrimination restrictions in the PFJ.

40. The PFJ also seeks to increase the role of OEMs in defining the Windows desktop. This is also insufficient to create significant middleware competition. Even if OEMs had complete control over the icons that would appear on the Windows desktop—and they would not under the PFJ—this would not alter in any way the software that would actually be present on the computer. Removing an icon from the desktop just removes the most obvious point of consumer access to the software, but the ability of ISVs to write to the APIs presented by the software remains unchanged.

41. The PFJ also attempts to prohibit Microsoft from discriminating against OEMs that distribute competing middleware. It does this by requiring Microsoft to provide uniform licensing terms to the 20 largest OEMs and preventing specific retaliation against OEMs that distribute competing middleware. It is not clear to me that these restrictions are sufficient to prevent Microsoft from exercising influence over the behavior of OEMs towards products that compete with Microsoft. First, I understand that the non-discrimination provisions apply only to certain Windows desktop operating systems (Windows XP and Windows 2000 Professional) and not to other Microsoft products that an OEM might purchase. Second, the relationships between Microsoft and OEMs are complex and multi-faceted. For example, Microsoft provides marketing and promotion support to OEMs; its provides technical assistance; its provides allowances for product development. Microsoft may provide these services differently to OEMs. Since the PFJ does not prohibit all forms of discrimination across OEMs, Microsoft may have sufficient ability to influence OEM decision-making.

42. The PFJ also contains limited disclosure requirements. The exact scope of these disclosures depends on careful interpretation of the complex language of the PFJ. I do not attempt such an interpretation but comment only on the limited impact of the disclosure remedies under any reasonable interpretation. There is a requirement to disclose interfaces that permit competing middleware to interoperate with Windows operating systems. I understand, however, that Microsoft is only required to make these disclosures if the interface is already in use by a Microsoft middleware product. A disclosure requirement limited in this manner pushes potential middleware competitors in the direction of ''me too'' products and does little to create incentives for significant innovation in middleware.

2. IE Open Source and Java Must-Carry

43. There are alternative middleware remedies that could have a more significant effect. More aggressive remedies with respect to that middleware threat would be open source Internet Explorer and a requirement for Microsoft to distribute the most current version of the standard Java runtime environment with IE and Windows. Even these remedies are likely to be insufficient to turn back the clock to the level of competition that existed before Microsoft's illegal conduct. But they are likely to have more impact than the remedies in the PFJ.

44. Open source IE is the most effective way to fully expose the links between IE and Windows as well as the IE APIs. This creates the possibility of interoperability between competing products and it furthers the possibility of operating system competition. It also allows anyone who wants to develop a competitive browser to be fully compatible with applications that are written to IE APIs. This way it limits the extension of the applications barrier to entry created by Microsoft's dominance in the browser.

45. The Java must-carry remedy works to erode the application barrier to entry by helping to overcome reluctance of ISVs to develop programs that require Java on the client. It is only by assuring sufficient ubiquity of Java and browser functionality that there is any chance that Microsoft may lose control of the applications barrier through competing middleware.

B. INATTENTION TO THE APPLICATIONS BARRIER TO ENTRY

46. The applications barrier to entry identified by the DC Circuit consists in part of the large number of applications available on the Windows platform. As discussed above, successful entry in middleware of the type commenced by Netscape Navigator and Java could have substantially eroded the applications barrier to entry and facilitated entry into the operating systems market.

47. Microsoft controls the most economically important set of applications in its Microsoft Office suite. Office accounts for nearly 30% of Microsoft's annual revenue.[8] Software suites consisting of personal productivity applications such as word processing, spreadsheets, presentation software, electronic mail, and calendar and contact management constitute a distinct and relevant product market. Microsoft's share of that market today is in the mid-90s[9] and Microsoft almost certainly holds substantial market power.

48. As found by the DC Circuit, Microsoft has used its control over Office to maintain its OS monopoly. Microsoft threatened to cancel the Macintosh version of Office if Apple did not distribute Internet Explorer, Microsoft's Interact browser. It is clear that Microsoft's ability to make such threats would be diminished if Microsoft had an obligation to license the rights to port Office to competing OS platforms.

49. Since remedies focused entirely on middleware will not re-create the threat to Microsoft's monopoly power in PC operating systems that existed prior to Microsoft's illegal conduct, additional actions need to be taken to ensure that Microsoft does not benefit from its illegal conduct. These additional actions should be targeted at further reducing the underlying source of Microsoft's market power, namely the applications barrier to entry. Porting Office to other platforms would be a remedy of this type that could have a significant impact on the applications barrier. One factor that limits the demand for Unix workstations, which have computational advantages over Intel-based PCs, is the inability to

[8] Dresdner Kleinwort Wasserstein, ''Microsoft Corporation,'' Figure 4 (1 Aug. 2001).

[9] In 1999, Microsoft accounted for 96.1% of the revenues of office suites designed for Windows. Since 98.1% of all sales of office suites in 1999 were for the Windows platform, these figures by themselves imply an industry share of 94%. But Microsoft also accounted for a large share of the revenues of office suites designed for Apple's Macintosh OS—a platform that accounted for nearly all of the non-Windows sales of office suites. IDC Office Suite Market Review and Forecast, 1998–2003 (Aug. 1999).

interoperate with Office. The thin-client model of computing, where most computing occurs on the server, not the client, represents one of the most important threats to Windows desktop computing. The switching costs of adopting new personal productivity software with files not compatible with Office represents a significant barrier to Unix-based thin client networks. A requirement to license the rights to port Office may be one of the most effective ways to create competition for Windows, something which can probably no longer be achieved by remedies exclusively related to middleware.

C. PROBLEMS WITH THE ENFORCEMENT MECHANISM

50. The remedies in the PFJ are too limited in scope to re-create past competitive conditions even if they are enforced perfectly. However, the enforcement mechanisms in the PFJ are far from perfect and will likely lead to delays and costs that further limit the effectiveness of the remedies. The PFJ relies on a technology committee to oversee Microsoft's compliance with the PFJ. The membership in the committee is controlled 50% by the company whose past illegal activities have been the subject of the Circuit Court's decision. The committee lacks both resources and the power to enforce the PFJ. The committee must rely on information provided to it by Microsoft and has little ability to engage in its own investigations. Furthermore, if it uncovers a violation, it must rely on lengthy litigation to enforce it.

51. The implication is that failures by Microsoft to comply may go undetected and if they are detected, it may take a great deal of time and effort to impose a change on Microsoft's behavior. Delays can greatly limit the effectiveness of any particular remedy in a dynamic industry subject to network effects. If enforcement will be ineffective, it may create an incentive for Microsoft to violate the terms of the decree.

52. Other consent decrees have used special masters with sufficient resources and expedited judicial review to enforce their terms. Given the complex, dynamic nature of the software industry, it is especially important that the resources are in place to monitor the terms of the decree and that swift enforcement is possible.

V. APPROPRIATE REMEDIES SHOULD NOT ALLOW MICROSOFT TO PROTECT ITS ILLEGALLY MAINTAINED MONOPOLY AGAINST CURRENT AND FUTURE COMPETITION FROM OTHER MARKETS

53. The PFJ focuses on the PC desktop as the central space in which competition will take place going forward. It does this by creating limited new operating rights for OEMs coveting the appearance of the desktop and greater protections for installing middleware that competes with Microsoft. As I have discussed above, given the substantial advantages in middleware that Microsoft has through its illegally maintained monopoly, I think that it is unlikely that these desk-top-oriented remedies will spur economically meaningful entry in middleware and that there is therefore little reason to think that those remedies will re-create the competitive risk Microsoft's desktop monopoly faced from middleware entrants in 1995.

54. The PFJ therefore needs to be augmented with remedies that take a forward-looking approach. The PFJ needs to focus on the current and future threats to Microsoft's market power and ensure that Microsoft is not allowed to use its illegally maintained monopoly in PC operating systems to dilute these current and future competitive threats. A PFJ focused on desktop remedies not only will not jump start competition now, but by allowing Microsoft to keep the benefits of its illegal activities, such remedies will fail to deter future illegal anticompetitive actions by Microsoft. Instead, additional remedies should naturally be directed at ensuring competition going forward uninfected by Microsoft's illegally maintained monopoly. In particular, these remedies should seek to re-create the same risks faced by Microsoft in 1995 when the middleware threat arose. ''

A. FUTURE COMPETITION IN SERVERS AND WEB SERVICES

55. A forward-looking remedy should seek to limit Microsoft's ability to use its illegally maintained monopoly power to bias competition in complementary products that have the potential to develop into substitutes for desktop computers. Server operating systems and Web services are two prime examples. These products intersect at the middle of two related trends. To date, the Internet has been a PC Interact. Most Interact users access the Internet through a PC or workstation. The first trend is a probable shift to the use of many devices to access the Interact, including cell phones, handhelds such as the Palm Pilot and other personal digital assistants, and thin clients. As these devices themselves are not as powerful as a typical PC, they will demand more work from the servers and sewer operating systems delivering the information. The implication is that, in the future, a significant amount of computing will bypass the desktop—which in turn implies that Microsoft has an incentive (if it can) to extend its monopoly from the desktop into servers.

56. The second trend is a related shift in how software is owned and managed. Prior to the Internet, PC software and content was largely locally owned and locally managed. The software was installed directly on the user's PC, from a floppy disk and then later a CO. The rise of the Interact makes it possible to move the location of software off of the PC and onto a remote device—a server—with much of the work done remotely. This gives rise to the generalized notion of a web service, where software is no longer a thing like a CD but instead a service delivered to a connecting device, much the way electricity is delivered to many devices.

57. On November 29, 2001, Steve Ballmer, Microsoft's CEO, discussed these trends and how Microsoft was approaching them through its .NET initiative: [10]

About three years ago we changed the vision of our company. Instead of talking about a computer on every desk and in every home we started talking about empowering people through software anytime, any place, any device. ... It starts with a view, which came to us quite clearly about five, almost six years ago now that XML [eXtensible Markup Language] would really be the transforming industry phenomenon of the next five years. If it was the PC 20 years ago and graphical user interface 10 or 15 years ago and the Internet five or six years ago, it's XML. And I'm not going to give a long description, but I think the way you should think about it is XML will be the Lingua Franca of computing. It will be the basis on which systems work better with systems, people with people, businesses with businesses, businesses with consumers. It will improve the level of integration and connectivity. It gives us a framework at least for the software community to build the software that allows that. ... .NET is our platform to let people take advantage of the XML revolution.

58. Ballmer also discussed the Microsoft business model and how .NET fits within it. He sees Microsoft as targeted on seven business areas, including, unsurprisingly, PC operating systems, PC productivity solutions ''anchored'' by Office, and server software for building and deploying these applications. All of these are now being organized around .NET:

I think you could say we are a company that invests in seven businesses around one platform. That platform is .NET. .NET is our platform for the next technology revolution that is going on. And that is the shift to the XML web service model as the fundamental way of building and deploying software. .NET is our platform to do that. ... That's how we think about the seven business areas in which we are investing. They're all being re-platformed or re-plumbed around .NET and XML web services.

59. A computing world in which Web services, hosted on servers, are delivered on demand over the Internet is a world that has negative implications for Microsoft's near-monopoly in desktop operating systems. In such a world, there is no longer the same need for desktop computers to have ''fat'' operating systems such as Windows. In many respects, the Web services model is simply a more developed version of the thin-client, ''network computer'' model advocated by Oracle and Sun in the mid/late-1990s. As such, the Web services model is a threat to Microsoft's desktop monopoly and Microsoft therefore has an incentive (if it can) to use its existing monopoly to gain control over this possible threat. It has an incentive to ensure that Windows remains at the center of the Web services model and/or to migrate its monopoly from the desktop to Web services.

B. MICROSOFT IS ATTEMPTING TO PROTECT ITS EXISTING MARKET POWER BY USING ITS ILLEGALLY MAINTAINED MONOPOLY IN PC OPERATING SYSTEMS TO GAIN ADVANTAGES IN SERVERS AND WEB SERVICES

60. Microsoft's illegally maintained monopoly in the market for PC operating systems provides it with important advantages in server operating systems, in particular operating systems for workgroup servers. Workgroup servers are the servers in a ''client-server'' network that interoperate directly with desktop clients. Workgroup

[10] S. Ballmer speech, Credit Suisse First Boston Technology Conference (Nov. 29, 2001) (http://www.microsoft.com/msft/speech/BallmerCSFB112901.htm).

servers provide services such as authentication and authorization, directory, and file and print. Very importantly, they are also the point of contact or gateway between an organization's network of servers and the Interact. Workgroup servers are distinct from enterprise servers, which are more powerful, reliable and expensive servers that handle databases and other ''mission critical'' applications.

61. Some of Microsoft's advantages in workgroup server operating systems arise because of the distribution advantage provided by its monopoly in PC operating systems. Suppose a vendor of workgroup operating systems develops a new feature (such as a new directory service for keeping track of the users and resources on a network or a new security system for authentication and authorization). In the usual case, the network cannot make use of the new service in a server operating system unless certain new code (supplied by the vendor of the server operating system) is also installed on the clients in the network. In large networks, this can be a costly and time-consuming exercise—unless the network is running Windows on its servers. A network that runs Windows on its servers does not face this kind of problem because Microsoft ensures that the client-side pieces of server-side technologies are built into its Windows desktop operating system. This gives Microsoft a competitive advantage over other vendors of workgroup server operating systems. But it is an advantage that derives from Microsoft's illegally maintained monopoly in PC operating systems. Moreover, there may be significant long-run costs through the adverse effect that Microsoft's distribution advantages (derived from its illegally maintained monopoly in desktop operating systems) may have on incentives to invest in server-side innovation.

62. There are other ways in which Microsoft's past illegal conduct has provided it with advantages today in the market for workgroup server operating systems—advantages that help protect and enhance Microsoft's existing market power. For example, one of the benefits to Microsoft from the defeat of Netscape's browser was the resulting reduction in demand for Netscape application programs for servers. These server-side applications were designed to interoperate with the Netscape browser and certain client-side applications, such as e-mail, written to the Netscape Navigator APIs. Unlike Microsoft's server-side applications (such as Exchange) that run only on Windows, Netscape's server-side applications were implemented on multiple platforms, including Unix and Novell's NetWare. As Netscape's share of the browser market declined following Microsoft's illegal conduct, the demand for Netscape's server applications also declined. Thus a consequence of Microsoft's illegal conduct has been an increase in the demand for Microsoft server-side applications such as Exchange that, as mentioned above, run only on Windows server operating systems. Put differently, Microsoft's past illegal conduct towards Netscape is helping Microsoft establish an applications barrier that will protect and enhance its future position in the market for workgroup server operating systems.

63. Another way in which Microsoft's past illegal conduct affects the market for workgroup operating systems today involves distributed application programs. As I mentioned before, Java is a programming language with features that I understand make it well suited for distributed applications, i.e., applications that call upon resources located on multiple different computers located around a network. As I understand it, for distributed applications to work, they need to conform to a particular set of protocols, and these protocols need to be supported by the operating systems of the computers involved in executing the distributed application. Java had protocols for distributed applications (RMI and CORBA) that were supported by multiple operating systems. Microsoft had an alternative, proprietary set of protocols called DCOM. By interfering with the development of cross-platform Java, Microsoft gave an advantage to its framework for distributed applications (DCOM) and promoted the development of distributed applications written to protocols that run only on Windows operating systems. In addition, since the programs that are written to these Microsoft protocols are targeted for computers using the Windows operating system, such programs also make use of Windows APIs. This means that even if rival operating systems were given the ability to support DCOM, they could not run most of the distributed applications written to this protocol because these applications also make use of Windows APIs. Thus this is another example of how Microsoft's past illegal conduct, this times towards Java, is helping Microsoft establish an applications barrier that will protect and enhance its future position in the market for server operating systems.

64. Microsoft's past illegal conduct has also given it advantages today in Web services. For example, one of the Web services that Microsoft has promoted heavily is Passport, its Internet authentication and authorization service. In a network environment, key issues are verifying the identity of users or computers (''who are you?'') and determining the resources to which you are entitled to have access (''what are you authorized to do?''). Passport is an authentication and authorization service targeted, at least initially, at e-commerce. Consumers who subscribe to Microsoft's Passport service will have their name and credit card information on file on servers controlled by Microsoft. E-commerce vendors who participate in Passport will have back office connections with the Microsoft servers so that, when a consumer who subscribes to Passport wants to purchase something, the e-commerce vendor can check with Microsoft's Passport servers to authenticate and authorize the purchase (and debit the consumer's credit card). The theory is that Passport will simplify e-commerce transactions.

65. For Passport to be successful, Microsoft needs to have a large base of consumers who subscribe to the service. A large base of consumers will make firms engaged in e-commerce interested in joining Passport on the vendor side, which in turn will make Passport more attractive to consumers. Thus there are potential network effects which, if they get started, may result in Passport being in the middle of a very large volume of Internet transactions.

66. Microsoft is actively using its illegally maintained monopoly in PC operating systems as a vehicle for enrolling consumers in Passport. Every time a consumer boots up a new copy of Windows, the consumer is asked multiple times whether he or she would like to sign up with Passport. In addition, the consumer is told that he or she will not receive information about product upgrades unless the consumer signs up for Passport. Thus this is an example in which Microsoft is using the distribution advantages that it has by virtue of its illegally maintained monopoly in PC operating systems to gain advantages in Web services. In so doing, Microsoft helps protect its existing monopoly power and/or helps migrate its market power from the desktop to Web services.

C. THE PFJ GIVES INSUFFICIENT ATTENTION TO:FUTURE COMPETITION

67. The implications of these trends are significant. Microsoft's monopoly in desktop operating systems provides it with advantages in adjacent markets that Microsoft is able to use to protect and enhance its illegally maintained monopoly power. By migrating its monopoly from desktop operating systems into server operating systems and Web services, Microsoft can help ensure that its future market power is comparable to (or greater than) the market power it possessed when the desktop was the principal hub of computing activity.

68. Given these links between Microsoft's past illegal conduct and Microsoft's future market power, an appropriate remedy should be focused on limiting Microsoft's ability to use its illegally maintained monopoly to gain advantages in products in other markets that have the potential to become substitutes for the Windows desktop operating system. Disclosure remedies have the potential to be an important step in this direction. For example, if Microsoft were required to fully disclose the interfaces and protocols used by its server and client operating systems, then vendors of non-Microsoft server operating systems could design their products so that they could interoperate smoothly in networks populated by Windows clients and servers. The resulting competition among vendors of server operating systems would help ensure that servers remain a threat to Microsoft's illegally maintained monopoly in desktop operating systems.

69. The PFJ does, not ignore completely issues related to adjacent markets. The PFJ does require disclosure for communication protocols that allow for servers to interoperate with Windows operating systems. This requirement, in contrast with the other provisions of the PFJ, appears to focus more on the server operating system market than competition in middleware. I understand, however, that the disclosure requirements proposed in the PFJ are exceedingly narrow and ultimately inadequate to allow full and equal interoperability for competitive server operating systems or Web services architectures.

70. In designing disclosure remedies (or any other remedy), it is important to remember that one is try to cure the consequences of past illegal conduct. As a result, there is no reason to be troubled by remedies that impose obligations that one would be reluctant to impose on other firms. Against this background, it seems reasonable to consider a remedy that requires disclosure sufficient to allow competitive products to interoperate with Microsoft software on an equal basis as Microsoft's own products. It is not clear that even this would be enough to offset the advantages that Microsoft has gained for itself in adjacent markets through past illegal conduct and which serve to protect and enhance its existing market power. But it scans like a reasonable step.

VI. SUMMARY OF CONCLUSIONS

71. As the DC Circuit found, Microsoft violated Sec. 2 of the Sherman Act in impermissibly maintaining its monopoly through actions designed to eliminate the threat to that monopoly posed in the mid 1990s by competition from Netscape Navigator and Java middleware. Given that finding, the remedies in this case should eliminate the benefits to Microsoft of its illegal conduct; should restore, if possible, the possibility of competition in operating systems; and should not allow Microsoft to protect its illegally maintained monopoly from current and future competition in related markets, such as server operating systems and Web services. In my opinion, the PFJ fails to accomplish these objectives.

72. The PFJ focuses on the desktop and on re-creating the possibility for middleware competition by giving OEMs freedom with regard to icon display and more limited freedom in installing and using non-Microsoft middleware. In doing so, it ignores the reality that Microsoft's market position in browsers and other middleware is substantially stronger today than it was in 1995. I know of no competing middleware today—and none is suggested in the Competitive Impact Statement—that begins to enjoy the time-to-market and market presence advantages held by Netscape Navigator and Java in the mid-1990s. The PFJ does nothing to address the powerful distributional advantage that Microsoft alone has and which ensures that its middleware will be ubiquitous. That ubiquity operates as an unchecked barrier to entry and reduces the incentive for others to create innovative, competitive middleware. I therefore see no reason to think that the PFJ will succeed in spurring a new middleware threat to the Microsoft operating system or in denying Microsoft the fruits of its illegally maintained monopoly.

73. The PFJ ignores remedies that could have a more significant effect in middleware markets, in particular, remedies that require Internet Explorer to be open source and that require Microsoft to distribute the most current version of the Java runtime environment with IE and Windows. Although these remedies are unlikely to fully restore the competitive threat posed by middleware before Microsoft's illegal activities took place, these remedies would likely have a greater impact than those set forth in the PFJ.

74. More fundamentally, the PFJ does nothing to address the applications barrier to entry that defines Microsoft's monopoly in PC operating systems. Microsoft also controls the most economically important set of applications for Windows through its control over Microsoft Office. As the DC Circuit found, Microsoft used that control to protect its operating system monopoly through threats against Apple. It is clear that Microsoft's ability to make such threats would be diminished if Microsoft has an obligation to license the rights to port Office to competing operating systems. Indeed, porting Office to other operating systems is a remedy that could have a significant impact on the applications barrier to entry.

75. In addition, the PFJ should focus on the current and future threats to Microsoft's market power and ensure that Microsoft cannot use its illegally maintained monopoly to stifle such threats. This ease makes clear that those threats are likely to come from products that are complements to Windows in the short run and potential competitors in the long run. That was precisely the position of Netscape Navigator and Java in 1995; today, based on Microsoft's?? public statements, that may be the position of server operating systems and Web services. Both of these represent a move away from a computing structure organized around desktop computers using ''fat'' operating systems such as Windows. Server operating systems and Web services represent an evolution of the thin-client model of computing, and as such, represent a threat to Microsoft's desktop monopoly. Microsoft is currently attempting to defeat this threat by using its illegally maintained monopoly in PC operating systems as a vehicle for expanding its market share in servers and attaching consumers to its Web services infrastructure. The PFJ is missing forward-looking remedies that address such efforts by Microsoft to protect and enhance its existing market power by using its illegally maintained monopoly in PC operating systems to defeat competitive threats in adjacent markets. This is a significant hole in the PFJ that bears on the future of competition in the computing industry.

I hereby affirm under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information and belief. Executed this 25th day of January, 2002 in Palo Alto, California.

Kenneth J. Arrow

Attachment B

PRIVILEGED AND CONFIDENTIAL

In re: United States v. Microsoft Corp., Civ. Action No. 98–1232; New York v. Microsoft Corp., Civ. Action No. 98–1233

Mediator's Draft No. 18 of Settlement Stipulation and Proposed Consent Decree Stipulation

The parties, by their respective attorneys, agree as follows:

1. The court has jurisdiction over the subject matter of this action and over all the parties to it.

2. The final judgment attached hereto (sometimes referred to as the ''decree'') may be entered by the court upon motion of any party or upon the court's own motion at any time after compliance with the requirements of the Antitrust Procedures and Penalties Act, 15 U.S.C. § 16.

3. The parties shall comply with the terms of the attached final judgment no later than 30 days after the date of the execution of this stipulation, with the exception of § 3.9 and 4.1, with respect to which compliance shall be due no later than 60 days after the date of the execution of this stipulation, and § 4.2, which specifies the time for compliance with that section.

4. The plaintiffs agree not to oppose a motion by Microsoft to vacate the findings of fact that the court issued on November 5, 1999, and to declare that those findings, and the judgment when entered, shall have no preclusive effect, either under principles of collateral estoppel (issue preclusion) or section 5(a) of the Clayton Act, 15 U.S.C. § 16(a), in any proceeding, the court having rendered no conclusions of law or determination of liability and Microsoft Corporation having not acknowledged liability and having represented that it has agreed to the entry of this judgment solely for business reasons, to avoid the expense and uncertainties of continued litigation. Microsoft's consent to the entry of this judgment is conditional upon the grant of this motion.

5. If the court does not enter the decree as the final judgment in this proceeding, all the parties are relieved from all obligations under the decree and this stipulation.

6. This stipulation will not be effective until all the parties to the litigation have signified in writing that they agree to it. It will become effective on the day on which the last party communicates its acceptance to the other parties.

7. This stipulation and the attached decree are the complete and integrated expression of the parties'' settlement agreement.

For the United States

For the other plaintiffs

For Microsoft Corporation Dated:——————————, 2000 4/5/00

Final Judgment

It is ordered, adjudged, and decreed, as follows:

§ 1. Jurisdiction:

This court has jurisdiction of the subject matter of this action and of Microsoft. Microsoft has violated sections 1 and 2 of the Sherman Act, 15 U.S.C. § 1, 2, and related state laws of the States of New York, California, Connecticut, Florida, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, New Mexico, North Carolina, Ohio, Utah, West Virginia, and Wisconsin, and the District of Columbia.

§ 2. Definitions:

(1) ''operating system'': the software that controls the operation of a computer. An ''operating system product'' is any operating system or part or feature thereof that is distributed commercially whether or not it is marketed for a positive price. A ''personal computer operating system'' is an operating system intended to be used with personal computers, whether or not such operating system is also intended to be used with other computers.

(2) ''Windows operating system.'' Software code (including source code and binary) of

Windows 98, Windows 2000 Professional, and their successors, including the Windows operating systems codenamed ''Millennium,'' ''Whistler,'' and ''Blackcomb.''

(3) ''middleware'': software that operates between two or more types of software (such as an application, an operating system, a server operating system, or a database management system) and could, if ported to multiple operating systems, enable software products written for that middleware to be run on multiple operating systems. Software does not cease to be middleware, if otherwise within the definition in this subsection, merely because it interacts directly with the operating system or other software. Examples of middleware within the meaning of the decree include Internet Explorer, the Outlook Express e-marl client, Windows Media Player, and the Java Virtual Machine. Examples of software that are not middleware within the meaning of the decree are disk compression and memory management.

(4) ''platform software'': either an operation system or middleware, as these terms are defined above.

(5) ''default Middleware'': software configured to launch automatically (that is, by ''default'') to provide particular functionality-when-other middleware has not been selected for this purpose. For example; a default browser is middleware configured to launch automatically to display Web pages transmitted over the Interact or an intranet that hear the .htm extension, when other software has not been selected for this purpose.

(6) ''personal computer'': a computer that is designed to he used by one person at a time that uses a video display and keyboard (whether or not the video display and keyboard are actually included), and that contains an Intel x86 or competitive microprocessor, and computers that are commercial substitutes for such computers.

(7) ''original equipment manufacturer (OEM)'': the manufacturer or assembler of a personal computer.

(8) ''independent software vendor (ISV)'': any entity other than Microsoft (or any subsidiary, division, or other operating unit of any such other entity) that is engaged in the development and licensing (or other marketing) of software products intended to intemperate with Microsoft platform software.

(9) ''application programming interfaces (APIs)'': the interfaces and protocols that enable an application, middleware, or server operating system to efficiently and effectively obtain services from (or provide services in response to requests from) platform software in a personal computer and to use, benefit from, and rely on the resources, facilities, and capabilities of such platform software.

(10) ''communications interfaces'': the interfaces and protocols that enable applications, middleware, or operating systems installed on other computers (including servers) to interoperate satisfactorily with the Windows platform software on a personal computer.

(11) ''technical information'': all information, regarding the identification and means of using APIs (or communications interfaces), that competent software developers require to make their products running on a personal computer, server, or other device interoperate satisfactorily with Windows platform software running on a personal computer. Technical information includes reference implementations, communications protocols, file formats, data formats, data structure definitions and layouts, error codes, memory allocation and deallocation conversions, threading and synchronization conventions, algorithms for data translation or reformatting (including compression/decompression algorithms and encryption/decryption algorithms), registry settings, and field contents.

(12)

(a) ''intellectual property rights'': copyrights, patents, trademarks, and trade secrets;

(b) ''to infringe intellectual property rights'': to commit a legal violation of such a right.

(13) ''end-user access'': the invocation of middleware by an end user of a personal computer or the ability of such an end-user to invoke middleware. ''End-user access'' includes invocation of middleware by end-users which is compelled by the design of the operating system.

(14) ''Market Development Agreement (MDA)'': the class of agreements with OEMs that provides discounts from Windows operating system royalties.

§ 3. Prohibitions:

Microsoft Corporation is enjoined from:(1) agreeing or offering to provide any consideration or advantage to any person in exchange for, or conditioned on, such person's agreement or willingness not to develop, promote or distribute (or to limit the development, promotion or distribution) of any operating system product or middleware competitive with any Windows operating system product or middleware.

(2) offering or conditioning a Windows operating system license to any OEM, or the terms of administration of a license, or any change in Microsoft's commercial relations with an OEM, or offering or threatening to do any of these things, related to whether (or to the extent) the OEM

(a) makes or promotes (or declines to make promote, distribute, or license) a non-Microsoft operating system product or middleware;

(b) makes, promotes, distributes, or licenses a modified version of the Windows operating system; or

(c) exercises any of the options provided under this decree;

(3) limiting an OEM's

(a) interrupting the Windows initial boot sequence by a registration sequence used to obtain subscription or other information from the user;,

(b) displaying icons of a competing platform software product on the Windows desktop, or the size, shape, or convenience of such icons;

(c) displaying a middleware user interface, provided that an icon is also displayed that allows the user to access the Windows desktop and that the OEM makes clear that the interface is not Microsoft's; or

(d) offering its own sign-up sequence, which may include an option to make a non-Microsoft middleware product (for example, non-Microsoft Web-browsing functionality) the default middleware product and to remove the icon for Microsoft's middleware product from the Windows desktop;

(4) conditioning the licensing of a Windows operating system, or the terms or administration of any such license (including the nature and extent of support provided), on the OEM's

(a) also licensing, shipping, or promoting (or declining to license, ship, promote; or limiting its licensing, shipment, or promotion of) (i) a Microsoft middleware product (ii) any other Microsoft software product that Microsoft distributes, in whole or in part, separately from the Windows -operating system(whether or not for a separate or positive price) (iii) the unmodified version of such an operating system if the OEM offers a modified version of the Windows operating system pursuant to this decree, or

(b) making middleware supplied by Microsoft the default middleware in computers sold or distributed by the OEM;

(c) whether the OEM limits end-user access to the middleware that is distributed with the operating system,

(5) Entering into any agreement with an OEM in which the operating system royalties are payable to Microsoft by the OEM are set otherwise than by reference to a uniform royalty schedule to be established by Microsoft: in its sole discretion, except that the schedule may specify different royalties for different language versions

(6) agreeing or offering

(a) to provide any consideration or advantage to any person in exchange for, or conditioned on such person's agreement or willingness to degrade or limit the quality of any non-Microsoft platform software, or not to may the supplier of any non-Microsoft platform software, or

(b) to include or promote any product of any person on the Windows desktop, in a folder on the Windows desktop, in the Active Desktop, or in the Windows initial boot sequence, related to the distribution, use, or promotion of Microsoft platform software, or to the limitation of the distribution, use, or promotion of non-Microsoft platform software;

(7) conditioning any bona fide ISV's access to technical information, or developer support to assist in its use, to assist in the creation of Windows-based applications (or the terms on which such Information or support is provided), upon such ISV's

(a) use, distribution, promotion, or support of any Microsoft middleware

(b) declining to use, distribute, promote, or support any non-Microsoft middleware

(8) failing to disclose (at the time such APIs, technical information, or communications interfaces are disclosed to Microsoft's own software developers) for use in interoperating with Windows operating systems and middleware distributed with such operating systems, the APIs, technical information and communications interfaces that Microsoft employs to enable

(a) Windows platform software to interoperate with Microsoft applications installed on the same personal computer, or

(b) Windows operating system software and middleware distributed with such

operating system to interoperate with Microsoft middleware installed on the same personal computer if the middleware is (i) Internet Explorer, the Outlook Express e-mail client, Windows Media Player, or the Java Virtual Machine, or their successors, or (ii) distributed separately from the operating system for installation on any Windows operating system; or

(c) a Windows operating system and middleware distributed with such operating system installed on one personal computer to interoperate with any of the following software installed on a different personal computer or on a server—(i) Microsoft applications, (ii) Microsoft middleware, or (iii) Microsoft client or server operating systems,

(9) tying or combining any middleware product to or with a Windows operating system unless Microsoft offers a version of that operating system without such middleware product at a reduced price that reasonably reflects the relative costs of the operating system and the excluded middleware

(10) limiting an OEM's right or ability to add non-Microsoft middleware to a Windows operating system

§ 4. Affirmative Provisions:

(1) Microsoft shall license the source code for Windows operating systems on the following terms:

(a) Microsoft-shall grant each of its 50 highest-volume OEM customers, at the OEM's option, a perpetual, nonexclusive license to the source code of Windows operating systems for the sole purpose of using that source code to modify those operating systems for purposes of (i) preventing end-user access to any middleware included in the operating system, (ii) facilitating, improving, or otherwise optimizing the interoperation of any non-Microsoft middleware with, and fixing the bugs in, the operating system, and (iii) installing any end-user interface; provided that OEMs shall have no right to make modifications to a Windows operating system that render inoperable any of the APIs exposed to ISVs by that operating system unless doing so is reasonably necessary to accomplishing purposes (i), (ii), or (iii) above and the end-user to whom such operating system is licensed is given the means readily to install all software necessary to endure that such APIs are rendered operable. The source code licenses granted by Microsoft under this subsection shall not entitle OEMs to use such source code for any purpose other than creating modified versions of Windows operating systems for the purposes stated in this section and working with ISVs to facilitate the interoperation of such ISV's products with Windows operating systems.

(b) The terms of source code licenses granted by Microsoft under this subsection shall be standardized and not be subject to negotiation with individual OEMs. Microsoft shall not charge OEMs a royalty or fee for access to the source code of Windows operating systems.

(c) Microsoft's royalty for any modified version of a Windows operating system installed on an end-user's personal computer shall be calculated as follows: (i) if the royalty charged that OEM for the unmodified version is no higher than the royalty charged for the predecessor operating system, the royalty charged the OEM for the modified version shall not exceed the royalty charged that OEM for the predecessor operating system; (ii) if the royalty charged that OEM for the unmodified version exceeds the royalty charged that OEM for the predecessor system, the royalty charged that OEM for the modified version shall be the royalty charged that OEM for the unmodified version discounted by the percentage difference that is allocable in accordance with accepted accounting principles to the middleware that is (i) excluded or (ii) made not end-user accessible by the OEM. The allocation shall be based on the development costs of the unmodified version of the operating system, as determined by the agreement of the parties or, in the absence of the agreement, by an arbitrator selected in accordance with the rules of the American Arbitration Association.

(d) OEMs shall have the right to license any modified version of a Windows operating system that they create pursuant to this § 4(1) to end-users, and to value-added resellers, systems integrators, retailers, ISVs, and other OEMs for licensing to end-users, for installation and use on personal computers, provided only that such non-end-user licensees agree, either in a sublicense With-the OEM or in a license with Microsoft, to be bound by the terms set forth in-the OEM's license (other than those terms providing for access to and modification of source code) with Microsoft pursuant to this section.

(e) Microsoft may require that modified versions of Windows operating systems created by a particular OEM be installed only in the form in which the unmodified versions of that operating system are installed, but must permit the OEM to distribute any non-Microsoft software in any form. Microsoft may also require that OEMs, and any licensees pursuant to § 4(1)(d) above, provide their customers with end-user licenses for such modified versions of Windows operating systems in a form prescribed by Microsoft .that is consistent with this decree. Microsoft is not required-to grant OEMs any right to disclose source code for the original or any modified version of a Windows operating system except as provided in the preceding sentence and in subsection 4(h) below.

(f) Microsoft may require that an OEM that develops a modified version of a Windows operating system that boots up automatically into a non-Microsoft user interface to include an icon on the primary screen of that user interface that enables the end-user to return to the Windows desktop as designed by Microsoft.

(g) Microsoft shall make all source code for Windows operating systems available to OEMs that enter into source code licenses pursuant to this section beginning with the first alpha, beta, or other release of the operating system outside of Microsoft and shall supply complete updates to that source code at the time of all later releases and release candidates. Microsoft may require OEMs to base their modified versions of Windows operating systems on the commercially released versions of those operating systems and not on a beta release or a release candidate, provided that Microsoft supplies OEMs with the final code for such systems at least 180 days prior to the earlier of their scheduled release date or their release. Microsoft may prohibit OEMs from releasing any modified version of a Windows operating system prior to the earlier release of Microsoft's release of that operating system or 60 days after the scheduled release date.

(h) To facilitate creation of modified versions of Windows operating systems by OEMs, Microsoft shall provide OEMs with its internal build tools, source code archives, bug-tracking databases, custom compilers, test suites, and other development tools ordinarily used by software developers in modifying and testing modified source code for operating systems (subject to normal and customary restrictions on disclosure of such proprietary technology), as well as reasonable access to knowledgeable Microsoft support engineers familiar with the source code, whose time may be billed by Microsoft to OEMs at customary rates. Subject to customary and reasonable intellectual property rights (including customary and reasonable nondisclosure agreements executed by ISVs and their personnel exposed to Microsoft's source code), Microsoft must permit an OEM to work with one or more ISVs or other software developers (which may participate in modifying the source code) to facilitate the OEM's development of a modified version of a Windows operating system pursuant to § 4(1) of this decree.

(i) OEMs shall have the right to use the word ''Windows'' to designate any modified version of a Windows operating system created pursuant to this section and to state, when true, that the modified version runs applications that run on Microsoft Windows, provided that the OEM states clearly that such modified version has been modified by the OEM, and does not imply that Microsoft endorses the modifications.

(j) Microsoft shall have no obligation to provide product support to an OEM's customers for those aspects of a modified version of a Windows operating system created by the OEM that are due to the modification.

(2) Microsoft shall, when it makes a major Windows operating system release (such as Windows95,Windows 98, Windows 2000 Professional, Windows ''Millennium,'' ''Whistler,'' ''Blackcomb,'' and successors to these), continue to license the previous Windows operating system at the existing royalty rate for three years to any OEM that desires such a license. During that period, Microsoft shall make the previous Windows operating system's code available to its 50 highest-volume OEM customers at customary and reasonable terms, together with reasonable personnel support (for which Microsoft may require compensation from the OEM at customary rates), for the purpose of enabling those OEMs to adapt the operating system to the latest hardware advances and to fix bugs. The OEM shall be free to market computers in which it preinstalls such an operating system in the same manner in which it markets computers

preinstalled with other Windows operating systems, provided, however, that Microsoft shall be entitled to require OEMs to inform their customers that such computers contain a modified version of a Windows operating system.

(3) In all future MDAs, Microsoft shall offer the same MDA terms to all OEMs whose shipments of Microsoft operating systems fall within a specified range (e.g., the 10 largest OEMs, as measured by total annual volume of modified and unmodified versions of Microsoft operating systems that they ship, would be entitled to the highest MDA, the next 10 to a lower MDA, and the remaining OEMs to no MDA), subject to variations by geography for OEMs that make more than S0 percent of their sales outside the United States. No class entitled to the same MDA terms in accordance with this subsection shall have fewer than 10 members.

(4) Notwithstanding the foregoing provisions, upon the release of its next Windows operating system, codenamed ''Millennium,'' and upon the next release, version, or service pack update of Windows 2000 Professional after May 30, 2000, Microsoft shall provide the means for OEMs and end users at their option readily to prevent end-user access to the operating system's browsing functionality. § 5. Term:

(1) Microsoft shall comply with the provisions of this decree within 30 days after its submission to the district court for approval.

(2) This decree shall expire at the end of five years from the date of that submission, except that:

(a) The source code licenses granted pursuant to § 4(1) are perpetual, and the right to license modified operating systems created thereunder shall continue for an additional five years; and

(b) If the obligation set forth in § 4(2) to continue to license a predecessor operating system is triggered during the five-year period referred to in the preceding subsection, Microsoft shall continue to comply with that obligation with respect to that predecessor operating system for an additional two years, but § 4(2) shall have no further force or effect after the expiration of the two-year period.

§ 6. Enforcement: In order to minimize the burden on the judicial system of enforcing this decree, the plaintiffs have agreed that exclusive responsibility for enforcing it shall be lodged with the United Department of Justice and with one of the-States that are plaintiffs in this action, as selected by the plaintiff States.

§ 7. Reporting and Compliance:

(1) To determine or secure compliance with this decree, duly authorized representatives of the plaintiffs shall, upon reasonable notice given to Microsoft at its principal office, subject to any lawful privilege, be permitted:

(a) access during normal office hours to inspect and copy all books, ledgers, accounts, correspondence, memoranda, source code, and other documents and records in the possession, custody, or control of Microsoft (which may have counsel present) relating to any hinters contained in this decree;

(b) subject to the reasonable convenience of Microsoft and without restraint or interference from it, to interview officers, employees, or agents of Microsoft, who may have counsel present, regarding any matters contained in this decree;

(c) upon written request and on reasonable notice to Microsoft at its principal office, require Microsoft to submit written reports, under oath if requested, with respect to any matters contained in this decree.

(2) No information or documents obtained by the means provided by this decree shall be divulged by any of the plaintiffs except in the course of legal proceedings to which one or more of the plaintiffs is a party, or for the purpose of securing compliance with this decree, or as otherwise required by law. If when information or documents are furnished by it Microsoft identified in writing material to which a claim of protection may be asserted under Rule 26(c)(7) of the Federal Rules of Civil Procedure and marks each page of such material ''Subject to claim of protection under Rule 26(c)(7) of the Federal Rules of Civil Procedure,'' ten days'' notice shall be given to Microsoft prior to divulging such material in any legal proceeding (other than a grand jury proceeding) to which Microsoft is not a party.

(3) Within thirty days of the date of submission of this decree for approval by the court, Microsoft shall designate an officer of the corporation to be the antitrust compliance officer. That officer shall have primary responsibility within the corporation for achieving and maintaining full compliance with this decree and shall serve as liaison with the plaintiffs with respect to the administration of the decree. The officer may be assisted by other employees of Microsoft and will report directly to Microsoft's chief executive officer.

§ 8. Miscellaneous Provisions:

(1) This decree applies not only to Microsoft but also to each of its officers, directors, agents, employees, successors, and assigns, and to all persons in active concert or participation with any of them who shall have received actual notice of this decree by personal service or otherwise.

(2) The district court shall retain jurisdiction to enforce the decree.

(3) The decree is in the public interest.

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

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UNITED STATES OF AMERICA,)) Plaintiff,)) v.) Civil Action No. 98–1232 (CKK)) MICROSOFT CORPORATION,)) Defendant.)) ————————————————)

STATE OF NEW YORK, et al.,)) Plaintiffs,)) v.) Civil Action No. 98–1233 (CKK)) MICROSOFT CORPORATION,)) Defendant.)) ————————————————————————

DECLARATION OF KENNETH J. ARROW

Kenneth J. Arrow declares under penalty of perjury as follows:

I. INTRODUCTION

1. I am the Joan Kenney Professor of Economics Emeritus and Professor of Operations Research Emeritus at Stanford University. I received the degrees of B.S. in Social Science from The City College in 1940, M.A. in mathematics from Columbia University in 1941, and Ph.D. in economics from Columbia University in 1951. I have taught economics, statistics, and operations research at the University of Chicago, Harvard University, and Stanford University, and I have written more than 200 books and articles in economics and operations research. I am the recipient of numerous awards and degrees, including the Nobel Memorial Prize in Economic Science (1972). A significant part of my writing and research has been in the area of economic theory, including the economics of innovation and its relation to industrial organization. My curriculum vitae is attached.

2. I have been asked by ProComp to comment on various economic issues related to the Revised Proposed Final Judgment (''PFJ'' or the ''decree'') proposed by the United States, various settling States and Microsoft Corporation (''Microsoft'').

3. My review of the PFJ begins with the fact that Microsoft has been found liable for violating Section 2 of the Sherman Act by engaging in a widespread series of practices that illegally maintained its monopoly in Intel-compatible PC operating systems. These practices were focused on eliminating the threat posed to Microsoft's PC operating system monopoly by the combination of Netscape Navigator and cross-platform Java technology (''middleware competition'').

4. Given that Microsoft has been found liable for illegal monopoly maintenance, the remedies in this ease should be designed to eliminate the benefits to Microsoft from its illegal conduct. To the extent possible, the remedies should be designed to restore the possibility of competition in the market where monopoly was illegally maintained (i.e., the market for PC operating systems). In addition, the remedies should strengthen the possibilities for competition and deter the exercise of monopoly power in the present and future, taking account of the special problems of an industry in which network effects are important.

5. It is my opinion that the PFJ fails to accomplish these objectives. First, the PFJ is unduly focused on attempting to re-create an opportunity for future middleware competition. Because of network effects and path dependencies, Microsoft's monopoly power in PC operating systems is more entrenched than it was in the mid-1990s. It will be exceedingly difficult now, even with the best of remedies, to re-establish middleware fully as the kind of competitive threat to Microsoft's monopoly power that it posed in the mid- 1990s. Additional remedial steps need to be taken to ensure that Microsoft does not benefit from its illegal conduct and the consequences of that conduct on dynamic competition in the OS market Second, the PFJ does not address the fact that no effort to restore competition in the market for PC operating systems will be successful without measures designed to lower the applications barrier to entry that currently protects Microsoft's position in this market. Third, the enforcement mechanism described in the PFJ seems likely to be ineffective, even with respect to the inadequate remedies in the PFJ. Fourth, the PFJ pays insufficient attention to the ways in

which Microsoft is currently attempting to protect its monopoly power by using its illegally maintained monopoly in PC operating systems against current and future competitive threats, such as server operating systems and Web services.

6. This affidavit has six parts and is organized as follows. After this introduction (Part I), Part II reviews the threat that Netscape, Java and the Internet posed in the mid-1990s to Microsoft's monopoly power in PC operating systems. Part III then reviews the illegal conduct that Microsoft used in defeating this threat. Part III also analyzes the state of the computer industry today following this illegal conduct and explains why it seems unlikely, at this stage, that the middleware threat can be re-created. With this as background, Parts IV and V review and assess the remedies proposed in the PFJ. Part IV critiques the remedies designed to restore middleware competition. In addition, Part IV discusses the lack of attention in the PFJ to the applications barrier to entry that protects Microsoft's monopoly power in PC operating systems. It also notes certain deficiencies in the enforcement mechanism proposed in the PFJ. Part V follows with a discussion of Microsoft's efforts to protect its existing monopoly power by using its illegally maintained monopoly in PC operating systems to gain advantages in other markets that threaten to reduce the scope of its current market power. Part V explains that the PFJ gives insufficient attention to this important subject—a subject that bears on the future of competition in the computing industry. The affidavit concludes in Part VI with a summary of conclusions.

II. MICROSOFT'S MONOPOLY POWER AND THE THREAT POSED BY NETSCAPE, JAVA AND THE INTERNET

A. NETWORK EXTERNALITIES

7. Network externalities have been central to Microsoft's ability to maintain its monopoly power in the market for PC operating systems. Both the District Court and the U.S. Court of Appeals for the District of Columbia Circuit referred to the ''applications barrier to entry,'' the process by which a large installed base induces the development of applications and other complementary goods designed for the dominant operating system, which further reinforces the position of the dominant operating system. I described this process in a declaration that I submitted in 1995 on behalf of the government in a prior settlement with Microsoft:

A software product with a large installed base has several advantages relative to a new entrant. Consumers know that such a product is likely to be supported by the vendor with upgrades and service. Users of a product with a large installed base are more likely to find that their products are compatible with other products. They are more likely to be able successfully to exchange work products with their peers, because a large installed base makes it more likely that their peers will use the same product or compatible products. Installed base is particularly important to the economic success of an operating system software product. The value of the operating system is in its capability to run application software. The larger the installed base of a particular operating system, the more likely it is that independent software vendors will write programs that run on that operating system, and, in this circular fashion, the more valuable the operating system will be to consumers.

8. The applications barrier to entry implies that it is likely that a single platform (or programming environment) will dominate broad segments of the computer software industry at any point in time. This does not necessarily imply that there will be monopoly; that depends on the extent to which the dominant platform is proprietary or closed. However, if the dominant platform is proprietary (which is certainly the case with Windows), then the interdependence of applications and operating systems creates a barrier against any new entrant. A new entrant would need to create both an operating system and the applications that make it useful.

9. In addition, any customer of a new entrant would have to incur considerable costs in switching to a new system. In the first place, the customer would have to learn new operating procedures. Second, there would be a problem of compatibility of files. These factors constitute a natural obstacle to change, so that a system with a large installed base will have a tendency to retain its users.

10. The special nature of operating systems and software also gives Microsoft, because of its large installed base of operating system, a great advantage in the markets for complementary software. Specifically, it can distribute the software much more easily than its competitors. Since virtually every new PC ships with Windows, Microsoft can put its software into the hands of users by including it with the operating system. Any other vendor of complementary software that wanted to distribute through OEMs would have to cut a separate deal with each OEM, and would face the task of persuading OEMs to carry software products that may be directly competitive with products offered by Microsoft. As a result, complementary software from other vendors typically either has to be downloaded (which imposes added costs on users) or distributed separately to users in ''shrink wrap.'' In addition, Microsoft has the ability to allow Microsoft developers of complementary software access to ''hidden APIs'' -application programming interfaces in the PC operating system that Microsoft developers know about but which are not disclosed fully to competing developers of complementary software.

B. THE MIDDLEWARE THREAT: NETSCAPE AND JAVA

11. A threat to Microsoft's monopoly in PC operating systems arose in the mid-1990s with the nearly simultaneous emergence of the Internet browser developed by Netscape and the Java programming environment. These are both examples of middleware—application software designed to run on multiple operating systems and which has its own set of APIs. Middleware that provides extensive functionality through a broad set of APIs has the potential to become an alternative platform for application development If many applications valued by PC users were written to middleware APIs, and if the middleware were ported to other operating systems (existing or to be created), then the applications barrier to entry in the market for PC operating systems would be weakened.

12. Netscape Navigator was a browser that also had the potential to become a platform for application programs. Netscape's browser had its own set of APIs to which developers could write application programs.

13. The initial success of Netscape Navigator was dramatic. Netscape shipped first browser in September 1994.[1] In July 1995, less than a year later, its share of the browser market was 74%. [2] By mid-1996, Netscape's share had reached 85%. [3]

14. The threat that Netscape posed to Microsoft's monopoly power in PC operating systems was made even greater by the nearly simultaneous development of Java. The Java technology has several pieces. R is a programming language that I understand has features well suited for writing ''distributed applications''—applications that run on networks, calling upon resources located on different computers in the network. Java technology also includes the Java Virtual Machine (''JVM'') and Java Class Libraries. The JVM and Java Class Libraries are forms of middleware. They are software programs that have been implemented on Windows and many other operating systems. A JVM is software that converts Java code into instructions that can be processed by the operating system on which the JVM sits. The Java Class Libraries are software that performs specific functions that developers can call upon, and build into, their Java application programs. The JVM and Java Class Libraries are sometimes referred to collectively as the ''Java runtime environment.'' The Java technology has been licensed in a way designed to encourage its implementation on a variety of different operating systems. The Java ideal was captured in the phrase, ''write once, run anywhere.''

15. Java added to the threat posed by Netscape because it extended the set of middleware APIs to which developers could write application programs. It increased the chances that developers could write sophisticated PC application programs written to middleware APIs instead of Windows APIs. Netscape also complemented Java by serving as a distribution mechanism. The Java technology could not succeed without widespread distribution of the Java runtime environment. Because Netscape supported Java and included the Java runtime environment with every copy of its browser, growth in the share of PCs that used the Netscape browser also meant growth in the share of PCs with a Java runtime environment that supported Java's ''write once, run anywhere'' ideal.

16. The economic relationship between middleware and the OS is unusual among the commodities that economic theory usually deals with. Middleware is a complement to

[1] ''A Software Giant's March Onto the Internet,'' New York Times (Jan. 12, 1998) at CA.

[2] ''Browser Usage: How It's Trending,'' Interactive Age (Jul. 31, 1995) (citing figures compiled by Interse Market Focus).

[3] ''Microsoft v Netscape: Freer than Free,'' The Economist (Aug. 17, 1996, U.S. Edition).

any OS in the short run, but it facilitates substitution among operating systems in the long run. Middleware is a complement in the short run because it adds functionality to the existing OS, but it is in a sense a substitute in the long run, because applications can be written to it rather than to the OS. Middleware therefore permits substitution among operating systems, since the applications are not specific to any one OS. Therefore, an OS monopolist will have an incentive to control middleware in order to maintain its OS monopoly. The short-run complementarity becomes an instrument by which this incentive can be realized. The middleware has to be ported to the OS, and the OS producer's control of the needed APIs can be used to restrict the spread and use of the middleware.

17. Middleware is naturally thought of as a disruptive technology, and the emergence of middleware in 1995 created what is frequently referred to as an ''inflection point.'' Put simply, this means that the then well-defined organization of the software market for personal computers might be altered substantially, or at least such a risk existed. As that organization was centered on the Microsoft Windows operating system and its productivity application suite Microsoft Office, Microsoft had the most at risk from any disrupting change that resulted from middleware.

18. Technological disruptions such as the middleware threat of the mid- 1990s do not occur frequently. They only arise when there is an important innovation that allows technology to evolve and create new products or functionality that has widespread appeal. At times of technological disruption, the forces of dynamic competition can play an especially important role. The Netscape browser and the cross-platform Java technology separately and in combination had the potential to develop into an alternative platform for application programs that could run on any operating system and which could transform PC operating systems into a commodity business. Bill Gates, in his memorandum of May 26, 1995 on the ''Internet Tidal Wave,'' described just this sort of dynamic competitive threat when he realized that, if successful, Netscape could ''commoditize'' the operating system.

19. There is no easy method by which an economist can determine exactly how significant a threat Java and Netscape actually represented to Microsoft's operating system monopoly. A precise determination of whether Netscape and Java could have succeeded in eroding Microsoft's monopoly power absent Microsoft's illegal conduct would require a counterfactual analysis that addressed a variety of complex interrelations. However, even without this kind of analysis, we have evidence that a reasonably expert onlooker felt the threat was serious, namely, the statements and behavior of Microsoft. Bill Gates, in his memorandum on the ''Internet Tidal Wave,'' explained:

A new competitor ''born'' on the Internet is Netscape. Their browser is dominant, with 70% usage share, allowing them to determine which network extensions will catch on. They are pursuing a multi-platform strategy where they move the key API into the client to commoditize the underlying operating system .... One scary possibility being discussed by Internet fans is whether they should get together and create something far less expensive than a PC which is powerful enough for Web browsing.

20. In the same memorandum, Gates made clear that he understood how Microsoft should leverage its Windows advantage to bolster its Internet position:

We need to move all of our Internet value added from the Plus pack into Windows 95 as soon as we possibly can with a major goal to get OEMs shipping our browser preinstalled. This follows directly from the plan to integrate the MSN and Internet clients. Another place for integration is to eliminate today's Help and replace it with the format our browser accepts including exploiting our unique extensions so there is another reason to use our browser.

21. To summarize, in an industry marked by network externalities, there is a strong tendency to monopoly (at least when the dominant platform is proprietary or closed). The consumer welfare and efficiency losses associated with monopoly are well known, but the one most relevant here is the decreased incentive to technological innovation. It is all the more important to encourage what may be called dynamic competition, the entry of new firms and new products. At certain periods, whether due to technological innovation or to a transient situation in which the tendency to monopoly has not yet worked to its completion, the market will be confronted with alternative lines of development; Netscape Navigator and Java as against Microsoft products in 1995, client-server networks and web services today. At these periods, there may be opportunities for a new platform to compete with and possibly take over from the existing one. In view of the strong tendency to monopoly in this industry (because of network externalities), it is all the more important to keep the competition as viable as possible when the opportunity presents itself. In particular, illegal anticompetitive steps by existing monopolists should be prevented to the maximum extent possible. Such a policy prevents the stagnation of existing monopolists and encourages the expansion of the number of alternatives among which the buyers can choose.

III. MICROSOFT DEFEATED THE THREAT POSED BY NETSCAPE AND JAVA

A. MICROSOFT'S ILLEGAL PRACTICES

22. Microsoft made a concerted effort to eliminate the threat from middleware competition. Microsoft was found to have engaged in illegal conduct exactly at the moment that dynamic competition might have flourished. As the DC Circuit concluded, Microsoft took illegal steps to exclude the middleware threat, and in particular, took anticompetitive actions directed against Netscape Navigator and Java. In particular, the DC Circuit judged illegal significant elements of Microsoft's strategy:

a) By barring original equipment manufacturers (''OEMs'') from removing access to Microsoft's Internet Explorer (''IE'') browser from the Windows desktop, Microsoft prevented many OEMs from installing Navigator or other browsers, and that in turn protected Microsoft's OS monopoly by reducing potential middleware competition. This violated Sec. 2 of the Sherman Act.

b) By preventing OEMs from altering the initial boot sequence for Windows, Microsoft prevented OEMs from promoting Internet access providers, many of whom were using and distributing Navigator to their customers. Again, this reduced competition with IE and protected Microsoft's OS market power in violation of See. 2.

c) Through commingling software code for Windows with that of Internet Explorer, Microsoft deterred OEMs from installing Navigator. That, in turn, reduced Navigator's usage share, and thereby protected the applications barrier to entry by reducing developer's interest in the APIs exposed by Navigator. Microsoft also removed Internet Explorer from its Add/Remove utility, further entrenching Internet Explorer and further discouraging OEMs from distributing Navigator. The DC Circuit found these actions to be anticompetitive and to support a finding of liability for exclusionary conduct and therefore monopolization under Section 2.

d) By entering into contracts with Internet access providers that foreclosed Navigator's access to an economically significant share of the Internet access provider (''IAP'') market, Microsoft engaged in exclusionary conduct in protection of its OS monopoly, again in violation of See. 2.

e) By entering into contracts with independent software vendors that required those independent software vendors (''ISVs'') to use Internet Explorer if the ISV need web display, Microsoft further foreclosed distribution of Navigator, again in protection of its OS monopoly, in violation of See. 2.

f) By entering into an exclusive distribution contract with Apple for Internet Explorer after Microsoft had threatened to cancel the Macintosh version of Office, Microsoft engaged in exclusionary conduct in protection of its OS monopoly in violation of Sec. 2.

g) Through a number of exclusionary actions directed at Java, Microsoft limited Java's viability as a cross-platform threat and did so in violation of Sec. 2. Those actions included: limiting distribution of ''write once, run anywhere'' JVMs directly through exclusionary contracts with ISVs and indirectly through Microsoft's actions against Netscape; deceiving developers who wanted to develop pure Java code into writing code with Windows-specific extensions that would make the code Windows dependent; and threatening Intel and inducing it to stop developing Intel multimedia software for Java.

B. THE STATE OF THE MARKET TODAY

23. As of 1995, Microsoft's share was of the installed base of PC operating systems was 87%,[4] while its share of the Internet browser market was less than 5%.[5] Today, those figures stand at 92% for PC operating

[4] Dataquest, ''All Platform Operating Systems Sales History and Forecast Summary,'' Table 12 (Mar. 1997).

[5] ''Microsoft v Netscape: Freer than Free,'' The Economist (Aug. 17, 1996, U.S. Edition).

systems [6] and 91% for browsers.[7] Thus Microsoft's position in PC operating systems remains strong, while its share in Interact browsers has risen dramatically.

24. Microsoft's illegal practices were successful in helping to minimize the threat that middleware posed for the creation of a programming environment outside of Microsoft's control. I am aware of no middleware today that poses a risk to Microsoft comparable to that posed by Navigator and Java in 1995. Nor does the government's Competitive Impact Statement suggest that such a threat exists today or is likely to emerge over the five-year duration of the PFJ.

C. MICROSOFT'S MIDDLEWARE ADVANTAGES

25. Microsoft today has substantial advantages in middleware that make it unlikely the market itself will generate new entrants into middleware capable of re-creating the competitive risk faced by Microsoft in 1995. As noted earlier, through its control over Windows, Microsoft has had and under the PFJ will continue to have—an enormous advantage in the distribution of software that is complementary to Windows. Since every new PC ships with Windows, Microsoft has a very easy way to get software into the hands of users: it can include it with the operating system. Microsoft can simply bundle the middleware with Windows or it can integrate the code into Windows itself.

26. This ensures the ubiquity of Microsoft middleware and operates as a harrier to entry for competing middleware. Any entrant would have to make a substantial investment to achieve comparable widespread distribution. A firm considering entry should understand that its inability to guarantee a universally exposed set of APIs means that, all other things equal, developers would prefer to write to the APIs exposed by Microsoft middleware. The ubiquity of Microsoft middleware and its ability to integrate middleware into Windows—which the PFJ does not constrain—therefore operate as economic disincentives for the development of competing middleware by potential entrants.

27. Microsoft also has complete freedom in how it prices its middleware. In bundling middleware with Windows, Microsoft need not charge an incremental price for the middleware. It can simply fold into the price of Windows whatever price it would charge for the middleware were it distributed separately. This would not be an option available for a potential entrant who will expect that it would need to establish a separate, discrete positive price for any middleware that it might create. The ability of Microsoft to set an apparent price of zero for its middleware operates as a barrier to entry in middleware.

28. Even if competing middleware were created, the ubiquity of Microsoft middleware would operate as a direct barrier of the distribution of that middleware. As the DC Circuit affirmed, OEMs are reluctant to install two products that perform the same function, as this raises support costs. Twice as many products will be supported for the same function, plus consumers may be confused by the presence of both products.

29. Moreover, Microsoft's ability to ''embrace and extend'' any middleware created by an entrant also operates as a barrier to entry. Again, it will take a substantial amount of time for an entrant to distribute innovative middleware. During that time, Microsoft will likely be able to imitate that middleware and distribute ''updated'' versions of Microsoft middleware over the Internet to end users through its Windows Update feature. Given this, entry into middleware is less likely and this may reduce innovation in and development of middleware.

30. In sum, Microsoft took substantial steps to eliminate the threat posed to it by Netscape and Java. The DC Circuit affirmed that a substantial number of those actions constituted impermissible monopoly maintenance and therefore monopolization in violation of Section 2 of the Sherman Act. Today, Microsoft's illegally maintained monopoly operates as a substantial barrier to new entry into middleware. The monopoly operates as a disincentive for entry and thereby likely reduces innovation in middleware. Given this market structure, it is highly unlikely that market forces alone will lead to the development of innovative middleware that creates the same competitive risk to Microsoft that it faced from Navigator and Java in 1995.

IV. THE RESTRICTIONS ON MICROSOFT'S BEHAVIOR CONTAINED IN PFJ ARE INSUFFICIENT TO RESTORE THE COMPETITIVE THREAT THAT MIDDLEWARE POSED IN 1995

31. No remedy can turn back the clock to 1995 and re-create the competitive threat that existed at that crucial time of technological disruption. Technological disruptions of the magnitude that Bill Gates called ''the Interact tidal wave'' cannot be created by judicial proceedings. Even so, one of the objectives of the remedies should be to attempt to restore, to whatever extent possible, the possibility of competition in the market where the illegal monopoly was maintained (i.e., the market for PC operating systems). The restrictions on Microsoft's behavior in the PFJ fall well short of this objective.

A. PROBLEMS WITH THE M1DDLEWARE REMEDIES

32. Following its years of illegal conduct, Microsoft's position in the core middleware products (Internet browsers and Java technology) is totally different today than it was in 1995. Microsoft has a dominant share of the browser market, IE has caught up to and surpassed Navigator's technical capabilities, and the prospect of large numbers of desktop applications written in ''write once, run anywhere'' Java seems remote.

33. There are two features of the industry that made the threat from Netscape and Java so significant First, the technological disruption of the Internet made the functionality of the browser sufficiently important that it could become a platform for large numbers of applications. Second, the head start that Netscape and Java had over Microsoft middleware provided a substantial first-mover advantage, a particularly important element for competitive success in network industries prone to ''tipping.'' Probably the only chance a competitor has to overcome the inherent advantages that Microsoft has in distribution is to create a large installed base of users before Microsoft can develop and launch a competitive product.

34. The market position that Microsoft has today makes it difficult for any set Of conduct remedies to lead to significant middleware competition. Neither the PFJ nor any other set of conduct remedies can re-create the technological disruption or competitive head start that existed before Microsoft acted illegally. However, for the reasons explained below, the middleware remedies in the PFJ seem especially likely to he ineffective.

1. The Reliance in the PFJ on OEMs to Distribute Competing Middleware

35. The PFJ relies heavily on competition in the OEM distribution channel as the key mechanism for overcoming the competitive harm created by Microsoft's actions. The same was true in the government's prior settlement with Microsoft, as I noted in my 1995 declaration: Despite the importance of natural advantages [referring to the installed base discussion above] in the market for IBM-compatible PCs, the complaint and proposed remedies addressed competitive issues that are critical to the success of new competition in this market. The most effective and economic point of entry for sales of IBM-compatible PC operating systems is the OEM distribution channel. New operating system software products should have unimpeded access to this channel. The Government's complaint and proposed settlement provide needed relief to facilitate the entry of new competitors, such as IBM's OS/2.

36. Seven years later, it is clear that little was accomplished in the prior consent decree in relying on the OEM channel to facilitate competition in PC operating systems. Unimpeded access to this channel may indeed he necessary for effective competition. However, it is far from sufficient to create effective competition for middleware given the current state of the industry.

37. One obstacle to competition in middleware, which the PFJ does not address, is the applications barrier that now protects the position of Microsoft middleware. ISVs have a strong incentive to write applications to Microsoft middleware, since Microsoft middleware will be present on every Windows machine that is shipped. The PFJ does not restrict Microsoft's ability to commingle code and include middleware APIs in with its Windows operating system. The PFJ permits OEMs to remove Microsoft middleware icons, but the middleware itself, and its associated API set, will remain. Thus, the ubiquity of Microsoft's middleware will encourage ISVs to write applications to these APIs.

38. The PFJ restricts Microsoft's ability to discriminate against OEMs that also ship

[6] IDC, ''Worldwide Client and Server Operating Environments, Market Forecast and Analysis, 2001–2005'' (Aug. 2001).

[7] ''AOL Files Suit Against Microsoft For Damages Inflicted on Netscape,'' Wall Street Journal (Jan. 23, 2002) (citing data compiled by WebSideStory, a market research firm).

competing middleware, but this does not create an incentive for OEMs to ship competing middleware. For the reasons explained by the District Court and the Court of Appeals, OEMs are reluctant to include software that provides similar functionality to other software on the machine—it increases confusion among users and raises support costs.

39. If ISVs do not write applications to the competing middleware, OEMs will not distribute it. If OEMs do not distribute it, ISVs will not write applications to it. The current dominance of Microsoft middleware thus makes it very unlikely that this circle can be broken by the non-discrimination restrictions in the PFJ.

40. The PFJ also seeks to increase the role of OEMs in defining the Windows desktop. This is also insufficient to create significant middleware competition. Even if OEMs had complete control over the icons that would appear on the Windows desktop—-and they would not under the PFJ—this would not alter in any way the software that would actually be present on the computer. Removing an icon from the desktop just removes the most obvious point of consumer access to the software, but the ability of ISVs to write to the APIs presented by the software remains unchanged.

41. The PFJ also attempts to prohibit Microsoft from discriminating against OEMs that distribute competing middleware. It does this by requiring Microsoft to provide uniform licensing terms to the 20 largest OEMs and preventing specific retaliation against OEMs that distribute competing middleware. It is not clear to me that these restrictions are sufficient to prevent Microsoft from exercising influence over the behavior of OEMs towards products that compete with Microsoft. First, I understand that the non-discrimination provisions apply only to certain Windows desktop operating systems (Windows XP and Windows 2000 Professional) and not to other Microsoft products that an OEM might purchase. Second, the relationships between Microsoft and OEMs are complex and multi-faceted. For example, Microsoft provides marketing and promotion support to OEMs; its provides technical assistance; its provides allowances for product development Microsoft may provide these services differently to OEMs. Since the PFJ does not prohibit all forms of discrimination across OEMs, Microsoft may have sufficient ability to influence OEM decision-making.

42. The PFJ also contains limited disclosure requirements. The exact scope of these disclosures depends on careful interpretation of the complex language of the PFJ. I do not attempt such an interpretation but comment only on the limited impact of the disclosure remedies under any reasonable interpretation. There is a requirement to disclose interfaces that permit competing middleware to interoperate with Windows operating systems. I understand, however, that Microsoft is only required to make these disclosures if the interface is already in use by a Microsoft middleware product. A disclosure requirement limited in this manner pushes potential middleware competitors in the direction of ''me too'' products and does little to create incentives for significant innovation in middleware.

2. IE Open Source and Java Must-Carry

43. There are alternative middleware remedies that could have a more significant effect. More aggressive remedies with respect to that middleware threat would be open source Internet Explorer and a requirement for Microsoft to distribute the most current version of the standard Java runtime environment with IE and Windows. Even these remedies are likely to be insufficient to turn back the clock to the level of competition that existed before Microsoft's illegal conduct. But they are likely to have more impact than the remedies in the PFJ.

44. Open source IE is the most effective way to fully expose the links between IE and Windows as well as the IE APIs. This creates the possibility of interoperability between competing products and it furthers the possibility of operating system competition. It also allows anyone who wants to develop a competitive browser to be fully compatible with applications that are written to IE APIs. This way it limits the extension of the applications barrier to entry created by Microsoft's dominance in the browser.

45. The Java must-carry remedy works to erode the application barrier to entry by helping to overcome reluctance of ISVs to develop programs that require Java on the client. It is only by assuring sufficient ubiquity of Java and browser functionality that there is any chance that Microsoft may lose control of the applications barrier through competing middleware.

B. INATTENTION TO THE APPLICATIONS BARRIER TO ENTRY

46. The applications barrier to entry identified by the DC Circuit consists in part of the large number of applications available on the Windows platform. As discussed above, successful entry in middleware of the type commenced by Netscape Navigator and Java could have substantially eroded the applications barrier to entry and facilitated entry into the operating systems market

47. Microsoft controls the most economically important set of applications in its Microsoft Office suite. Office accounts for nearly 30% of Microsoft's annual revenue.[8] Software suites consisting of personal productivity applications such as word processing, spreadsheets, presentation software, electronic mail, and calendar and contact management constitute a distinct and relevant product market. Microsoft's share of that market today is in the mid-90s [9] and Microsoft almost certainly holds substantial market power.

48. As found by the DC Circuit, Microsoft has used its control over Office to maintain its OS monopoly. Microsoft threatened to cancel the Macintosh version of Office if Apple did not distribute Internet Explorer, Microsoft's Internet browser. It is clear that Microsoft's ability to make such threats would be diminished if Microsoft had an obligation to license the rights to port Office to competing OS platforms.

49. Since remedies focused entirely on middleware will not re-create the threat to Microsoft's monopoly power in PC operating systems that existed prior to Microsoft's illegal conduct, additional actions need to be taken to ensure that Microsoft does not benefit from its illegal conduct. These additional actions should be targeted at further reducing the underlying source of Microsoft's market power, namely the applications barrier to entry. Porting Office to other platforms would be a remedy of this type that could have a significant impact on the applications barrier. One factor that limits the demand for Unix workstations, which have computational advantages over Intel-based PCs, is the inability to interoperate with Office. The thin-client model of computing, where most computing occurs on the server, not the client, represents one of the most important threats to Windows desktop computing. The switching costs of adopting new personal productivity software with files not compatible with Office represents a significant barrier to Unix-based thin client networks. A requirement to license the rights to port Office may be one of the most effective ways to create competition for Windows, something which can probably no longer be achieved by remedies exclusively related to middleware.

C. PROBLEMS WITH THE ENFORCEMENT MECHANISM

50. The remedies in the PFJ are too limited in scope to re-create past competitive conditions even if they are enforced perfectly. However, the enforcement mechanisms in the PFJ are far from perfect and will likely lead to delays and costs that further limit the effectiveness of the remedies. The PFJ relies on a technology committee to oversee Microsoft's compliance with the PFJ. The membership in the committee is controlled 50% by the company whose past illegal activities have been the subject of the Circuit Court's decision. The committee lacks both resources and the power to enforce the PFJ. The committee must rely on information provided to it by Microsoft and has tittle ability to engage in its own investigations. Furthermore, if it uncovers a violation, it must rely on lengthy litigation to enforce it.

51. The implication is that failures by Microsoft to comply may go undetected and if they are detected, it may take a great deal of time and effort to impose a change on Microsoft's behavior. Delays can greatly limit the effectiveness of any particular remedy in a dynamic industry subject to network effects. If enforcement will be ineffective, it may create an incentive for Microsoft to violate the terms of the decree.

52. Other consent decrees have used special masters with sufficient resources and expedited judicial review to enforce their terms. Given the complex, dynamic nature of

[8] Dresdner Kleinwort Wasserstein, ''Microsoft Corporation,'' Figure 4 (1 Aug. 2001).

[9] In 1999, Microsoft accounted for 96.1% of the revenues of office suites designed for Windows. Since 98.1% of all sales of office suites in 1999 were for the Windows platform, these figures by themselves imply an industry share of 94%. But Microsoft also accounted for a large share of the revenues of office suites designed for Apple's Macintosh OS—a platform that accounted for nearly all of the non-Windows sales of office suites. IDC Office Suite Market Review and Forecast, 1998–2003 (Aug. 1999).

the software industry, it is especially important that the resources are in place to monitor the terms of the decree and that swift enforcement is possible.

V. APPROPRIATE REMEDIES SHOULD NOT ALLOW MICROSOFT TO PROTECT ITS ILLEGALLY MAINTAINED MONOPOLY AGAINST CURRENT AND FUTURE COMPETITION FROM OTHER MARKETS

53. The PFJ focuses on the PC desktop as the central space in which competition will take place going forward. It does this by creating limited new operating fights for OEMs covering the appearance of the desktop and greater protections for installing middleware that competes with Microsoft. As I have discussed above, given the substantial advantages in middleware that Microsoft has through its illegally maintained monopoly, I think that it is unlikely that these desktop-oriented remedies will spur economically meaningful entry in middleware and that there is therefore little reason to think that those remedies will re-create the competitive risk Microsoft's desktop monopoly faced from middleware entrants in 1995.

54. The PFJ therefore needs to be augmented with remedies that take a forward-looking approach. The PFJ needs to focus on the current and future threats to Microsoft's market power and ensure that Microsoft is not allowed to use its illegally maintained monopoly in PC operating systems to dilute these current and future competitive threats. A PFJ focused on desktop remedies not only will not jump start competition now, but by allowing Microsoft to keep the benefits of its illegal activities, such remedies will fail to deter future illegal anticompetitive actions by Microsoft. Instead, additional remedies should naturally be directed at ensuring competition going forward uninfected by Microsoft's illegally maintained monopoly. In particular, these remedies should seek to re-create the same risks faced by Microsoft in 1995 when the middleware threat arose.

A. FUTURE COMPETITION IN SERVERS AND WEB SERVICES

55. A forward-looking remedy should seek to limit Microsoft's ability to use its illegally maintained monopoly power to bias competition in complementary products that have the potential to develop into substitutes for desktop computers. Server operating systems and Web services are two prime examples. These products intersect at the middle of two related trends. To date, the Internet has been a PC Internet. Most Internet users access the Internet through a PC or workstation. The first trend is a probable shift to the use of many devices to access the Internet, including cell phones, handhelds such as the Palm Pilot and other personal digital assistants, and thin clients. As these devices themselves are not as powerful as a typical PC, they will demand more work from the servers and server operating systems delivering the information. The implication is that, in the future, a significant amount of computing will bypass the desktop—which in turn implies that Microsoft has an incentive (if it can) to extend its monopoly from the desktop into servers.

56. The second trend is a related shift in how software is owned and managed. Prior to the Internet, PC software and content was largely locally owned and locally managed. The software was installed directly on the user's PC, from a floppy disk and then later a CD. The rise of the Internet makes it possible to move the location of software off of the PC and onto a remote device—-a server—with much of the work done remotely. This gives rise to the generalized notion of a web service, where software is no longer a thing like a CD but instead a service delivered to a connecting device, much the way electricity is delivered to many devices.

57. On November 29, 2001, Steve Ballmer, Microsoft's CEO, discussed these trends and how Microsoft was approaching them through its .NET initiative:[10]

About three years ago we changed the vision of our company. Instead of talking about a computer on every desk and in every home we started talking about empowering people through software anytime, any place, any device .... It starts with a view, which came to us quite clearly about five, almost six years ago now that XML [eXtensible Markup Language] would really be the transforming industry phenomenon of the next five years. If it was the PC 20 years ago and graphical user interface 10 or 15 years ago and the Internet five or six years ago, it's XML. And I'm not going to give a long description, but I think the way you should think about it is XML will be the Lingua Franca of computing. It will be the basis on which systems work better with systems, people with people, businesses with businesses, businesses with consumers. It will improve the level of integration and connectivity. It gives us a framework at least for the software community to build the software that allows that ..... NET is our platform to let people take advantage of the XML revolution.

58. Ballmer also discussed the Microsoft business model and how .NET fits within it. He sees Microsoft as targeted on seven business areas, including, unsurprisingly, PC operating systems, PC productivity solutions ''anchored'' by Office, and server software for building and deploying these applications. All of these are now being organized around .NET: I think you could say we are a company that invests in seven businesses around one platform. That platform is .NET..NET is our platform for the next technology revolution that is going on. And that is the shift to the XML web service model as the fundamental way of building and deploying software..NET is our platform to do that .... That's how we think about the seven business areas in which we are investing. They're all being re-platformed or re-plumbed around .NET and XML web services.

59. A computing world in which Web services, hosted on servers, are delivered on demand over the Internet is a world that has negative implications for Microsoft's near-monopoly in desktop operating systems. In such a world, there is no longer the same need for desktop computers to have ''fat'' operating systems such as Windows. In many respects, the Web services model is simply a more developed version of the thin-client, ''network computer'' model advocated by Oracle and Sun in the mid/late-1990s. As such, the Web services model is a threat to Microsoft's desktop monopoly and Microsoft therefore has an incentive (if it can) to use its existing monopoly to gain control over this possible threat. It has an incentive to ensure that Windows remains at the center of the Web services model and/or to migrate its monopoly from the desktop to Web services.

B. MICROSOFT IS ATTEMPTING TO PROTECT ITS EXISTING MARKET POWER BY USING ITS ILLEGALLY MAINTAINED MONOPOLY IN PC OPERATING SYSTEMS TO GAIN ADVANTAGES IN SERVERS AND WEB SERVICES

60. Microsoft's illegally maintained monopoly in the market for PC operating systems provides it with important advantages in server operating systems, in particular operating systems for workgroup servers. Workgroup servers are the servers in a ''client-server'' network that interoperate directly with desktop clients. Workgroup servers provide services such as authentication and authorization, directory, and file and print. Very importantly, they are also the point of contact or gateway between an organization's network of servers and the Internet. Workgroup servers are distinct from enterprise servers, which are more powerful, reliable and expensive servers that handle databases and other ''mission critical'' applications.

61. Some of Microsoft's advantages in workgroup server operating systems arise because of the distribution advantage provided by its monopoly in PC operating systems. Suppose a vendor of workgroup operating systems develops a new feature (such as a new directory service for keeping track of the users and resources on a network or a new security system for authentication and authorization). In the usual case, the network cannot make use of the new service in a server operating system unless certain new code (supplied by the vendor of the server operating system) is also installed on the clients in the network. In large networks, this can be a costly and time-consuming exercise—unless the network is running Windows on its servers. A network that runs Windows on its servers does not face this kind of problem because Microsoft ensures that the client-side pieces of server-side technologies are built into its Windows desktop operating system. This gives Microsoft a competitive advantage over other vendors of workgroup server operating systems. But it is an advantage that derives from Microsoft's illegally maintained monopoly in PC operating systems. Moreover, there may be significant long-run costs through the adverse effect that Microsoft's distribution advantages (derived from its illegally maintained monopoly in desktop operating systems) may have on incentives to invest in server-side innovation.

62. There are other ways in which Microsoft's past illegal conduct has provided it with advantages today in the market for workgroup server operating systems—advantages that help protect and enhance Microsoft's existing market power. For

[10] S. Ballmer speech, Credit Suisse First Boston Technology Conference (Nov. 29, 2001) (http://www.microsoft.com/msft/speech/BallmerCSFB112901.htm).

example, one of the benefits to Microsoft from the defeat of Netscape's browser was the resulting reduction in demand for Netscape application programs for servers. These server-side applications were designed to interoperate with the Netscape browser and certain client-side applications, such as e-mail, written to the Netscape Navigator APIs. Unlike Microsoft's server-side applications (such as Exchange) that run only on Windows, Netscape's server-side applications were implemented on multiple platforms, including Unix and Novell's NetWare. As Netscape's share of the browser market declined following Microsoft's illegal conduct, the demand for Netscape's server applications also declined. Thus a consequence of Microsoft's illegal conduct has been an increase in the demand for Microsoft server-side applications such as Exchange that, as mentioned above, run only on Windows server operating systems. Put differently, Microsoft's past illegal conduct towards Netscape is helping Microsoft establish an applications barrier that will protect and enhance its future position in the market for workgroup server operating systems.

63. Another way in which Microsoft's past illegal conduct affects the market for workgroup operating systems today involves distributed application programs. As I mentioned before, Java is a programming language with features that I understand make it well suited for distributed applications, i.e., applications that call upon resources located on multiple different computers located around a network. As I understand it, for distributed applications to work, they need to conform to a particular set of protocols, and these protocols need to be supported by the operating systems of the computers involved in executing the distributed application. Java had protocols for distributed applications (RMI and CORBA) that were supported by multiple operating systems. Microsoft had an alternative, proprietary set of protocols called DCOM. By interfering with the development of cross-platform Java, Microsoft gave an advantage to its framework for distributed applications (DCOM) and promoted the development of distributed applications written to protocols that run only on Windows operating systems. In addition, since the programs that are written to these Microsoft protocols are targeted for computers using the Windows operating system, such programs also make use of Windows APIs. This means that even if rival operating systems were given the ability to support DCOM, they could not run most of the distributed applications written to this protocol because these applications also make use of Windows APIs. Thus this is another example of how Microsoft's past illegal conduct, this times towards Java, is helping Microsoft establish an applications barrier that will protect and enhance its future position in the market for server operating systems.

64. Microsoft's past illegal conduct has also given it advantages today in Web services. For example, one of the Web services that Microsoft has promoted heavily is Passport, its Internet authentication and authorization service. In a network environment, key issues are verifying the identity of users or computers (''who are you?'') and determining the resources to which you are entitled to have access (''what are you authorized to do?''). Passport is an authentication and authorization service targeted, at least initially, at e-commerce. Consumers who subscribe to Microsoft's Passport service will have their name and credit card information on file on servers controlled by Microsoft. E-commerce vendors who participate in Passport will have back office connections with the Microsoft servers so that, when a consumer who subscribes to Passport wants to purchase something, the e-commerce vendor can check with Microsoft's Passport servers to authenticate and authorize the purchase (and debit the consumer's credit card). The theory is that Passport will simplify e-commerce transactions.

65. For Passport to be successful, Microsoft needs to have a large base of consumers who subscribe to the service. A large base of consumers will make firms engaged in e-commerce interested in joining Passport on the vendor side, which in turn will make Passport more attractive to consumers. Thus there are potential network effects which, if they get started, may result in Passport being in the middle of a very large volume of Internet transactions.

66. Microsoft is actively using its illegally maintained monopoly in PC operating systems as a vehicle for enrolling consumers in Passport. Every time a consumer boots up a new copy of Windows, the consumer is asked multiple times whether he or she would like to sign up with Passport. In addition, the consumer is told that he or she will not receive information about product upgrades unless the consumer signs up for Passport. Thus this is an example in which Microsoft is using the distribution advantages that it has by virtue of its illegally maintained monopoly in PC operating systems to gain advantages in Web services. In so doing, Microsoft helps protect its existing monopoly power and/or helps migrate its market power from the desktop to Web services.

C. THE PFJ GIVES INSUFFICIENT ATTENTION TO FUTURE COMPETITION

67. The implications of these trends are significant. Microsoft's monopoly in desktop operating systems provides it with advantages in adjacent markets that Microsoft is able to use to protect and enhance its illegally maintained monopoly power. By migrating its monopoly from desktop operating systems into server operating systems and Web services, Microsoft can help ensure that its future market power is comparable to (or greater than) the market power it possessed when the desktop was the principal hub of computing activity.

68. Given these links between Microsoft's past illegal conduct and Microsoft's future market power, an appropriate remedy should be focused on limiting Microsoft's ability to use its illegally maintained monopoly to gain advantages in products in other markets that have the potential to become substitutes for the Windows desktop operating system. Disclosure remedies have the potential to be an important step in this direction. For example, if Microsoft were required to fully disclose the interfaces and protocols used by its server and client operating systems, then vendors of non-Microsoft server operating systems could design their products so that they could interoperate smoothly in networks populated by Windows clients and servers. The resulting competition among vendors of server operating systems would help ensure that servers remain a threat to Microsoft's illegally maintained monopoly in desktop operating systems.

69. The PFJ does not ignore completely issues related to adjacent markets. The PFJ does require disclosure for communication protocols that allow for servers to interoperate with Windows operating systems. This requirement, in contrast with the other provisions of the PFJ, appears to focus more on the server operating system market than competition in middleware. I understand, however, that the disclosure requirements proposed in the PFJ are exceedingly narrow mad ultimately inadequate to allow full and equal interoperability for competitive server operating systems or Web services architectures.

70. In designing disclosure remedies (or any other remedy), it is important to remember that one is try to cure the consequences of past illegal conduct. As a result, there is no reason to be troubled by remedies that impose obligations that one would be reluctant to impose on other firms. Against this background, it seems reasonable to consider a remedy that requires disclosure sufficient to allow competitive products to interoperate with Microsoft software on an equal basis as Microsoft's own products. It is not clear that even this would be enough to offset the advantages that Microsoft has gained for itself in adjacent markets through past illegal conduct and which serve to protect and enhance its existing market power. But it seems like a reasonable step.

VI. SUMMARY OF CONCLUSIONS

71. As the DC Circuit found, Microsoft violated Sec. 2 of the Sherman Act in impermissibly maintaining its monopoly through actions designed to eliminate the threat to that monopoly posed in the mid 1990s by competition from Netscape Navigator and Java middleware. Given that finding, the remedies in this case should eliminate the benefits to Microsoft of its illegal conduct; should restore, if possible, the possibility of competition in operating systems; and should not allow Microsoft to protect its illegally maintained monopoly from current and future competition in related markets, such as server operating systems and Web services. In my opinion, the PFJ fails to accomplish these objectives.

72. The PFJ focuses on the desktop and on re-creating the possibility for middleware competition by giving OEMs freedom with regard to icon display and more limited freedom in installing and using non-Microsoft middleware. In doing so, it ignores the reality that Microsoft's market position in browsers and other middleware is substantially stronger today than it was in 1995. I know of no competing middleware today—and none is suggested in the Competitive Impact Statement—that begins to enjoy the time-to-market and market

presence advantages held by Netscape Navigator and Java in the mid-1990s. The PFJ does nothing to address the powerful distributional advantage that Microsoft alone has and which ensures that its middleware will be ubiquitous. That ubiquity operates as an unchecked barrier to entry and reduces the incentive for others to create innovative, competitive middleware. I therefore see no reason to think that the PFJ will succeed in spurting a new middleware threat to the Microsoft operating system or in denying Microsoft the fruits of its illegally maintained monopoly.

73. The PFJ ignores remedies that could have a more significant effect in middleware markets, in particular, remedies that require Internet Explorer to be open source and that require Microsoft to distribute the most current version of the Java runtime environment with IE and Windows. Although these remedies are unlikely to fully restore the competitive threat posed by middleware before Microsoft's illegal activities took place, these remedies would likely have a greater impact than those set forth in the PFJ.

74. More fundamentally, the PFJ does nothing to address the applications barrier to entry that defines Microsoft's monopoly in PC operating systems. Microsoft also controls the most economically important set of applications for Windows through its control over Microsoft Office. As the DC Circuit found, Microsoft used that control to protect its operating system monopoly through threats against Apple. It is clear that Microsoft's ability to make such threats would be diminished if Microsoft has an obligation to license the rights to port Office to competing operating systems. Indeed, porting Office to other operating systems is a remedy that could have a significant impact on the applications barrier to entry.

75. In addition, the PFJ should focus on the current and future threats to Microsoft's market power and ensure that Microsoft cannot use its illegally maintained monopoly to stifle such threats. This case makes clear that those threats are likely to come from products that are complements to Windows in the short run and potential competitors in the long run. That was precisely the position of Netscape Navigator and Java in 1995; today, based on Microsoft's public statements, that may be the position of server operating systems and Web services. Both of these represent a move away from a computing structure organized around desktop computers using ''fat'' operating systems such as Windows. Server operating systems and Web services represent an evolution of the thin-client model of computing, and as such, represent a threat to Microsoft's desktop monopoly. Microsoft is currently attempting to defeat this threat by using its illegally maintained monopoly in PC operating systems as a vehicle for expanding its market share in servers and attaching consumers to its Web services infrastructure. The PFJ is missing forward-looking remedies that address such efforts by Microsoft to protect and enhance its existing market power by using its illegally maintained monopoly in PC operating systems to defeat competitive threats in adjacent markets. This is a significant hole in the PFJ that bears on the future of competition in the computing industry.

I hereby affirm under penalty of perjury that the forgoing is true and correct to the best of my knowledge, information and belieú Executed this 25th day of January, 2002 in Palo Alto, California.

Kenneth J. Arrow

BIOGRAPHICAL SKETCH

KENNETH J. ARROW

Personal

Born: 23 August, 1921

Wife's name: Selma

Children: David Michael and Andrew Seth

Education

B.S. in Social Science, City College, New York, 1940. Major: Mathematics.

M.A., Columbia University, 1941. Field: Mathematics.

Ph.D., Columbia University, 1951. Field: Economics.

Positions

Captain, U. S. Army Air Corps, 1942–46 (Weather Officer). Research Associate, Cowles Commission for Research in Economics, 1947–49.

Assistant Professor of Economics, University of Chicago, 1948–49.

Consultant, the RAND Corporation, 1948-date.

Acting Assistant Professor of Economics and Statistics, Stanford University, 1949–50.

Associate Professor of Economics and Statistics, Stanford University, 1950–53.

Professor of Economics, Statistics, and Operations Research, Stanford University, 1953–68

Economist, Council of Economic Advisers, U. S. Government, 1962.

Visiting Professor of Economics, Massachusetts Institute of Technology, Fall, 1966.

Fellow, Churchill College (Cambridge, England), 1963–64, 1970, 1973, 1986.

Guest Professor, Institute for Advanced Studies, Vienna, June 1964, June 1970.

Professor of Economics, Harvard University, 1968–74.

James Bryant Conant University Professor, Harvard University, 1974–79.

Joan Kenney Professor of Economics and Professor of Operations Research, Stanford University, 1979 to 1991.

Senior Fellow by Courtesy, Hoover Institution on War, Revolution and Peace, 1981–94.

Part-time Professor, European University Institute, 1986.

External Professor, Santa Fe Institute, 1988 to date.

Joan Kenney Professor of Economics Emeritus and Professor of Operations Research Emeritus, 1991 to date

Fulbright Professor, University of Siena, Spring 1995.

Visiting Fellow, All Souls College (Oxford, England), 1996.

University and Faculty Administration at Stanford University

Executive Head, Department of Economics, 1953–6

Member and Chair, Executive Committee of the Academic Council

Acting Executive Head, Department of Economics, 1962–3

Member and Chair, Advisory Board

Member and Chair, Senate of the Academic Council

Director, Stanford Institute for Theoretical Economics, 1993–98

Director, Stanford Center on Conflict and Negotiation, 1993–5

Honors and Awards

Gold Pell Medal (highest grades), City College, New York, 1940.

Phi Beta Kappa.

Social Science Research Fellow, 1952.

Fellow, Center for Advanced Study in the Behavioral Sciences, 1956–57.

John Bates Clark Medal, American Economic Association, 1957.

LL.D. (honorary), University of Chicago, 1967.

M.A. (honorary), Harvard University, 1968.

Marshall Lecturer, Cambridge University, Spring 1970.

D.Soc/Eco.Sci. (honorary), University of Vienna, 1971.

LL.D. (honorary), City University of New York, 1972.

Nobel Memorial Prize in Economic Science, 1972.

John R. Commons Lecture Award, Omicron Delta Epsilon, 1973.

D.Sci. (honorary), Columbia University, 1973.

D.Soc.Sci. (honorary), Yale University, 1974.

Dr. (honorary), Universite Rene Descartes, 1974.

LL.D. (honorary), Hebrew University of Jerusalem, 1975.

LL.D. (honorary), University of Pennsylvania, 1976.

D.Pol.Sci. (honorary), University of Helsinki, 1976.

Member, National Academy of Sciences (Chairman, Section 54, 1976–1979, Council member 1990 to date).

Fellow, American Academy of Arts and Sciences (Vice President, 1979–80, 1991–94).

Member, American Philosophical Society.

Member, Institute of Medicine.

Foreign Honorary Member, Finnish Academy of Sciences.

Corresponding Member, British Academy.

Sigma Xi (President, Stanford Chapter, 1981–82).

Tanner Lecturer, Oxford University, Spring 1983.

2nd Class Order of the Rising Sun, Japan, 1984.

Tanner Lecturer, Harvard University, Spring 1985.

Dr. of Letters, University of Cambridge, 1985.

Dr. Honoris Causa, Universite d'Aix-Marseille III, 1985.

von Neumann Prize of The Institute of Management Sciences and the Operations Research Society of America, 1986.

LL.D. (honorary), Washington University in St. Louis, 1989.

Clarendon Lectures, Oxford University, November 1989.

LL.D. (honorary), Ben-Gurion University of the Negev, 1992.

Member, Pontifical Academy of Social Sciences

Laurea (honoris causa) Universita Cattolica del Sacro Cuore (Milan)

Dr. (hon causus) University of Uppsala, 1995.

Publication of Enduring Quality Award 1995, Association of Environmental and Resource Economics (with Anthony C. Fisher)

Kampe de Feriet Award (Information Processing for Management under Uncertainty), 1998

Medal of the University of Paris, 1998

Dr. (hon.) University of Buenos Aires, 1999

LL.D. (hon.) Harvard University, 1999

Dr. (hon. Causus) University of Cyprus, 2000.

50th Anniversary Medal, School of Humanities, Arts, and Social Sciences, Massachusetts Institute of Technology

Ph.D. (h.c.) University of Tel Aviv, 2001

Professional Societies

Econometric Society (Fellow; Vice President, 1955, President, 1956, Member of the Council, 1983).

Institute of Mathematical Statistics (Fellow).

American Statistical Association (Fellow).

American Economic Association (Member, Executive Committee, 1967–1969; President-elect, 1972; President, 1973; Distinguished Fellow).

The Institute of Management Sciences (President, 1963; Chairman of the Council, 1964).

Western Economic Association (President, 1980–1981).

American Association for the Advancement of Science (Fellow; Chair, Section K, 1982).

International Society for Inventory Research (President, 1983–1988).

Honorary President, International Economic Association; President 1983–1986; Member, Executive Committee, 1986–1992.

The Society for Social Choice and Welfare, Caen, France, First President, 1992–93.

Economists Allied for Arms Reduction, Co-Chair, 1990–1995

Business Positions

Member, Board of Directors, Varian Associates, Inc., 1973–1991

Member, Board of Directors, Abt Associates, Inc., 1975–1985

Member, Board of Directors, Fireman's Fund Insurance Company, 1980–1991

Member, Board of Directors, Strategies for a Global Environment, Inc., 1998-

Member, Board of Directors, Unext, Inc., 2000-

PUBLICATIONS OF KENNETH J. ARROW

BOOKS

1. [1951] Social Choice and Individual Values. New York: Wiley.

2. [1958] (with S. Karlin and H. Scarf) Studies in the Mathematical Theory of Inventory and Production. Stanford, California: Stanford University Press.

3. [1958] (with L. Hurwicz and H. Uzawa) Studies in Linear and Non-Linear Programming. Stanford, California: Stanford University Press.

4. [1959] (with M. Hoffenberg and the assistance of H. Markowitz and R. Shephard) A Time Series Analysis of Interindustry Demands. Amsterdam: North-Holland Publishing Co.

5. [1963] Social Choice and Individual Values. Wiley: New York, 2nd edition.

6. [1965] Aspects of the Theory of Risk-Bearing. Yrjo Jahnssonin saatio Helsinki, Finland.

7. [1970] (with M. Kurz) Public Investment, the Rate of Return, and Optimal Fiscal Policy. Baltimore and London: The Johns Hopkins Press.

8. [1971] (with F. H. Hahn) General Competitive Analysis. San Francisco: Holden-Day; Edinburgh: Oliver & Boyd.

9. [1971] Essays in the Theory of Risk-Bearing. Chicago: Markham; Amsterdam and London: North-Holland.

10. [1974] The Limits of Organization. New York: W. W. Norton.

11. [1976] (with S. Shavell and J. Yellen) The Limits of the Market Economy, (in Japanese). Memorandum for Ministry of International Trade and Industry, Japan.

12. [1976] The Viability and Equity of Capitalism. E. S. Woodward lecture, Department of Economics, University of British Columbia.

13. [1977] (with L. Hurwicz) Studies in Resource Allocation Processes. Cambridge, London, New York, and Melbourne: Cambridge University Press.

14. [1983] Collected Papers of Kenneth J. Arrow, Volume 1, Social Choice and Justice. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.

15. [1983] Collected Papers of Kenneth J. Arrow, Volume 2, General Equilibrium. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.

16. [1984] Collected Papers of Kenneth J. Arrow, Volume 3, Individual Choice under Certainty and Uncertainty. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.

17. [1984] Collected Papers of Kenneth J. Arrow, Volume 4, The Economics of Information. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.

18. [1985] Collected Papers of Kenneth J. Arrow, Volume 5, Production and Capital. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.

19. [1985] Collected Papers of Kenneth J. Arrow, Volume 6, Applied Economics. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.

20. [1986] (with Herve Raynaud) Social Choice and Multicriterion Decision-Making. Cambridge, Massachusetts: The MIT Press.

22. [2000] Theorie de l'information et des organisations. Edited by T. Granger. Paris: Dunod.

BOOKS EDITED

1. [1960] (with S. Karlin and P. Suppes) Mathematical Methods in the Social Sciences, 1959: Proceedings of the First Stanford Symposium. Stanford, California: Stanford University Press.

2. [1962] (with S. Karlin and H. Scarf) Studies in Applied Probability and Management Science. Stanford, California: Stanford University Press.

3. [1969] (with T. Scitovsky) Readings in Welfare Economics. American Economic Association Series of Republished Articles in Economics. Homewood, Illinois: Richard D. Irwin, Vol. XII.

4. [1971] Selected Readings in Economic Theory from Econometrica. Cambridge, Massachusetts, and London: MIT Press.

5. [1978] (with S. J. Fitzsimmons and R. Wildenmann) Zukunftsorientierte Planung und Forschung fur die 80er Jahre. Koningstein/Ts., German Federal Republic: Athenaum Verlag.

6. [1981] (with C. C. Abt and S. J. Fitzsimmons) Applied Research for Social Policy: The United States and the Federal Republic of Germany. Cambridge, Massachusetts: Abt.

7. [1981] (with M. Intriligator) Handbook of Mathematical Economics, Volume I. Amsterdam, New York and London: North-Holland.

8. [1982] (with M. Intriligator) Handbook of Mathematical Economics, Volume 11. Amsterdam, New York and London: North-Holland.

9. [1985] (with Seppo Honkapohja) Frontiers of Economics. Oxford and New York: Basil Blackwell Ltd.

10. [1986] (with M. Intriligator) Handbook of Mathematical Economics, Volume III. Amsterdam, New York and London: North-Holland.

11. [1988] (with M. J. Boskin) The Economics of Public Debt. Basingstoke and London: Macmillan in association with The International Economic Association.

12. [1988] (with P. W. Anderson and D. Pines) The Economy as an Evolving Complex System. Redwood City, California: Addison-Wesley.

13. [1988] The Balance between Industry and Agriculture in Economic Development. Volume 1: Basic Issues. Basingstoke and London: Macmillan in association with The International Economic Association.

14. [1991] Issues in Contemporary Economics. Volume I, Markets and Welfare. Basingstoke and London: Macmillan for International Economic Association.

15. [1994] (with R. Arnott, A.B. Atkinson, and J. Dreze) Public Economics, by William Vickrey. Cambridge, U.K., New York, and Oakleigh, Victoria: Cambridge University Press.

16. [1995] (with R.H. Mnookin, L. Ross, A. Tversky, and R. Wilson) Barriers to Conflict Resolution. New York and London; W.W. Norton.

17. [1996] (with E. Colombatto, M. Perlman, and C. Schmidt) The Rational Foundations of Economic Behavior. Basingstoke and London: Macmillan for the International Economic Association.

18. [1996] (with R.W. Cottle, B.C. Eaves and I. Olkin) Education in a Research University. Stanford, CA: Stanford University Press.

19. [1996–7] (with Amartya Sen and Kotaro Suzumura) Social Choice Re-examined. Basingstoke and London: MacMillan in association with the International Economic Association. 2 vol.

20. [1998] (with Yew-Kwang Ng and Xiaokai Yang) Increasing Returns and Economic Progress. Basingstoke, UK: Macmillan, and New York: St. Martin's.

22. [2000] (with S. Bowles and S. Durlauf) Meritocracy and Economic Inequality. Princeton, NJ: Princeton University Press.

23. [2001] (with G. Debreu) Landmark Papers in General Equilibrium Theory, Social Choice, and Welfare Economics. Cheltenham, UK, and Northampton, MA: Edward Elgar.

COLLECTIVE STUDIES

1. [1971] (as member of Climatic Impact Committee of the National Research Council, National Academy of Sciences, National Academy of Engineering) Environmental Impact of Stratospheric Flight. Washington, D. C.: National Academy of Sciences.

2. [1977] (as member of Nuclear Energy Policy Study Group) S. M. Keeny, Jr., et al, Nuclear Power Issues and Choices. Cambridge, Massachusetts: Ballinger.

3. [1979] H.H. Landsberg, et al, Energy: The Next Twenty Years. Cambridge, Massachusetts: Ballinger.

4. [1981] (as Chairman of the Committee for a Planning Study for an Ongoing Study of Costs of Environment-related Health Effects, Institute of Medicine) Costs of Environment-related Health Effects. Washington, D. C.: National Academy Press.

5. [1991] (as member of the Oversight Review Board of the National Acid Precipitation Assessment Program) The Experience and Legacy of NAPAP. Washington, DC: National Acid Precipitation Assessment Program.

6. [1993] (as Co-chair) Report of the NOAA [National Oceanic and Atmospheric Administration] Panel on Contingent Valuation. **Federal Register**, 58, No. 10 (January 15, 1993): 4602–4614.

7. [1995] (with B. Bolin, R. Constanza, P. Dasgupta, C. Folke, C.S. Holing, B.-O. Jansson, S. Levin, K.-G. Maler, C. Perrings, and D. Pimentel) Economic growth, carrying capacity, and the environment. Science 268.28 April 1995, 520–521.

8 [1996] (with M.L. Cropper, G.C. Eads, R.W. Hahn, L.B. Lave, R.G. Noll, P.R. Portney, M. Russell, R. Schmalensee, V.K. Smith, and R.N. Stavins) Benefit-Cost Analysis in Environmental, Health, and Safety Regulations: A Statement of Principles. La Vergne, TN: The AEI Press, c/o Publisher Resources, Inc.

9 [2000] (with G. Daily, P. Dasgupta, S. Levin, K.-G. Maler, E. Maskin, D. Starrett, T. Sterner, and T. Tietenberg) Managing ecosystem resources. Environmental Science and Technology 34: 1401–1406.

NONTECHNICAL ARTICLES

1. [1961] ''Does the Majority Ever Rule?'' introductory notes. Portfolio and Art News Annual 4:76–78.

2. [1974] ''Taxation and Democratic Values.'' The New Republic 171:18:23–25.

3. [1975] ''How Much to Fear from OPEC?'' Moment 1:2:32–34.

4. [1978] ''Capitalism, Socialism, and Democracy,'' (symposium). Commentary 65:4:29–31.

5. [1978] ''A Cautious Case for Socialism.'' Dissent, Fall, 472–480.

6. [1979] ''The Economy and the Economist.'' Partisan Review 1:113–116.

7. [1981] ''Two Cheers for Regulation.'' Harper's 262:18–22.

8. [1982] ''Why People Go Hungry.'' New York Review of Books 29:12:24–26.

9. [1983] ''The Economics of 1984.'' In P. Stansky (ed.) On Nineteen Eighty-Four. San Francisco: W.H. Freeman, pp. 43–48.

10. [1984] ''The International Economic Order of the Twenty-First Century.'' In Osaka Junior Chamber, Inc., Wisdom Toward the 21st Century. Tokyo: YMCA Press, pp. 173–227 (in Japanese).

11. [1984] ''The Economy as Order and Disorder.'' In P. Livingston (ed.) Disorder and Order. Saratoga, California: ANMA Libri., pp. 162–172.

12. [1986] ''Kenneth J. Arrow.'' In W. Breit and R. W. Spencer (eds.) Lives of the Laureates: Seven Nobel Economists. Cambridge, Massachusetts, and London, pp. 43–57.

13. [1987] ''Redistribution to the Poor: A Collective Expression of Individual Altruism.'' In F. Jimenez (ed.) Poverty and Social Justice. Tempe, Arizona: Bilingual Press, pp. 39–46.

14. [1989] ''The Multiple Responsibilities of the Corporation.'' In J. E. Weiler (ed.), The First International Symposium on Stakeholders. Dayton, Ohio: Center for Business and Economic Research, School of Business Administration, University of Dayton, pp. 53–62.

15. [1989] Chapter 1. In W. Sichel (ed.) The State of Economic Science. Kalamazoo, Michigan: W.E. Upjohn Institute for Employment Research.

16. [1991] ''Economic Forecasting.'' In G. E. Gaull (ed.) New Technologies and the Future of Food and Nutrition. New York: Wiley. Chapter 25, pp. 135–140.

17. [1992] ''Decision Making by Individuals and Systems.'' In Office of Naval Research: Forty Years of Excellence. Arlington, Virginia: Office of Naval Research. Pp. 123–127.

18. [1992] ''I Know a Hawk from a Handsaw.'' In M. Szenberg (ed.) Eminent Economists. Cambridge and New York: Cambridge University Press. Pp. 42–50.

19. [1992] ''Moral Thinking and Economic Interaction.'' In Pontifical Council for Justice and Peace, Social and Ethical Aspects of Economics. Vatican City. Pp. 17–22.

20. [1994] ''Gli Obblighi Etica del Mercato.'' Etica degli Affari e delle Professioni, VII: 1/94: 34–38.

21. [1996] ''Environmental Aspects of Environmental Challenges,'' in H.W. Kendall et. al., Meeting the Challenges of Population, Environment, and Resources: The Costs of Inaction. Washington, DC: The World Bank. Environmentally Sustainable Development Proceedings Series No. 14, pp. 29–31.

22. [1996] What Does the Present Owe the Future: An Economic and Ethical Perspective on Climate Change. Grace A. Tanner Lecture on Human Values XVII. Cedar City, Utah: Southern Utah University.

23. [1998] Tribute to Michael Bruno. The Economic Quarterly 45:473–477 (in Hebrew).

24. [2000] Globalization and its implications for international security. ECAAR Bulletin 12(3): 1,7.

25. [2001] Is capitalism good for democracy? In J. Cohen and K. R Manning (eds.) Asking the Right Questions: A Colloquium Celebrating the 50th Anniversary. Massachusetts Institute of Technology, School of Humanities, Arts, and Social Sciences. Pp. 90–96.

26. [2001] John C. Harsanyi, 1920–2000. Biographical Memoirs of the National Academy of Sciences 80: 3–14.

27. [2001] Armen Alchian's contributions of NIE. Newsletter International Society for New Institutional Economics 3 (Number 2): 5–8.

PAPERS

1. [1949] On the Use of Winds in Flight Planning. Journal of Meteorology 6:150–159.

2. [1949] (with D. Blackwell and M. A. Girshick) Bayes and Minimax Solutions of Sequential Decision Problems. Econometrica 17:213–44.

3. [1950] Homogeneous Systems in Mathematical Economics: A Comment. Econometrica 18:60–62.

4. [1950] A Difficulty in the Concept of Social Welfare. Journal of Political Economy 58:328–46.

5. [1951] Alternative Proof of the Substitution Theorem for Leontief Models in the General Case. In T. C. Koopmans, (ed.) Activity Analysis of Production and Allocation. New York: Wiley, Chapter IX.

6. [1951] (with T. E. Harris and J. Marschak) Optimal Inventory Policy. Econometrica 19:250–72.

7. [1951] Alternative Approaches to the Theory of Choice in Risk-Taking Situations. Econometrica 19:404–37.

8. [1951] Little's Critique of Welfare Economics. American Economic Review 41:923–34.

9. [1951] Mathematical Models in the Social Sciences. In D. Lerner and H. D. Lasswell (eds.), The Policy Sciences. Stanford, California: Stanford University Press, pp. 129–54.

10. [1951] An Extension of the Basic Theorems of Classical Welfare Economics. In J. Neyman (ed.), Proceedings of the Second Berkeley Symposium on Mathematical Statistics and Probability. Berkeley and Los Angeles: University of California Press, pp. 507–32.

11. [1952] The Determination of Many-Commodity Preference Scales by Two-Commodity Comparison. Metroeconomica IV: 107–15.

12. [1952] Le principe de rationalite dans les decisions collectives. Economie Appliquee V:469–84.

13. [1953] Le role des valeurs boursieres pour la repartition la meilleure des risques, Econometrie. Colloques Internationaux du Centre National de la Recherche Scientifique, Vol. XI, pp. 41–47.

14. [1953] (with E. W. Barankin and D. Blackwell) Admissible Points of Convex Sets, Contributions to the Theory of Games, II. Princeton: Princeton University Press, pp. 87–91.

15. [1954] (with G. Debreu) Existence of Equilibrium for a Competitive Economy. Econometrica 22:265–90.

16. [1954] Import Substitution in Leontief Models. Econometrica 22:481–492.

17. [1956] (with L. Hurwicz) Reduction of Constrained Maxima to Saddle-Point Problems. In J. Neyman (ed.) Proceedings of the Third Berkeley Symposium on Mathematical Statistics and Probability. Berkeley and Los Angeles: University of California Press, Vol. V, pp. 1–20.

18. [1956] (with A. C. Enthoven) A Theorem on Expectations and the Stability of Equilibrium. Econometrica 24:288–93.

19. [1957] Statistics and Economic Policy. Econometrica 25:523–31.

20. [1957] (with L. Hurwicz) Gradient Methods for Constrained Maxima. Operations Research 5:258–65.

21. [1957] Decision Theory and Operations Research. Operations Research 5:765–74.
22. [1958] Utilities, Choices, Attitudes: A Review Note. Econometrica 26:1–23.
23. [1958] Tinbergen on Economic Policy. Journal of the American Statistical Association 53:89–97.
24. [1958] The Measurement of Price Changes. In Joint Economic Committee, The Relationship of Prices to Economic Stability and Growth. Washington, DC: U.S. Government Printing Office, pp. 77–88.
25. [1958] (with M. Nerlove) A Note on Expectations and Stability. Econometrica 26:297–305.
26. [1958] (with A. Alchian and W. M. Capron) An Economic Analysis of the Market for Scientists and Engineers. Santa Monica, California: The Rand Corporation, RM 2190-RC.
27. [1958] (with M. McManus) A Note on Dynamic Stability. Econometrica 26:448–54.
28. [1958] (with L. Hurwicz) On the Stability of the Competitive Equilibrium. Econometrica 26:522–52.
29. [1959] Toward a Theory of Price Adjustment. In M. Abramovitz and others, The Allocation of Resources. Stanford, California: Stanford University Press, pp. 41–51.
30. [1959] (with W. M. Capron) Dynamic Shortages and Price Rises: The Engineer-Scientist Case. Quarterly Journal of Economics 63:292–308.
31. [1959] Rational Choice Functions and Orderings. Economica, N. S. 26:121–27.
32. [1959] (with H. D. Block and L. Hurwicz) On the Stability of the Competitive Equilibrium, II. Econometrica 27:82–109.
33. [1959] Functions of a Theory of Behavior Under Uncertainty. Metroeconomica 11:12–20.
34. [1960] (with L. Hurwicz) Competitive Stability Under Weak Gross Substitutability: The ''Euclidean Distance'' Approach. International Economic Review 1:38–49.
35. [1960] Optimization, Decentralization, and Internal Pricing in Business Firms. In Contributions to Scientific Research in Management. Western Data Processing Center, Graduate School of Business Administration, University of California, Los Angeles, pp. 9–18.
36. [1960] Decision Theory and the Choice of a Level of Significance for the t-Test. In I. Olkin and others (eds.), Contributions to Probability and Statistics. Stanford, California: Stanford University Press. pp. 70–78.
37. [1960] The Work of Ragnar Frisch, Econometrician. Econometrica 28:175–92.
38. [1960] Price-Quantity Adjustments in Multiple Markets with Rising Demands. In K. J. Arrow, S. Karlin, P. Suppes (eds.) Mathematical Methods in the Social Sciences, 1959. Stanford, California: Stanford University Press, pp. 3–16.
39. [1960] (with L. Hurwicz) Decentralization and Computation in Resource Allocation. In R. W. Pfouts (ed.), Essays in Economics and Econometrics. Chapel Hill: University of North Carolina Press, pp. 34–104.
40. [1960] (with L. Hurwicz) Stability of the Gradient Process in N-Person Games. Journal of the Society for Industrial and Applied Mathematics 8:280–94.
41. [1960] (with L. Hurwicz) Some Remarks on the Equilibria of Economic Systems. Econometrica 28:640–46.
42. [1961] Additive Logarithmic Demand Functions and the Slutsky Relations. Review of Economic Studies 28:176–81.
43. [1961] (with H. B. Chenery, B. Minhas and R. M. Solow) Capital-Labor Substitution and Economic Efficiency. Review of Economics and Statistics 43:225–50.
44. [1961] (with L. Hurwicz and H. Uzawa) Constraint Qualifications in Maximization Problems. Naval Research Logistics Quarterly 8:175–91.
45. [1961] (with A. C. Enthoven) Quasi-Concave Programming. Econometrica 29:779–800.
46. [1962] Case Studies: Comment. In National Bureau of Economic Research, The Rate and Direction of Inventive Activity: Economic and Social Factors. Princeton: Princeton University Press, pp. 335–38.
47. [1962] Economic Welfare and the Allocation of Resources for Invention. In National Bureau of Economic Research, The Rate and Direction of Inventive Activity: Economic and Social Factors. Princeton: Princeton University Press, pp. 609–25.
48. [1962] Optimal Capital Adjustment. In K. J. Arrow, S. Karlin, and H. Scarf (eds.), Studies in Applied Probability and Management Science. Stanford, California: Stanford University Press, pp. 1–17.
49. [1962] (with M. Nerlove) Optimal Advertising Policy Under Dynamic Conditions. Economica N. S., 29:129–42.
50. [1962] The Economic Implications of Learning by Doing. Review of Economic Studies 29:155–73.
51. [1962] (with L. Hurwicz) Competitive Stability Under Weak Gross Substitutability: Nonlinear Price Adjustment and Adaptive Expectations. International Economic Review 3:233–55.
52. [1963] Conference Remarks. In M. Astrachan and A. S. Cahn (eds.), Proceedings of RAND'S Demand Prediction Conference, January 25–26, 1962. Santa Monica, California: The RAND Corporation, RM-3358-RP, pp. 125–34.
53. [1963] Utility and Expectation in Economic Behavior. In S. Koch (ed.), Psychology: A Study of a Science. New York: McGraw-Hill, Vol. 6, pp. 724–52.
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Pursuant to the Tunney Act, 15 U.S.C. § 16
Lloyd R. Day, Jr Jeffrey S. Kingston, Michael H. Morris, Robert M. Galvin, James L. Miller Lee Patch Renee DuBord
DAY CASEBEER
MADRID & BATCHELDER LLP
20300 STEVENS CREEK BLVD.
SUITE 400
CUPERTINO, CA 95014
(408) 255-3255
BROBECK, PHELGSTER & SUN MICROSYSTEMS, INC.
901 SAN ANTONIO ROAD
SPEAR STREET TOWER
PALO ALTO, CA 94305
(650) 960—1300
HARRISON LLP
ONE MARKET STREET
SAN FRANCISCO, CA 94105Table of Contents

I. Introduction

Microsoft illegally maintained its monopoly over Intel-compatible personal computer (''PC'') operating systems by acting to undermine the distribution and commercial appeal of alternative computing platforms like Netscape Corporation's Navigator browser and Sun Microsystems, Inc.'s Java TM technology. [1]By eliminating the ability of alternative platforms to compete with Windows, Microsoft has not only maintained its monopoly over PC operating systems, it also has dramatically increased the economic power that it derives from that monopoly, such that Microsoft now has the power to control competition in a number of adjacent and downstream markets as well.

In the emerging world of networked devices and services, the commercial appeal and success of adjacent or downstream devices and services such as servers, personal digital assistants (''PDAs''), telephones, video game systems, television set-top boxes, and web-based services are in very large measure dependent on their ability to interoperate with PCs via the Internet or other networks. Microsoft's expanded monopoly power over PC operating systems and web browsers affords it the power to deny competing devices and services the same ability to interoperate fully and completely with PCs as Microsoft's networked devices and services enjoy. Microsoft is in fact exercising the power it derives from its PC monopoly in just this way to exclude competition in each of these adjacent markets. Unless and until that power is effectively checked and ultimately eliminated, Microsoft's past practices and insatiable ambition demonstrate that it will continue to destroy competition in each of these enormously important markets.

Unfortunately, the Revised Proposed Final Judgment (''RPFJ'') does little or nothing to eliminate the unlawful monopoly maintained by Microsoft over PC operating systems. Nor does it redress the harm that Microsoft's illegal acts have caused to competition in that market. And while the RPFJ apparently recognizes the threat to competition posed by Microsoft's exclusionary behavior in adjacent and downstream markets, the remedies it

[1] United States v. Microsoft Corp., 253 F.3d 34, 46 (DC Cir. 2001) (''Microsoft III'').

proposes to redress this threat are plagued with so many loopholes and ambiguities that there can be no assurance that Microsoft's anticompetitive conduct will stop.

A. Competition in the market for PC operating systems must be restored

The adjudicated facts establish that Microsoft illegally maintained a monopoly over the market for PC operating systems by undermining the ability of rival software platforms to compete in that or closely related markets. By offering consumers the ability to run compelling applications on operating systems other than Microsoft's Windows operating system, the Navigator browser and Java platform threatened to reduce or eliminate the applications barrier to competition that sustains Microsoft's monopoly. [2] Microsoft fully recognized the threat these middleware platforms posed to its continued monopoly over PC operating systems and contrived to maintain that monopoly by restricting consumer access to these and any other non-Microsoft middleware platforms.

The commercial appeal of any computing platform is dependent in very large measure on the numbers of consumers who own or use the platform. The greater the number of users, the greater the demand for applications capable of running on that platform. The greater the demand for applications, the greater the number and variety of applications developed for the platform. And the greater the number and variety of applications developed for a platform, the greater the consumer demand for a given computing platform.[3] Once started, this ''feedback'' effect can and will sustain the adoption and commercial success of platform software, such as Microsoft's Windows operating system, Netscape's Navigator browser or Sun's Java platform.The key to successful competition in platform software is thus distribution.[4] Unless a platform enjoys widespread and sustained distribution, such that large numbers of computer users have the platform installed and available for use on their computer systems, the feedback cycle of application development and platform adoption will not take effect.

As the District Court found, and the Court of Appeals affirmed, Microsoft engaged in a seal es of illegal acts to choke off the distribution channels for the Navigator and Java platforms.[5] By restricting and disrupting the distribution of the Navigator browser and the Java platform, Microsoft sought to limit the numbers of computer users with access to these alternative platforms and thereby also limit the demand for, and economic incentives supporting, application development on the Navigator and Java platforms. By decreasing the distribution of non-Microsoft platforms, such as the Navigator browser and the Java platform, Microsoft knew that it could also decrease the number and variety of applications developed for such platforms, and thus their relative commercial appeal to consumers.

But for Microsoft's unlawful attack on the distribution of the Navigator and Java platforms, the installed base of these alternative platforms would have been very different today. So too would the economic incentives and choices of consumers and software developers.

Consumers would have had the opportunity to choose among a variety of competing platforms—not just Microsoft's Windows platform—based upon performance, cost or personal preference. Developers too would have had the opportunity to choose among a variety of competing platforms on which to develop applications with the features, performance and cost that consumers demand.

Indeed, because the Navigator and Java platforms were ''cross-platform''—that is, ran on top of a variety of operating systems, not just Microsoft's Windows operating system—consumers would have had the ability to run applications written for the Navigator browser and Java platform on any operating system, not just Microsoft's Windows operating system. By dramatically lowering the cost to switch applications from one operating system to another, the Navigator and Java platforms directly attacked the applications barrier to competition that protects Microsoft's monopoly over PC operating systems, and greatly reduced the cost to consumers and developers alike of switching away from Microsoft's monopoly platform. In short, but for Microsoft's anticompetitive conduct, consumers today would have enjoyed far greater freedom, at far less cost, to choose among competing operating systems based on their comparative features, performance, and price, rather than simply the number of applications they support.

B. Microsoft's unlawful power to exclude competition in adjacent and downstream markets must be stopped and eventually dissipated

By disrupting and eliminating the distribution of competing platforms, Microsoft has not only maintained its monopoly over PC operating systems, it also has increased the economic power that it derives from that monopoly. By secretly manipulating the interfaces and protocols needed to intemperate with Windows, Microsoft can control which products and services in adjacent or downstream markets are capable of interoperating with PCs. Not only does this permit Microsoft to enhance the relative appeal and functionality of its products and services at the expense of its competitors, it denies consumers the benefits of competition. Instead of choosing a server, telephone, application, or web service based solely on its competitive merits, Microsoft is increasingly forcing consumers to purchase such products and services based upon their ability to interoperate with its unlawfully monopolized platforms.

Microsoft is now abusing the power it has over PC operating systems and web browsers by seeking to extend its control to embrace any device, application, or web service that seeks to interoperate with Microsoft's monopolized PC operating systems or browsers. Microsoft's unbridled monopoly over a critical node on the digital network—PCs—provides it the power to allow only such servers, PDAs, telephones, television set-top boxes, videogame systems, or web services that implement Microsoft's proprietary interfaces and protocols to interoperate effectively with Microsoft's monopoly products. By illegally exploiting its PC operating system monopoly to acquire and utilize a chokehold over networked connections to PCs, Microsoft is dramatically expanding its power to deny consumers the benefits of choice and competition in adjacent and downstream markets as well.

C. The RPFJ fails to remedy the monopoly illegally maintained by Microsoft

In the face of this record, the law requires that any remedial decree ''terminate'' the monopoly, ''unfetter'' the market from anticompetitive conduct, ''deny to the defendant the fruits'' of its illegal acts, and ''ensure'' no repetition of such abuse in the future. [6] Measured against this standard, the proposed settlement between the United States and Microsoft reflected in the RPFJ falls far short.

Rather than act directly to restore competition to the market for PC operating systems, and redress the harm to competition inflicted by Microsoft's past misconduct in that and adjacent markets, the RPFJ actually accedes to Microsoft's monopoly, and does little or nothing to eliminate or check the enormous power it provides. Incredibly, the RPFJ barely proscribes behavior already held to be unlawful without remedying the far-reaching and continuing anticompetitive effects that have been caused by that behavior. [7] Even though Microsoft effectively destroyed competition for web browsers and blocked the distribution of upgraded, compatible versions of the Java platform for the PC, the RPFJ fails to remedy directly these anticompetitive acts or disgorge Microsoft of the power it now enjoys as a result of those acts.

Instead, the RPFJ relies on Microsoft's partners—PC manufacturers—to indirectly undermine Microsoft's monopoly by distributing non-Microsoft middleware. Relying on Microsoft's distributors to achieve the Department's goals is fundamentally flawed, since the PC manufacturers have little or no economic incentive or ability to work with Microsoft's competitors, absent fundamental changes to the competitive landscape in the PC operating system market, which the RPFJ fails to seek. [8] At best, the

[2] United States v. Microsoft Corp., 84 F. Supp. 2d 9, § 68 (D.DC 2000) (''Findings of Fact'') (explaining how middleware technologies such as the Navigator browser and the Java platform have the ability to weaken the applications barrier to entry).

[3] See Findings of Fact, 84 F. Supp. 2d at §§ 39–40.

[4] See Microsoft III, 253 F.3d at 55–60, 60–61, 70–71; Findings of Fact, 84 F. Supp. 2d at §§ 3652, 143–44,

[5] See Microsoft III, 253 F.3d at 61, 72, 75–76; Findings of Facts, 84 F. Supp. 2d at §§ 357, 395402.

[6] Microsoft III, 253 F.3d at 103.

[7] See Schine Chain Theatres, Inc. v. United States, 334 U.S. 110, 128 (1948) (concluding that injunctive relief which merely ''forbid[s] a repetition of the illegal conduct'' is legally insufficient because defendants would ''retain the full dividends of their monopolistic practices and profit from the unlawful restraints of trade which they inflicted on competitors'').

[8] Findings of Fact, 84 F. Supp. 2d at § 54 (stating that ''[w]ithout significant exception, all OEMs pre-install Windows on the vast majority of PCs that they sell, and they uniformly are of a mind that

RPFJ will marginally increase the opportunity, but not the ability, of competitors to compete at some future date with Microsoft's middleware products. It does nothing directly to dislodge Microsoft's PC operating system monopoly or to restore the market for PC operating systems to the competitive dynamics the market would have possessed ''but for'' Microsoft's illegal conduct.

D. The loopholes in the RPFJ must be eliminated and its important ambiguities clarified

While promising in principle, the disclosure remedies in the RPFJ (Sections III.D. and III.E) are likely to fail in practice to achieve the procompetitive objectives identified by the United States Justice Department (the ''Department'') in its Competitive Impact Statement. Key provisions in the RPFJ contain critical loopholes and glaring ambiguities. Given Microsoft's past disdain for compliance with the strictures of its prior antitrust consent decree with the Department, these ambiguities will likely lead to future litigation, particularly since Microsoft has repeatedly refused to answer any questions regarding whether it agrees or disagrees with the interpretations of the RPFJ proposed by the Department in the Competitive Impact Statement. Instead, it is clear that Microsoft's strategy is to say as little as possible about the meaning or application of the RPFJ prior to entry of judgment, hoping that any ambiguities in the language will ultimately be interpreted in its favor. In order to protect the public and ensure that the Department has actually secured a settlement that is consistent with its representations to the Court, the Department must force Microsoft to identify any disagreements that it has with the Department's interpretations prior to entry of the judgment. Unless such minimal steps are taken, the RPFJ will certainly fail to secure even the modest objectives it seeks to attain.

The RPFJ is further flawed because it allows Microsoft to profit from its illegal acts by exacting royalties as a condition for making interoperability disclosures. Moreover, it gives Microsoft far too much discretion about how it will ''comply'' with the RPFJ. Given its past record of anticompetitive conduct, a remedial scheme which relies on Microsoft acting ''reasonably'' is doomed to fail. After having successfully prosecuted its case against Microsoft, it would be tragic for the Department to shirk its duty under the law, and through entry of the RPFJ, allow Microsoft to maintain and expand its monopoly power.

II. Sun Microsystems'' Interest Regarding the Terms of the RPFJ

Since its founding in 1982, Sun has been propelled by an innovative vision- ''The Network Is The Computer.'' TM Sun is a leader in the design, manufacture, and sale of computer hardware, software, and services. Sun directly competes with Microsoft across a wide variety of markets including operating systems, ''middleware'' platforms, software development tools, office productivity suites, directory services, and enterprise software.

Sun's experience and expertise place it in a unique position to assess the true competitive impact of the RPFJ. As one of Microsoft's leading competitors and as the creator and licensor of the Java platform, Sun was a prime target of the anticompetitive conduct at issue in United States v. Microsoft. In addition, because Sun designs, manufactures, and sells a wide variety of products and services that must interoperate with Microsoft's products and services, Sun's realworld experience regarding the difficulties and barriers to effective interoperability with Microsoft's products affords Sun unique insights into whether the various technical disclosures and licensing practices mandated under the RPFJ will actually achieve the results intended by the Department. Sun's comments on the RPFJ are not intended to be exhaustive. Instead, the comments focus on key shortcomings or problems with the RPFJ, which most directly impact Sun, its distributors, developers, and customers. Others. including trade organizations of which Sun is a member, are likely to raise additional problems with the RPFJ, which should be addressed prior to entry of the judgment. By omitting such subjects from its submission, Sun does not wish to convey to the Department the impression that it believes the remainder of the RPFJ is satisfactory to Sun. Rather, Sun has merely focused its comments to highlight particular areas of concern. III. The RPFJ Fails To Remedy the Continuing Harm to Competition Caused By Microsoft's Illegal Acts A. The RPFJ fails to dissipate Microsoft's monopoly power in the market for PC operating systems A remedies decree in an antitrust case ''must seek to unfetter a market from anticompetitive conduct, to terminate the illegal monopoly, deny the defendant the fruits of its statutory violation, and ensure that there remain no practices likely to result in monopolization in the future.'' [9] Tile market over which Microsoft has unlawfully maintained its monopoly power is the market for PC operating systems. It is that market—the market for PC operating systems—that must be restored to competition, and in which Microsoft's power must be eliminated.

Indeed, the RPFJ does not even focus its principal remedies on the relevant market: the market for PC operating systems, Instead, it focuses its principal remedies on entirely different markets: the market for distribution of Microsoft operating systems and the market for middleware. In light of the record established and affirmed in this case, the Department's reliance on Microsoft's own distributors—entities whose commercial viability is dependent on and inextricably tied to Microsoft's success -to promote non-Microsoft middleware products capable of threatening Microsoft's monopoly position is misplaced at best, and foolhardy at worst.

1. The Department previously acknowledged that an effective remedy had to eliminate the applications barrier protecting Microsoft's monopoly

In recognition of the Department's obligations under the law and the extent of Microsoft's misconduct, the Department originally set its remedial objectives much higher than those proposed in the RPFJ. In fact, both the Department and the District Court concluded that a combination of structural relief and conduct remedies was necessary to lower the applications barrier to entry and to restore competition in the market for PC operating systems. [10] As the Department itself acknowledged, conduct remedies, by themselves, are likely to be insufficient in this case to remedy the past harm to competition:

[C]onduct remedies can do little to rectify the harm done to competition by Microsoft's illegal conduct in the past. For example, the evidence shows and the Court found that Microsoft's illegal conduct prevented Navigator and Java from eroding the applications barrier to entry ''for several years, and perhaps permanently'' because they could not facilitate entry unless they became almost ubiquitous and thus became attractive platforms for ISVs. A conduct remedy cannot undo the demise of Navigator and the concomitant rise of Internet Explorer, nor can it ensure that there will be other middleware threats comparable to Navigator in the future. [11]

According to the Department, ''[c]ompetition was injured in this case principally because Microsoft's illegal conduct raised entry barriers to the PC operating system market by destroying developments that would have made it more likely that competing operating systems would gain access to applications and other needed complements.'' [12] Thus, ''the key to a remedy in this case is to reduce Microsoft's

there exists no commercially viable alternative to which they could switch in response to a substantial and sustained price increase or its equivalent by Microsoft.'').

[9] Microsoft III, 253 F.3d at 103 (internal quotations and citations omitted). Although the Department acknowledges the required remedial objectives under the law, it fails to achieve them in practice. See Competitive Impact Statement (''CIS'') at 24 (''Appropriate injunctive relief in an antitrust case should: (1) end the unlawful conduct; (2) 'avoid a recurrence of the violation'' and others like it; and (3) undo its ant/competitive consequences.''). The RPFJ, however, fails to serve this fundamental objective. The first and most important flaw in the RPFJ lies in its failure to do anything to restore competition in the market for PC operating systems. But for Microsoft's anticompetitive conduct, the market would today provide consumers and software developers with the benefits of competitive choice among at least three alternative computing platforms for desktop computers: the Windows operating system, the Navigator browser, and the Java platform. As a direct result of Microsoft's anticompetitive conduct, consumers and developers today effectively enjoy no such choice. Rather than restore the market to the state it would have enjoyed but for Microsoft's illegal conduct, or even attempt to dissipate Microsoft's illegally maintained power over that market, the RPFJ accedes to and accepts Microsoft's monopoly over PC operating systems, and does nothing to directly and immediately restore that market to competition.

[10] United States v. Microsoft Corp., 97 F. Supp. 2d 59 (D,DC 2000), aff'd in part, rev'd in part, and remanded, 253 F.3d 34 (DC Cir. 2001).

[11] 11 4/28/00 Plaintiffs'' Memo. in Support of Proposed Final Judgment at 7–8 (citations omitted).

[12] Id. at 30.

ability to erect or maintain entry barriers.'' [13] To achieve this objective, the Department originally sought to divide Microsoft into an Applications Business and an Operating Systems Business in order to ''create incentives for Microsoft's Office and its other uniquely valuable applications to be made available to competing operating systems when that is efficient and profitable—in other words, in response to ordinary market forces—instead of being withheld strategically, at the sacrifice of profits and to the detriment of consumers—in order to protect the Windows operating system monopoly.'' [14]

But now that the Department has reversed its prior position and seeks to rely solely on conduct remedies, the remedies it has proposed are even leas likely to rectify the harm done to competition than the interim conduct remedies previously adopted by the District Court. The conduct remedies of the RPFJ are simply not tailored to rectify the continuing harm or lower the barriers to competition for competing operating system vendors. For example, the RPFJ does not even attempt to redress the competitive harm caused by Microsoft's interference and disruption of the distribution channels for the Navigator browser or the Java platform, even though Microsoft correctly perceived that widespread distribution of those platforms would lower the barriers to competition protecting its monopoly. Nor does the RPFJ take any direct steps to loosen Microsoft's chokehold on the PC operating system market and facilitate the development of applications from both Microsoft and others that could run on competing operating systems. If, as the Department previously contended, the ''key to a remedy'' in this case is to reduce or eliminate Microsoft's ability to create and maintain barriers to competition, the RPFJ does not attempt to serve, much less achieve, that remedial objective.

Although the Court of Appeals vacated and remanded the District Court's divestiture order, it affirmed the central liability findings against Microsoft. Rejecting Microsoft's numerous challenges, the Court of Appeals concluded that Microsoft had monopoly power over the PC operating system market, that Microsoft's monopoly was protected by an applications barrier to entry, and that Microsoft engaged in a panoply of illegal acts to maintain that monopoly in light of the competitive threat posed by the Navigator browser and the Java platform. [15] Furthermore, it set forth the legal standard against which any remedy for such violations should be measured. [16]

While the Department certainly had discretion to choose not to pursue a divestiture remedy on remand, the Court of Appeals'' affirmance of the core liability findings against Microsoft provided no excuse for seeking watered-down conduct remedies that are likely to be even less effective than the interim conduct remedies previously ordered by the Court. This is not a case where the Department entered into a settlement with a defendant in lieu of trial. Here, the District Court held, and the Court of Appeals affirmed, that Microsoft violated the antirust laws. By failing to remedy file effects of Microsoft's illegal acts, disgorge Microsoft's ill-gotten gains, and attack the barriers to competition protecting Microsoft's monopoly, the Department has shirked its duty under the law.

2. The RPFJ fails to address the effects of Microsoft's distribution power

Any remedy designed to restore competition in the PC operating system market mast account for the economic realities of software platform development. Distribution is the key to competitive viability in the market for PC platform software. [17] The applications barrier to entry which forms a ''positive feedback loop'' for Microsoft and a ''vicious cycle'' for Microsoft's competitors was a centerpiece of the Department's case: the number of installed units of a platform determines its commercial appeal to applications developers; the number and variety of applications available for a platform determines its commercial appeal to consumers; and the commercial appeal of the platform to consumers in turn drives its installed base and market share. [18] As the Court of Appeals concluded, ''[b]ecause the applications barrier to entry protects a dominant operating system irrespective of quality, it gives Microsoft power to stave off even superior new rivals.'' [19]In large measure, the Navigator browser and the Java platform threatened Microsoft's monopoly because they had achieved widespread distribution on both Windows and non-Windows platforms, thereby becoming a potentially more attractive platform for application development than Windows. If developers increasingly chose to develop their applications to the Navigator and Java platforms, rather than the Windows platform, consumers would have greater freedom to switch away from the Windows operating system because they would still be able to run the applications that they desire using competing operating systems.

To restore competition in the PC operating system market, an appropriate remedy should attempt to place the market back in the position it would have been ''but for Microsoft's illegal conduct. In other words, an appropriate remedy would ensure, to the extent possible, that alternative platforms achieve the distribution that they would have received ''but for'' Microsoft's illegal conduct. Moreover, an appropriate remedy also would seek to open up Microsoft's distribution channels to expand consumer choice by ensuring that alternative platforms could compete on the merits with Microsoft's products, rather than having Microsoft's illegally maintained distribution powers effectively foreclose such choices.

To evaluate the potential efficacy of the RPFJ, one must compare the competitive landscape before and after Microsoft's illegal acts. Prior to Microsoft's acts, the marketplace was undergoing dramatic changes as a result of the nearly simultaneous emergence of both the Navigator browser and the Java platform. By easily connecting consumers to resources across the Internet and providing a new platform for software development, these new, widely distributed platforms threatened Microsoft's monopoly power because they afforded consumers the ability to run applications on many different operating systems, not just Windows. Customers could chose between different browsers as well as different implementations of the Java platform. They were not reliant on a single vendor for their platform software. At this inflection point in the market, the barriers to competition protecting Microsoft's monopoly looked increasingly precarious. Microsoft's internal documents demonstrate how serious that threat really was. Despite its dominant market position, Microsoft believed it was necessary to engage in a campaign of illegal conduct to crush this competition. As a result of that conduct, consumers no longer have any real competitive choices for browsers for PCs, other than Microsoft's Internet Explorer. As a practical matter, PC consumers also have been denied access to the latest, compatible versions of the Java platform as a result of Microsoft's conduct. Instead, Microsoft first offered an incompatible version of the Java platform, and now seeks to roll-out their ''knock-off'' middleware runtime, the .NET Framework/Common Language Runtime, that copies many of the features of the Java platform with one critical difference—it rims only on Windows.

The question that should be asked regarding the RPFJ is whether it will disgorge from Microsoft the fruits of its illegal acts and restore a competitive marketplace where consumers will have the ability to choose their platform software from an array of competitive choices. A critical review of the P,.PFJ makes plain it does not.

3. The RPFJ does little more than attempt to enjoin Microsoft from continuing to engage in the conduct already found to be unlawful

Rather than attempting to undo the damage to competition resulting from Microsoft's actions and pry open the PC operating system market to competition, the RPFJ is purely forwardlooking, focusing primarily on the precise Microsoft conduct already found to be unlawful. Injunctive relief which simply ''forbid[s] a repetition oft he illegal conduct'' is insufficient under Section 2 because it would allow Microsoft to ''retain the full dividends of [its] monopolistic practices and profit from the unlawful restraint of trade which [it] had inflicted on competitors.'' [20] As the Supreme Court has made plain, an antitrust remedy ''does not end with enjoining continuance of the unlawful restraints'' but must also seek to undo the effects of the illegal acts and ensure that they do not reoccur. [21]

Most of the RPFJ is oriented towards prohibiting a narrow set of future illegal

[13] Id.

[14] Id.

[15] Microsoft III, 253 F.3d at 51, 60, 64, 71, 76–78.

[16] Id. at 103.

[17] See Microsoft III, 253 F.3d at 55–56, 60–61, 70–71; Findings of Facts, 84 F. Supp. 2d at §§ 36–52, 143–44.

[18] Findings of Fact, 84 F. Supp. 2d at §§ 39–40.

[19] Microsoft III, 253 F.3d at 55–56.

[20] Schine, 334 U.S. at 128.

[21] See United States v. Paramount Pictures, 334 U.S. 131, 171 (1948).

conduct by Microsoft. For example, the RPFJ contains provisions which would prohibit Microsoft from:

. retaliating against distributors of or developers for Non-Microsoft Operating Systems and Non-Microsoft Middleware (Sections III.A and III.F);

. entering into certain restrictive agreements relating to the distribution of or development for Non-Microsoft Operating Systems and Non-Microsoft Middleware (Sections III.C, III. F.2, III.G); or

. preventing end-users and OEMs from enabling non-Microsoft Middleware Products over Microsoft Middleware Products (Section III.H).

Although sucb provisions are certainly appropriate in light of Microsoft's past conduct, they merely enjoin Microsoft from continuing to break the law in the future, and do nothing to repair the damage to competition caused by Microsoft's past acts.

4. The RPFJ assumes that Microsoft's Windows distributors will promote competitive middleware products

Sun questions whether the Department's reliance upon Microsoft's primary distributors, PC manufacturers, to re-start competition in the PC operating system market is fundamentally misplaced. In its Competitive Impact Statement, the Department contends that the RPFJ will ''restore the competitive threat that middleware products posed prior to Microsoft's unlawful undertakings.'' [22] The Department's assumption seems to be that by giving PC manufacturers greater contractual freedom to distribute non-Microsoft Middleware Products, a rich market of competing middleware products will arise that could eventually give rise to alternative computing platforms capable of undermining Microsoft's application barrier to entry.

The RPFJ, however, does nothing to ensure that such alternative platforms are actually distributed to consumers. If PC manufacturers choose not to distribute such software, consumers will never have the choice that they had, prior to Microsoft's illegal acts, when alternative platforms like the Navigator browser or the Java platform were ubiquitously distributed. The key question then is whether PC manufacturers will aggressively distribute non-Microsoft platforms. Unfortunately, the Department's Competitive Impact Statement offers no explanation or empirical evidence to support this critical assumption.

Given the limited nature of the relief proposed in the RPFJ, Sun is not as sanguine as the Department about such prospects.

First, despite the retaliation restrictions contained in the RPFJ, because Microsoft's market power is left largely untouched and PC manufacturers remain dependent solely on Microsoft for a critical component for their products, it is very likely that, in practice, many PC manufacturers will remain reluctant to risk incurring Microsoft's wrath by supporting competing platforms. Microsoft simply retains too many formal and informal tactics to reward its ''friends,'' and punish its ''enemies.'' One need only look at PC manufacturers'' treatment of Microsoft's Internet Explorer for guidance on how the terms of the RPFJ are likely to be applied in practice. In July 2001, Microsoft: announced that PC manufacturers, for the first time, would be free to remove access to Internet Explorer. Since that time, not one PC manufacturer has removed the Internet Explorer icon from retail PCs.

Second, under the terms of the RPFJ, competing middleware vendors are at such a competitive disadvantage to Microsoft that it will remain extremely difficult to secure distribution of these competing products through PC manufacturers. Under the RPFJ, Microsoft's ability to bundle middleware products into its Windows operating system would remain essentially unfettered. PC manufacturers would have the legal fight to remove or disable certain Microsoft middleware products, but what commercial incentive will the PC manufacturers have to remove or disable the Microsoft products if they have already paid for such products in order to license the Windows operating system? Moreover, while Microsoft retains the ability to bundle its middleware product (e.g., a browser, media player, etc.) into every copy of Windows (absent an affirmative act by a PC manufacturer to exclude such product), a competitor would have to individually approach scores, if not hundreds, of different PC manufacturers around the world and negotiate a separate agreement with each to achieve a comparable degree of distribution. In addition, because the marginal cost to the PC manufacturer for the bundled Microsoft middleware product is effectively zero, PC manufacturers may be reluctant to pay non-Microsoft middleware vendors a sufficient price to recoup the costs such middleware vendors would incur to make and sell competing products.

Finally, since the vast majority of PC manufacturers are in the business of selling Windows PCs, some manufacturers might believe it is against their own commercial interests to support alternative middleware platforms. For example, if a middleware platform (e.g—, the Java platform) truly lowers barriers to entry and allows consumers to run applications on any operating system (e.g., Apple Mac operating system, etc.) that supports that middleware platform, consumers eventually might chose to purchase their computers from vendors other than Windows PC vendors. Thus, the RPFJ fails to account for the fact that many PC manufacturers may derive substantial benefit from maintaining the applications barrier to entry protecting Microsoft's Windows monopoly.

B. The RPFJ does not remedy the continuing competitive harm to web browsers

Prior to Microsoft's illegal campaign, Netscape's Navigator browser was the market leading web browser by a wide margin. [23] Today, Microsoft's Internet Explorer browser dominates the market, accounting for over 87% of all users. [24] To achieve this dramatic turn of events, the District Court found, and the Court of Appeals affirmed, that Microsoft engaged in a series of unlawful, anticompetitive acts:

. Exclusionary contracts with OEMs, [25] IAPs, [26] and ISVs; [27]

. Commingling of software code to make it technologically difficult to remove Internet Explorer from Windows. [28]

Anticompetitive deals with Apple Computer. [29]

Not only did Microsoft effectively destroy Navigator as a viable alternative platform, by seizing control over the web browser, Microsoft greatly expanded its market power. By dominating web browsers and effectively excluding all competitors, Microsoft secured the power to set and control the protocols and interfaces used for connecting with and communicating over the Internet.

Imagine, for example, that a single company monopolized the manufacture and supply of telephones, such that it supplied 95% of the world's telephones. If that company were permitted to change the dial tone on its phones, or the keypad, in ways that permitted only phones made by it to call and interact with its installed base of telephones, the telephones made and sold by its competitors would have very little or no value, since they could no longer interoperate effectively with 95% of all telephones. And if that company also altered the telephones it made so that they worked best—or indeed only—with the telephone switches and answering machines that the monopoly telephone company also made, then that company would quickly obtain a monopoly over the telephone switch and answering machine markets as well.

Microsoft's control over the browser and PC operating system provides Microsoft with just such unbridled power to dictate unilaterally the interfaces and protocols by which other devices and applications can interoperate with Microsoft's products and services over the Internet. The role played by the browser in communicating with devices, applications, and web services over the Internet is directly analogous to the role played by the consumer telephone in the telephone network.

As a result of Microsoft's illegal acts, Microsoft can now exclude competing products and services from being able to communicate over the Internet with Microsoft's browser, or Microsoft can mandate interfaces and protocols which favor its products over competitors'' products. Thus, by virtue of its anticompetitive conduct, Microsoft has secured the power to potentially appropriate a public asset of immeasurable value—the Internet—through use of proprietary interfaces and protocols.

Control of the browser also was essential to protecting Microsoft's PC operating system monopoly. By controlling this ''killer application,'' Microsoft can determine which competing operating systems, if any, will be able to run Internet Explorer. Without first-rate browser support capable of communicating with the content available

[22] CIS at 3.

[23] See Findings of Fact, 84 F. Supp. 2d at § 360.

[24] 2/21/01 StatMarket Report Regarding Global Browser Usage Share.

[25] See Microsoft III, 253 F.3d at 64.

[26] See id. at 71.

[27] See id. at 72.

[28] See id. at 67.

[29] See id. at 74.

across the Internet, competing PC operating systems simply will not be able to attract consumers away from Microsoft's monopoly operating system.

Finally, control of the browser was important in order for Microsoft to be able to control a key distribution channel for middleware that potentially threatened Microsoft's monopoly. Browsers have been a vital distribution channel for a variety of middleware products, including the Java platform, media players, instant messaging products, etc. If Microsoft did not control this distribution channel, competitors could have continued to use competing browsers as a vehicle for distributing non-Microsoft middleware.

Consequently, the continuing competitive harm flowing from Microsoft's unlawful conduct is substantial. The RPFJ, however, does nothing directly to address it. Instead, it leaves Microsoft to enjoy the spoils of its illegal conduct At best, the RPFJ attempts to make it easier for PC manufacturers to now distribute competing browsers. But given the dominant position that Internet Explorer has now achieved, who will develop and market a competing browser? Because Microsoft bundles Internet Explorer with its monopoly operating system, a competitor would have to compete against a product with a marginal cost to PC manufacturers and consumers of essentially zero, since Microsoft can recoup its costs from its monopoly products. Even if the competing browser were technically superior, Microsoft can regularly introduce new interfaces and protocols to interfere with the competing browser's ability to compete, forcing the competitor to chase each new proprietary standard Microsoft announces.

Unless Microsoft is first stripped of the fruits of its illegal conduct, real competition in the browser market is unlikely to occur. Absent such remedial relief, it is akin to holding a 100-yard dash in which Microsoft has an 87-yard lead after jumping the gun and intentionally tripping all of its competitors. Consumers are directly harmed as a result. Instead of a marketplace offering many different browser choices, consumers are increasingly faced with only one choice—Microsoft's browser.

C. The RPFJ does not remedy the substantial harm to competition caused by Microsoft's illegal acts against the Java platform

The District Court found, and the Court of Appeals affirmed, that Microsoft engaged in numerous anticompetitive acts directed against the Java platform:

Exclusionary ISV deals; [30]

Anticompetitive threats to Intel to stop Java platform development; [31]

Deceiving developers into using Microsoft's incompatible implementation of the Java platform; [32]

Blocking distribution of Netscape Navigator—a prime distribution channel for the Java platform to PCs. [33]

Prior to Microsoft's anticompetitive acts, Sun had secured two major distribution channels for delivering the Java platform to PCs—Netscape's Navigator browser and Microsoft's Internet Explorer browser and Windows operating system. By its illegal acts, Microsoft effectively blocked the distribution of compatible, upgraded versions of the Java platform through both channels, and substantially slowed the development of desktop applications written to the Java platform.

First, by blocking distribution of Netscape Navigator and dramatically reducing its market share, Microsoft effectively closed this alternative channel for distributing compatible versions of the Java platform to PCs. Second, by developing and distributing its own incompatible version of the Java platform which was tied to Windows, Microsoft fragmented the Java platform in order to re-create its applications barrier to entry, ensuring that PC consumers only had Microsoft's version of the Java platform. By refusing to distribute compatible upgrades of the Java platform, Microsoft effectively froze desktop development for the Java platform by continuing to distribute an ''old'' version of the technology, which did not have the richer set of functionality available in later versions. Finally, by means of exclusionary deals, threats, and incompatible developer tools, Microsoft attempted to either deceive or coerce developers away from developing compatible applications written to the Java platform that could run on operating systems other than Windows.

Since the trial, Microsoft has continued to attack the Java platform to the detriment of consumers. In its most recent version of Windows, Windows XP, Microsoft no longer included even the old version of the Java platform which it previously had been shipping as part of Windows in accordance with the terms of a settlement agreement with Sun. As a result, millions of consumers purchasing Windows XP will no longer be able to access web pages that contain applications written to the Java platform unless they engage in a time-consuming download of the entire Java platform.

In addition, Microsoft recently unveiled its own competing middleware runtime—the .NET Framework—as part of its .NET initiative. During the time that Microsoft effectively halted the development and distribution of the Java platform for the PC for several years, it simultaneously was busy developing its own middleware runtime that copied the design and architecture of the Java platform with one glaring difference—the .NET Framework runs only on Windows. Thus, not only did Microsoft's illegal conduct allow it to blunt the competitive threat which the Java platform posed to Microsoft's Windows monopoly, it also allowed Microsoft the time to try and catch up with many of the compelling features that, at the time, only the Java platform offered. The RPFJ, however, does not seek to remedy the continuing competitive harm caused by Microsoft's actions. For example, the RPFJ does nothing to attempt to put the marketplace in the position it would have been ''but for'' Microsoft's conduct—ubiquitous distribution of an upgraded, compatible Java platform on top of every Windows operating system as an available, alternative platform for software applications. Nor does it account for the time-to-market advantage that the Java platform lost as a result of Microsoft's conduct, particularly now that Microsoft will attempt to compete against the Java platform with its .NET Framework. Instead of attempting to undo this damage to competition, the RPFJ would allow Microsoft to bundle its competing .NET Framework with Windows, while forcing Sun and its licensees to try and m-create the distribution channels that Microsoft unlawfully destroyed. Absent real remedial relief, Microsoft will continue to reap the benefits of its unlawful conduct, and consumers will have no meaningful alternative computing platform available on PCs that is not controlled by Microsoft.

IV. Critical Terms In The RPFJ Are Undefined or Ambiguous

A. Significant ambiguities in the RPFJ must be cured to avoid further litigation The dispute between Microsoft and the Department regarding the prior consent decree demonstrates the need to carefully define technical terms to avoid future litigation and ensure the parties agree with respect to Microsoft's obligations. As the Department is well aware, the 1995 consent decree with Microsoft prevented Microsoft from requiring PC manufacturers to license other products as a condition of licensing the Windows operating system. [34] However, the consent decree specified that this obligation did not ''prohibit Microsoft from developing integrated products,'' though the term ''integrated products'' was left undefined. [35]

In 1997, the Department asked the District Court to find Microsoft in contempt for requiring PC manufacturers who licensed the Windows operating system to also license Internet Explorer. Although the District Court found that the Department's proposed definition was probably correct, the court declined to find Microsoft in contempt because Microsoft offered a ''plausible interpretation,'' and any ambiguities had to be resolved in Microsoft's favor. [36] Given that any ambiguities are likely to be resolved in Microsoft's favor in any future enforcement proceeding, Sun believes it is essential that any and all material ambiguities be clarified prior to the entry of the RPFJ.

Although the Department offers its own interpretation of some of the RPFJ's ambiguous terms in the Competitive Impact Statement, Microsoft has repeatedly refused to reveal whether it disagrees with those interpretations. For example, following recent testimony by Microsoft's counsel, Charles Rule, before the Senate Judiciary Committee, members of the Committee posed a series of questions to Mr. Rule regarding whether Microsoft agreed with the

[30] See id. at 76.

[31] See id. at 78.

[32] See id. at 77.

[33] See Findings of Fact, 84 F. Supp. 2d at § 397 (explaining how Microsoft used some of its ''surplus monopoly power'' to suppress distribution of Netscape Navigator and inflict further competitive damage on the distribution of the Java platform).

[34] See United States v. Microsoft Corp., 980 F. Supp. 537, 539 (D.DC 1997).

[35] Id. at 53940 (emphasis added).

[36] Id. at 541–42.

Department's interpretation of the RPFJ as set forth in the Competitive Impact Statement. Mr. Rule's responses were telling. When asked a series of questions directed to whether ''Microsoft disagree[d] with anything stated in the Department's Competitive Impact Statement concerning the meaning and scope of the proposed Final Judgment,'' Mr. Rule refused to answer the questions directly, instead repeatedly referring to the same ''non-answer'': Microsoft did not participate in the preparation of the Competitive Impact Statement. The language of the Revised Proposed Final Judgment was carefully negotiated and means what it says. The Department's Competitive Impact Statement has the same legal force and effect in this case as in any other. Beyond that I cannot go in light of the facts that the Tunney Act proceeding is currently under way before Judge Kollar-Kotelly and that the non-settling states are attempting to raise various issues concerning the Competitive Impact Statement as part of the ongoing ''remedies'' litigation also before Judge Kollar-Kotelly. Once that litigation is completed, I may be in a better position to discuss these issues with the Committee. [37]

Microsoft's clear strategy is to refuse to reveal anything about its interpretations of the RPFJ prior to the Court's entry of the judgment, lest it become clear to both the Department and the public that Microsoft's understanding of its potential obligations under the RPFJ is substantially different from the Department's. Then, when disputes with the Department about the scope of its obligations arise, as they inevitably will, Microsoft will be free to argue that the R.PFJ is ambiguous, and therefore must be construed, as a matter of law, in Microsoft's favor. [38]

While it certainly is in Microsoft's interest to pursue such a strategy, the Department should not risk being complicit in a scheme that would effectively mislead the Court and the public about the true nature and impact of the RPFJ. The Department should insist that Microsoft identify any and all disagreements that it has with the interpretations offered by the Department in the Competitive Impact Statement prior to entry of the RPFJ. Absent such an inquiry and a record of Microsoft's position, the District Court, Sun, and the public at large have no assurances that the terms of the RPFJ will actually be construed/n the manner proposed by the Department in its Competitive Impact Statement.

B. ''Interoperate'' and ''interoperating'' must be defined

The key disclosure provisions contained in the RPFJ rely on the terms ''intemperate'' and ''interoperating'' to define the scope of Microsoft's obligations, but these critical terms are not expressly defined.

Section III.D of the RPFJ would require Microsoft to disclose ''for the sole purpose of interoperate with a Windows Operating System Product ... the APIs and related Documentation that are used by Microsoft Middleware to interoperate with a Windows Operating System Product.'' (emphasis added).

Section III.E would require Microsoft to: make available for use by third parties, for the sole purpose of interoperating with a Windows Operating System Product, on reasonable and non-discriminatory terms..., any Communication Protocol that is ... (i) implemented in a Windows Operating System Product installed on a client computer, and (ii) used to interoperate natively (i.e., without the addition of software code to the client operating system product) with a Microsoft server operating system product. (emphasis added). [39]

Depending on the definition of these terms, the scope of Microsoft's obligations under these provisions could vary dramatically. Therefore, in order to avoid a reprise of the litigation surrounding the 1995 consent decree with Microsoft, the Department should clarify the meaning of these terms in the text of the RPFJ, particularly since any ambiguity is likely to be construed in Microsoft's favor in any enforcement action brought by the Department. An explicit definition of these terms is essential because Sun believes the Department and Microsoft likely attach very different meaning to these terms. For example, in the Competitive Impact Statement, the Department offers a number of broad characterizations regarding the scope of these interoperability disclosures: . ''[I]f a Windows Operating System Product is using all the Communications Protocols that it contains to communicate with two servers, one of which is a Microsoft server and one of which is a competing server that has licensed and fully implemented all the Communications Protocols, the Windows Operating System Product should behave identically in its interaction with both the Microsoft and non-Microsoft servers.''[40]

. ''Section III.E. will permit seamless interoperability between WindowsOperating System Products and non-Microsoft servers on a network. For example, the provision requires the licensing of all Communications Protocols necessary for non-Microsoft servers to interoperate with the Windows Operating System Products'' implementation of the Kerberos security standard in the same manner as do Microsoft servers, including the exchange of Privilege Access Certificates. Microsoft must license for use by non-Microsoft server operating system products the Communications Protocols that Windows Operating System Products use to enable network services through mechanisms such as Windows server message block protocol/ common Internet file system protocol communications, as well as Microsoft remote procedure calls between the client and server operating systems.''[41]

. ''Section III.D of the proposed Final Judgment requires Microsoft to disclose to ISVs, IHVs, IAPs, ICPs and OEMs all of the interfaces and related technical information that Microsoft Middleware uses to interoperate with any Windows Operating System Product .... Microsoft will not be able to hamper the development or operation of potentially threatening software by withholding interface information or permitting its own products to use hidden or undisclosed interfaces.''[42]

In light of these comments, the Department appears to be interpreting ''interoperate'' to mean the ability of two different products to access, utilize, and support the full features and functionality of one another. Under the Department's interpretation, the disclosures would be of sufficient detail to allow a non-Microsoft server operating system to implement the Microsoft Communication Protocols in a manner such that the non-Microsoft server operating system could be substituted for a Microsoft server operating system without any disruption, degradation, or impairment of all the features, functionality, and services of any Microsoft PC operating system connected to such non-Microsoft server operating system. By contrast, in proceedings before the European Commission, Microsoft has asserted a much narrower interpretation of ''interoperate'' than the Department's interpretation. In that forum, Microsoft has maintained it already discloses all information necessary to achieve interoperability between Microsoft's PC operating system and non-Microsoft server operating systems. Since Microsoft contends that they already disclose all of the information necessary to satisfy this narrow definition of ''interoperate,'' if this definition were to prevail, Microsoft will disclose nothing new. Its conduct will remain unchanged.

Under Microsoft's narrow definition, interoperability is a one-way street that is satisfied if all of the functionality of a non-Microsoft server operating system can be accessed from a Windows PC operating system. In contrast to the Department's position, Microsoft has repeatedly taken the position that interoperability does not require a disclosure sufficient to allow a Windows PC operating system to behave identically when connected to both Microsoft and non-Microsoft server operating systems. Moreover, Microsoft has previously claimed that ''interoperability'' relates only to those protocols and interfaces which Microsoft has chosen to document and make available to third parties, and should not include protocols and interfaces that Microsoft reserves for itself to use to connect its PC and server operating system products. Absent an explicit definition of this critical term in the RPFJ, Sun believes the disclosure provisions of the RPFJ are doomed to fail. To avoid future disputes over the meaning of this term and to ensure that the public actually receives a remedy that is consistent with the Department's representations in the

[37] Responses of Charles F. Rule to Judiciary Committee Questions at 13.

[38] See Microsoft, 980 F. Supp, at 541 (''The Court must resolve any ambiguities in the terms of the Final Judgment in favor of Microsoft, the party charged with contempt.''); see also Cause v. Nuclear Regulatory Corem'n, 674 F.2d 921,927–28 (DC Cir. 1982).

[39] See also Section III.H (providing that a Windows Operating System Product may invoke a Microsoft Middleware Product in any instance in which ''that Microsoft Middleware Product would be invoked solely for use in interoperating with a server maintained by Microsoft (outside the context of general Web browsing)'').

[40] CIS at 38.

[41] CIS at 38–39.

[42] CIS at 33.

Competitive Impact Statement, Sun proposes that the RPFJ should be amended to include the following definition: ''Interoperate'' or ''Interoperating'' means the ability of two different products to access, utilize and/or support the full features and functionality of one another in all of the ways they are intended to function. For example, a non-Microsoft operating system installed on a server computer ''Interoperates'' with a Windows Operating System Product installed on a Personal Computer if such non-Microsoft server operating system can (a) be substituted for a Microsoft operating system running on a server computer connected to a Personal Computer running a Windows Operating System Product, and Co) provide the user of the non-Microsoft server operating system the ability to access, utilize and/or support the full services, features and functionality of the Windows Operating System Product that are accessed, utilized and/or supported by such Microsoft server operating system without any disruption, degradation or impairment in such services, features and functions.

C. The scope of Microsoft's ''Communication Protocols'' disclosure should be clarified and exemplified

As a vendor of server operating systems that must connect and communicate with Microsoft's monopoly PC operating system, the disclosure and licensing provisions in Section III. E relating to Microsoft's Communications Protocols are especially important to Sun's business. Although the term Communications Protocols is expressly defined, the RPFJ lacks any explicit examples regarding which Microsoft technologies would currently be required to be disclosed or what the extent of such disclosure would be in practice. While the terms of the RPFJ must be written to anticipate Microsoft's future conduct, there is no excuse for misunderstandings regarding Microsoft's obligations with respect to known, existing interoperability barriers. Because the technical terms surrounding this provision are potentially subject to varying interpretations, the RPFJ would be substantially improved if it gave better guidance on how these provisions would actually be applied in practice.

For example, in its Competitive Impact Statement, the Department identifies some of the specific protocols it believes Microsoft will be required to disclose under Section III.E to the extent such protocols are implemented in Microsoft's PC operating system products, including: protocols relating to Microsoft's Internet Information Services (''IIS'') web server and Active Directory, Microsoft's implementation of the Kerberos security standard (including the exchange of Privilege Access Certificates), the Windows server message block protocol, the Windows common Internet file system protocol, Microsoft remote procedure calls between the client and server operating systems, and protocols that permit a runtime environment (e.g., the Common Language Runtime) to receive and execute code from a server. [43]

Microsoft, however, has refused to say whether it agrees with the Department's interpretation. To avoid future disputes and ensure that the parties agree on the kinds of protocols that will fall within the scope of the term ''Communications Protocols,'' the RPFJ should be amended to identify particular examples of protocols that Microsoft would be required to disclose. Furthermore, in advance of entry of the RPFJ, Microsoft should be required to fully detail what it will disclose with regard to existing Communications Protocols that pose a barrier to interoperability. At a minimum, the Department should require Microsoft to identify any disagreements Microsoft has with the Department's interpretation of this provision prior to entry of the RPFJ. Unless the Department and Microsoft go through the exercise of attempting to apply this provision in practice, the public cannot be assured that there truly has been a ''meeting of the minds'' regarding the scope and meaning of this important provision. Not only should the Department clarify the RPFJ with examples of particular protocols that Microsoft currently would be required to disclose, the Department also should clarify the kinds of information Microsoft will be required to disclose regarding its Communications Protocols. Although the term Communications Protocols appears to be defined broadly in Section VI.B of the RPFJ, in practice, the actual application of these provisions is likely to give rise to many potential questions and disputes. For example,

. Is everything that is shipped with Microsoft Windows server operating system products (e.g., Windows 2000 Server, Windows 2000 Advanced Server, etc.), including Microsoft's Active Directory or IIS, part of the ''server operating system,'' and therefore potentially the subject of disclosure to the extent it comprises a ''Communications Protocol''?

. Are Active Directory, Kerberos security protocol, COM+, Dfs, DLT, CIFS extensions, RPC, the Win 32 APIs, or Passport examples of ''Communications Protocols'' that must be disclosed and licensed pursuant to Section III.E of the RPFJ?

. Where Microsoft has extended an industry standard like Kerberos, will Microsoft be required to disclose both the standard portion of its implementation and its proprietary extensions?

. Will Microsoft be required to disclose the details regarding its proprietary implementation of the Kerberos security protocol in Windows 2000 and Windows XP Professional, including the information necessary for a non-Microsoft server to be able to generate, exchange, and process the authentication and authorization data in Privilege Access Certificates?

. What does ''make available for use by third parties'' mean in practice in the context of Section III.E? Will Microsoft be required to just disclose fields, formats, etc., or will it be required to disclose sufficient information to allow a competitor to create its own implementation of the Communications Protocol that will allow a competitor's server operating system to seamlessly interoperate with the Windows PC operating system in the same manner as a Microsoft server operating system? Unless such questions are resolved and clarified in advance of entry of the RPFJ, the disclosure and licensing obligations of Section III.E will not provide any meaningful relief.

D. The scope of the ''carve-out'' provisions of Section III.J should be clarified Particularly troubling to Sun is the possibility that the ''carve-out'' provisions of Section III.J might be broadly construed by Microsoft to exclude many of the kinds of disclosures that would otherwise fall within the scope of Sections III.D and III.E. Section III.J. 1 provides that no provision of the Final Judgment shall: [r]equire Microsoft to document, disclose or license to third parties: (a) portions of APIs or Documentation or portions or layers of Communications Protocols the disclosure of which would compromise the security of 'a particular installation or group of installations'' of anti-piracy, anti-virus, software licensing, digital rights management, encryption or authentication systems, including without limitation, keys, authorization tokens or enforcement criteria .... (emphasis added).

In the Competitive Impact Statement, the Department characterizes this exception as a ''narrow one, limited to specific end-user implementations of security items such as actual keys, authorization tokens or enforcement criteria, the disclosure of which would compromise the security of 'a particular installation or group of installations'' of the listed security features''[44] But nowhere in the RPFJ is the term ''compromise the security of a particular installation or group of installations'' defined. What will this provision mean in practice? With respect to known interoperability problems relating to Active Directory, Microsoft's Kerberos security model, Windows Media Player, or the Passport authentication/authorization service, what portions of those protocols and interfaces can Microsoft refuse to disclose pursuant to this provision? If Microsoft refuses to disclose such information, will competitors be able to fully interoperate with all of the features and functionality of the Windows operating system, or will the value of the disclosure provisions be effectively eviscerated? What steps has the Department taken to ensure that, in practice, this exception will not swallow the intended effect of the disclosure provisions?

Again, unless such questions are clarified in advance of entry of the RPFJ, Microsoft is likely to use this purportedly narrow exception to eviscerate its disclosure and licensing obligations under the RPFJ.

E. The definition of ''Microsoft Middleware Product'' should be amended The definition of ''Microsoft Middleware Product''[45] in the

[43] CI8 at 37–39.

[44] CIS at 39.

[45] The RPFJ defines ''Microsoft Middleware Product'' as Follows:

1. the functionality provided by Internet Explorer, Microsoft's Java Virtual Machine, Windows Media Player, Windows Messenger, Outlook Express and their successors in a Windows Operating System Product, and.

2. for any functionality that is first licensed, distributed or sold by Microsoft after the entry of this Final Judgment and that is part of any Windows Operating System Product

RPFJ is fundamentally flawed because it grants Microsoft discretion to limit its obligations merely based on the way it chooses to trademark its products. For middleware functionality that is distributed after entry of the Final Judgment, except for a small, specified class of middleware applications (e.g., Internet browsers, email client software, etc.), Microsoft's obligations under the RPFJ are not triggered unless it chooses to distribute the middleware product under a trademark other than ''Microsoft??'' or ''Windows??''[46] In other words, after entry of the RPFJ, if Microsoft bundles its new middleware runtime alternative to the Java platform, the .NET Framework (also known as the Common Language Runtime) with Windows, it only would have to make disclosures about the APIs used by the .NET Framework or allow OEMs and consumers to remove access to it, if it chose to distribute the .NET Framework under the trademarked name ''.NET Framework.'' If it simply distributed the product under the name ''Microsoft??'' .NET Framework,'' its activities would appear to be unconstrained by the RPFJ. To allow Microsoft to evade its obligations under the RPFJ based on arbitrary trademarking practices is absurd.

To avoid this result, the definition of ''Microsoft Middleware Product'' should be amended as follows: the ''Trademarked'' requirement of Section VI.K.2.b.iii should be stricken; the terms ''.NET Framework'' and ''Common Language Runtime'' should be added to Section VI.K. 1; and the term ''middleware runtime environment'' should be added to Section VI.K.2.a.

V. Section III.I's Licensing Provisions Allow Microsoft to Profit from Its Unlawful Acts

A. Microsoft should not be allowed to demand royalties as a condition for making interoperability disclosures

The licensing provisions of the RPFJ are fundamentally flawed because they would require the public to pay royalties to Microsoft in order to interoperate with Microsoft's illegally maintained monopoly products. If Microsoft had not engaged in its pattern of illegal conduct, its monopoly would have begun to dissipate, and it would have been unable to collect this ''interoperability'' tax. As the Department itself previously recognized, ''[i]f Microsoft were in a competitive market, it would disclose its confidential interface information to other server software developers so that their complementary software would work optimally with, and thereby enhance the value of, Microsoft's PC operating systems.''[47] It is only because Microsoft has illegally maintained its PC operating system monopoly and wishes to expand its monopoly to server operating systems that Microsoft has an incentive to withhold information from competitors regarding complementary software. Thus, the RPFJ, in effect, authorizes Microsoft to collect a portion of its monopoly rents through this licensing regime.

Furthermore, not only is Microsoft authorized to collect royalties for the ''privilege'' of interoperating with its illegal monopoly, the RPFJ places no limits on how high a royalty Microsoft can demand, other than the royalty must be reasonable. However, since competitors'' products must be able to interoperate with Microsoft's monopoly PC operating systems, they may be constrained to essentially pay whatever Microsoft demands. To ensure Microsoft does not continue to enjoy the fruits of its illegal conduct, Section III.I of the RPFJ should be mended to require Microsoft to grant any licenses required under the RPFJ on a royalty-free basis.

B. Microsoft has too much discretion over licensing terms under the RPFJ Although Section III.I of the RPFJ places some limitations on the terms under which Microsoft must license its technology to facilitate the disclosure obligations of the RPFJ, Microsoft retains broad discretion, which it is likely to exploit. For example, Section III.I. 1 requires that all license terms be ''reasonable.'' A reasonableness standard, however, provides little practical guidance, and is a particularly poor choice in the case of a monopolist like Microsoft who has repeatedly broken the law to secure commercial advantages over its competitors. Similarly, the fact that licenses must be ''nondiscriminatory'' could actually be exploited by Microsoft to ensure that its strongest competitors are denied access to Microsoft's disclosures. For instance, a small start-up company with no revenues and no existing intellectual property rights might be willing to agree to terms that would be commercially unacceptable to significant Microsoft competitors like Sun, IBM, or Novell. The terms of the RPFJ also allow Microsoft the ability to substantially delay making any interoperability disclosures. Under Section III.E, Microsoft does not even need to make its Communications Protocols available until nine months after submission of the RPFJ. But since Microsoft can insist that third parties enter into a license agreement before they receive any disclosures, Microsoft can continue to delay making disclosures to key competitors by dragging out negotiations and insisting on commercially unacceptable terms. Does the Department intend to review ongoing negotiations to ensure Microsoft is taking reasonable positions in the negotiations? How will the Department ensure that Microsoft does not exploit the negotiating process to facilitate delay and disadvantage key competitors? Will Microsoft's competitors be forced to sign license agreements before they know the scope of information that Microsoft will or will not disclose? Does the Department expect that the proposed Technical Committee will be involved in resolving such disputes? If so, will Technical Committee members have the requisite licensing and legal experience to assess whether Microsoft is insisting upon commercially unreasonable terms? To ensure Microsoft cannot circumvent the intent of the RPFJ, Sire proposes that the R.PFJ be amended to include a publicly available template identifying the terms under which Microsoft will license its technology pursuant to the RPFJ. In principle, this approach is analogous to Section III.B which requires Microsoft to have uniform license agreements with OEMs in accordance with published, uniform royalty rates. Requiring Microsoft to identify this license template in advance would serve two important objectives. First, it would help limit Microsoft's ability to evade the intent of the RPFJ through negotiation tactics. Second, it would allow the public to understand the true costs and conditions of licensing under the RPFJ in advance of entry of the RPFJ. Unless the material licensing terms are specified in advance, neither the Department nor the public can accurately assess the actual commercial significance of the proposed disclosure obligations.

C. Microsoft should not be allowed to force third parties to forfeit their intellectual property claims against Microsoft

Section III.I.5 provides that third parties ''may be required to grant to Microsoft on reasonable and nondiscriminatory terms a license to any intellectual property rights it may have relating to the exercise of their options or alternatives provided by this Final Judgment.'' In other words, Microsoft would be free to infringe a third party's patents or copyrights, or steal its trade secrets, and then by virtue of its monopoly position, force such third party to grant Microsoft a license to do so as the price that third party must pay in order to interoperate with Microsoft's monopoly product. If Microsoft wished to obtain rights to practice or use a competitor's intellectual property, it could do so simply by incorporating that technology into Windows, then insisting on both a royalty and a grant-back license as the consideration that competitor must provide in order to enable its products to interoperate with Microsoft's monopolized PCs. Indeed, Microsoft's competitors would have to license Microsoft the right to whatever intellectual property Microsoft may have incorporated into Windows even before they know what intellectual property Microsoft has stolen or infringed. No other company has such power, let alone governmental blessing and endorsement, to extort such concessions. Sun therefore proposes that the RPFJ be mended to strike Section III. I.5 in its entirety.

VI. Conclusion

The RPFJ fails to remedy the continuing competitive harm resulting from Microsoft's actions, and instead improperly accedes to Microsoft's illegally maintained and

a. Internet browsers, email client software, networked audio/video client software, instant messaging software or

b. functionality provided by Microsoft software that—

i. is, or in the year preceding the commercial release of any new Windows Operating System Product was, distributed separately by Microsoft (or by an entity acquired by Microsoft) from a Windows Operating System Product;

ii. is similar to the functionality provided by a Non-Microsoft Middleware Product; and

iii. is Trademarked. Functionality that Microsoft describes or markets as being part of a Microsoft Middleware Product (such as a service pack, upgrade, or bug fix for Internet Explorer), or that is a version of a Microsoft Middleware Product (such as Internet Explorer 5.5), shall be considered to be part of that Microsoft Middleware Product.

[46] See RPFJ, Sections VI.K and VI.T.

[47] 4/28/00 Plaintiffs'' Memo. in Support of Proposed Final Judgment at 28.

expanded monopoly power. The Department should withdraw its support for the RPFJ, and instead pursue remedies that will restore competition to the PC operating system market, prevent Microsoft from expanding its monopoly in that market into adjacent and downstream markets, and redress the harm to competition caused by Microsoft's illegal acts. At a minimum, the Department should seek to remedy directly the specific harm to competition caused by Microsoft's illegal acts against the Navigator browser and the Java platform, which formed the very heart of the Department's case against Microsoft. Because critical terms in the RPFJ are undefined or ambiguous, the Department also should assure the public that Microsoft is bound by the interpretation of the RPFJ set forth in the Department's Competitive Impact Statement. Finally, the Department should delay seeking entry of the RPFJ until the completion of trial on the remedies sought by the Department's co-plaintiffs, the Litigating States. Sun believes that the evidentiary record from that trial is likely to demonstrate the substantial flaws and inadequacies of the RPFJ and cause the Department to seriously re-consider whether its support for the RPFJ is in the public interest.

MTC–00030610

MAYER, BROWN & PLATT
555 COLLEGE AVENUE
PALO ALTO, CA 94306- 1433
DONALD M. FALK
DIRECT DIAL (650) 33 1–2030
DIRECT FAX (650) 33 1–2068
dfalk@mayerbrown.com
MAIN TELEPHONE
(650) 331–2000
MAIN FAX
(650) 33I–2060
January 28, 2002
VIA E-MAIL AND MESSENGER
Renata B. Hesse
Antitrust Division
U.S. Department of Justice
601 D Street NW
Suite 1200
Washington, DC 20530–0001
Re: Microsoft Settlement: United States v. Microsoft Corp., No. 98–1232 Tunney Act proceedings

Dear Renata:

Enclosed please find the following comments on the settlement:

(1) Comments of Computer & Communications Industry Association on the Revised Proposed Final Judgment;

(2) Declaration of Joseph E. Stiglitz and Jason Furman; and

(3) Declaration of Edward Roeder.

Thank you for your assistance. Please feel free to call my Washington colleague, David Gossett (202–263–3384) or me if you have any questions.

Hope all is well with you. It's a long way from the ELQ days.

Sincerely,
Donald M. Falk
Enclosures

BEFORE THE UNITED STATES DEPARTMENT OF JUSTICE UNITED STATES OF AMERICA Plaintiff, V. MICROSOFT CORPORATION, Defendant. Civil Action No. 98–1232 (CKK) United States District Court for the District of Columbia STATE OF NEW YORK ex rel. Attorney General ELIOT SPITZER, et al., Plaintiffs, v. MICROSOFT CORPORATION, Defendant. Civil Action No. 98–1233 (CKK) United States District Court for the District of Columbia

COMMENTS OF COMPUTER & COMMUNICATIONS INDUSTRY ASSOCIATION ON THE REVISED PROPOSED FINAL JUDGMENT

Donald M. Falk
Mayer, Brown & Platt
555 College Avenue
Palo Alto, California 94306
(650) 331–2030
(650) 331–2060 facsimile
Edward J. Black
Jason M. Mahler
Computer & Communications Industry Association
666 11th Street NW
Washington, DC 20001
(202) 783–0070
David M. Gossett
Mayer, Brown & Platt
1909 K Street, NW
Washington, DC 20006
(202) 263–3000

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INTEREST OF THE COMMENTER

The Computer & Communications Industry Association (''CCIA'') is an association of computer, communications, Internet and technology companies that range from small entrepreneurial firms to some of the largest members of the industry. CCIA's members include equipment manufacturers, software developers, providers of electronic commerce, networking, telecommunications and on-line services, resellers, systems integrators, and third-party vendors. Its member companies employ nearly one million persons and generate annual revenues exceeding $300 billion. CCIA's mission is to further the interests of its members, their customers, and the industry at large by serving as the leading industry advocate in promoting open, barrier-free competition in the offering of computer and communications products and services worldwide. CCIA's motto is ''Open Markets, Open Systems, Open Networks, and Full, Fair and Open Competition,'' and its website is at www.ccianet.org. For nearly 30 years, CCIA has supported antitrust policy that ensures competition and a level playing field in the computer and communications industries. That involvement antedates the founding of Microsoft, much less its acquisition of its first monopoly and its refinement of anticompetitive techniques. CCIA supported the Tunney Act in the 1973 congressional hearings preceding the enactment of that legislation, and played active roles on the side of competition in other significant antitrust cases, including those against AT&T and IBM. Before participating as amicus curiae at the trial and appellate stages of the current Microsoft case, CCIA participated as a leading amicus curiae in the proceedings examining the last Microsoft consent decree in 19941995, both in the district court and in the court of appeals. As a consequence, CCIA and its members are intimately familiar with the shortcomings of that decree, and its failure to prevent or deter Microsoft from continuing on an anticompetitive course. Microsoft's conduct in the intervening years, including the period while this case has been litigated, has only sharpened CCIA's awareness of Microsoft's dedication to driving out competition from as many aspects of the computer-software and related industries as possible. Microsoft may repeat its attempts to mischaracterize CCIA as a mere voice for competitors, but that innuendo cannot withstand scrutingy in light of the diversity of CCIA's membership now and over the years, combined with CCIA's 30 years of vigorous commitment to supporting openness and competition in the computer technology and communications industries. In hopes that a meaningful remedy in this case will prevent Microsoft from further expanding the scope of its monopoly, and with the certainty that the current Revised Proposed Final Judgment (''RPFJ'') falls far short of that task, CCIA submits this analysis of the RPFJ in conjunction with the economic analysis of Nobel laureate Joseph Stiglitz and his colleague Jason Furman, and the Declaration of Edward Roeder.

INTRONUCTION

The Tunney Act was designed to constrain the Department of Justice (''DOJ'') from entering into settlements that provided DOJ with an exit from an antitrust case but did not provide the public with a remedy commensurate with the defendant's antitrust violations. The Revised Proposed Final Judgment (RPFJ) in this case does not provide adequate relief for the extensive and thoroughly proven antitrust violations it purports to remedy. Review of the RPFJ in this case should be especially searching because there can be no doubt about Microsoft's liability. For the first time in the history of the Tunney Act, the Court will review a proposed settlement reached after liability has been not only imposed, but unanimously affirmed on the government's most sweeping and economically significant theory. That clear-cut liability, and the voluminous Findings of Fact and trial record, place the Court in this case in a different position from courts reviewing pre-trial settlements. Because there is no litigation risk on liability, the Court is uniquely situated to evaluate any asserted litigation risk as to remedy. Established principles of antitrust relief provide the Court in this case with concrete, recognized standards to ensure that the settlement serves the public interest in a way that courts reviewing pre-trial settlements cannot. Magnifying the need for close measurement of the RPFJ by objective principles is Microsoft's silence, in its filing under 15 U.S.C. 16(g), about its effort to truncate this case by a lobbying campaign of unprecedented scope directed at the Executive and Legislative Branches alike—despite extensive public reports of that lobbying. Microsoft's effort to deny the obvious gives rise to an inference that it has something to hide.

The terms of the RPFJ provide the strongest reason for close scrutiny, because they cannot withstand analysis. The RPFJ would not provide a meaningful remedy for Microsoft's extensive campaign of exclusionary acts. That campaign suppressed the most serious threat to Microsoft's monopoly in the past decade, and not only prevented the erosion of the applications barrier to entry that insulates the monopoly, but increased the bar to new competition. The RPFJ ignores some of the most significant holdings of the court of appeals, however, including its separate imposition of liability for Microsoft's commingling of middleware code with the code for the Windows operating system.

More fundamentally, the RPFJ misses the point of Microsoft's illegal conduct, which was to prevent erosion of the applications barrier to entry by preventing middleware from attracting software developers to the middleware application programming interfaces (''APIs''). The RPFJ's basic premises, moreover, ignore the current economic and technical realities of the computer and software markets. In the seven years since Microsoft began the illegal conduct at issue in this case, Microsoft has strengthened its operating systems monopoly. The Internet browser, formerly a threat to that monopoly, has become an adjunct to it, with Microsoft's 91% share of that product adding further insulation to the operating systems monopoly. Microsoft's unadjudicated monopoly over personal productivity applications—a key to the applications barrier to entry in the operating systems market—likewise has grown in market share and market power. But the RPFJ does not try to deprive Microsoft of any of the benefits of its illegal activity directed at the browser and other middleware. DOJ's remedial theory rests entirely on unidentified future middleware threats. In fact, there are no technologies today presenting a threat as intense as that presented by the Netscape browser and Java, and the duration of the RPFJ is so short that it almost certainly will expire before any significant new threats materialize. Aside from some restrictions on commercial retaliation that at best might keep matters from getting worse, the RPFJ relies on two sets of putative obligations to achieve a more competitive market. But neither the provisions aimed at original equipment manufacturer (''OEM'') flexibility nor those addressing information disclosure requirements in fact require anything competitively meaningful. In large part, these provisions replicate Microsoft's current business practices respecting the disclosure of technical information and the configuration of end-user access to middleware products.

The OEM flexibility sections in RPFJ §§ III(C) and III(H) are literally superficial,

principally addressing desktop icons rather than the middleware code itself, which contains the APIs relied on by software applications developers. Even if successful, the flexibility provisions would not affect the applications barrier to entry. Moreover, these provisions largely restate current business practices or provide OEMs with flexibility that both Microsoft and DOJ understand from experience will never be exercised. OEMs have little or no incentive to exercise their options; if they decline to do so, then the flexibility provisions will have no competitive consequences for the industry. The RPFJ's information disclosure sections (Ill(D) and Ill(E)) are so transparently insubstantial as to cast doubt on the entire proposal. The purported disclosure requirements trace back to definitions that are committed to Microsoft's control, are circular, or simply do not exist. Neither DOJ nor any other objective observer could have any idea precisely which APIs or protocols must be disclosed. The RPFJ's provisions and definitions are so vague that only two practical results are possible. Either everyone will simply ignore the decree, which plainly would not be in the public interest for an antitrust remedy, or the Court will have to take primary responsibility for defining its terms during enforcement proceedings. DOJ's answer seems to be to let Microsoft set the terms of its obligations: the RPFJ gives the defendant ''sole discretion'' to define the decree's most important term, ''Windows Operating System Product,'' which appears 46 times to delimit the RPFJ's 10 substantive

Indeed, much of DOJ's Competitive Impact Statement (''CIS'') seems to reflect an understanding that the RPFJ is inadequate in several critical respects. The CIS defines terms not defined in the RPFJ, exaggerates the scope of certain RPFJ provisions, and redefines other terms in order to minimize the impact of some of the broad exemptions in the RPFJ. It is the RPFJ that the Court would have to enforce, however, as the CIS is not part of the contract between DOJ and Microsoft.

In sum, although the RPFJ's provisions superficially seem to restrict Microsoft's practices, there is no substance behind them. The provisions accomplish little beyond laying down criteria for Microsoft to follow in order to avoid any interference with its continuing campaign of illegal monopolization. The terms of the RPFJ, as much as the circumstances of the settlement, strongly suggest that Microsoft and the Department of Justice shared a desire to end this case, rather than to provide an effective remedy for Microsoft's substantial antitrust violations. The 1995 consent decree with Microsoft produced uninterrupted illegal monopolization, prompting the filing of this case in 1998. The Court can expect the same with this decree. The RPFJ, if approved, might temporarily end DOJ's involvement, but would not provide the type of remedy that the public interest and the Tunney Act demand. To the contrary, because the harm to the competitive process caused by Microsoft's adjudicated illegal conduct is certain, a remedy that masks but does not cure that harm affirmatively injures the public interest, and therefore should be rejected.

A. Liability Rests On Microsoft's Suppression Of Middleware Threats That Threatened To Erode The Applications Barrier To Entry This case is about Microsoft's devastatingly thorough suppression of threats to its Windows operating system (''OS'') monopoly by ''middleware.'' That monopoly was insulated from competition by the applications barrier to entry described by the court of appeals and the CIS. See United States v. Microsoft Corp., 253 F.3d 34, 55–56 (DC Cir. 2001) (''Microsoft III''); CIS 10–11, 66 Fed. Reg. 59,452, 59,462 (2001). See also Declaration of Joseph E. Stiglitz & Jason Furman 7–9 (''Stiglitz/Furman Dec.'') (attached). The middleware at issue in this case exposed APIs that could be used by software applications developers to write programs that did not rely on the underlying Windows operating system. As Microsoft recognized, if developers embraced non-Microsoft middleware APIs and designed their products to run on that middleware rather than directly on an operating system, ''middleware'' of this kind ''would erode the applications barrier to entry,'' as ''applications * * * could run on any operating system on which the middleware product was present with little, if any, porting.'' Microsoft III, 253 F.3d at 55. The threat that ''middleware could usurp the operating system's platform function,'' id. at 53, prompted Microsoft's anticompetitive conduct. But non-Microsoft middleware can become a competing platform only if developers write software that calls on the non-Microsoft middleware APIs. Most developers will create software only to run on platforms that are distributed widely enough for the developers to be reasonably certain that the APIs (on which their programs rely) will be present on most, if not all PCs. Likewise, if developers can be certain that Microsoft's middleware APIs are present on all PCs, this will strongly influence their initial decision as to whether it is worth the effort to write applications to alternative, non-Microsoft middleware APIs. The successful theory of the case—proved and accepted by two courts—is that Microsoft engaged in an ''extensive campaign of exclusionary acts'' that were designed ''to maintain its monopoly'' by suppressing middleware threats posed by the Netscape Navigator Internet browser and the cross-platform Java technologies. CIS 9, 66 Fed. Reg. 59,462; Microsoft III, 253 F.3d at 53–56, 60–62, 74–78. Microsoft's response to this threat guaranteed that developers would not use the APIs of competing middleware, destroying the platform threat. Because Microsoft has a monopoly over the OS, it can ensure that its own versions of a middleware product have universal distribution, so that Microsoft's middleware APIs will be present on all PCs. For example, because Windows is both an operating system and a distribution channel for Microsoft's technologies, Microsoft could and did ensure that the code for its Internet Explorer (''IE'') browser was distributed to every PC.

Ensuring that the code for Microsoft middleware was on every PC accomplished two related goals. First, it guaranteed instant and unassailable ubiquity for the Microsoft version of the middleware and the middleware APIs on which developers rely. Second, the forced ubiquity of Microsoft middleware prevents competing middleware from achieving ubiquity, or anything like it, because few distribution channels will incur the support and other costs of distributing two versions of the same functionality. A key theory of the case is that the applications barrier to entry could have been eroded only if developers chose and used alternative middleware platforms on which to write software. End-user access to middleware was significant only to the extent it influenced developers'' choices to write to the APIs of that middleware. Thus, ensuring that the code for the Microsoft version of middleware is on every PC destroys the competitive threat presented by the competing middleware's APIs, since few developers will use them in preference to Microsoft middleware APIs that are certain to be ubiquitous. This fact provides the essential context for any meaningful analysis of the information disclosure and OEM flexibility provisions of the RPFJ.

B. The RPFJ Does Not Prevent Microsoft From Abusing Its Position And Does Not Meet Basic Standards For An Antitrust Remedy

The DC Circuit set out a simple standard for measuring the legal sufficiency of any remedy selected in the Microsoft litigation: the remedy must ''seek to ''unfetter [the] market from anticompetitive conduct,'' * * * to ''terminate the illegal monopoly, deny to the defendant the fruits of its statutory violation, and ensure that there remain no practices likely to result in monopolization in the future.'' Microsoft III, 253 F.3d at 103 (quoting Ford Motor Co. v. United States, 405 U.S. 562, 577 (1972), and United States v. United Shoe Machinery Corp., 391 U.S. 244, 250 (1968)). As the District Court recognized in beginning remedy proceedings on remand (9/28/01 Tr. 6–7), not one word in the DC Circuit's opinion suggests the slightest antipathy toward any conduct remedy related to the illegal monopolization that the Court of Appeals exhaustively condemned.[1] The District Court warned the plaintiffs to be ''cautiously attentive to the efficacy of every element of the proposed relief.'' 9/28/01 Tr. 8. That is, the plaintiffs must make sure that the proposed remedy works.

That admonition appears to have fallen on deaf ears. Because liability has been established and affirmed in great detail, the scope of the District Court's appropriate deference to DOJ is extremely limited because the range of permissible action by DOJ is closely confined. There is no litigation risk other than the risk that the District Court would not approve a particular remedy, or that the District Court's exercise of discretion in approving a remedy might be reversed on appeal. A remedy, even one imposed by agreement, must provide adequate relief for the violations that have been proved, however. DOJ is entitled to deference only for choices that fall within the range of adequate

[1] Indeed, in denying rehearing, the DC Circuit made crystal clear that ''[n]othing in the Court's opinion is intended to preclude the District Court's consideration of remedy issues.'' Order, at 1 (DC Cir. Aug. 2, 2001) (per curiam).

relief. The RPFJ misses the point of the central theory of liability. The RPFJ does not impose certain, enforceable, or competitively significant obligations on Microsoft to restore competition or to avoid suppressing future threats. The RPFJ allows Microsoft to keep every anticompetitive gain that resulted from its illegal conduct, simply requiring Microsoft to find new and slightly different ways to accomplish its anticompetitive goals. DOJ seems to recognize that the case focused on two specific products—Netscape Navigator and Java—that embodied the broader threat of middleware and the Internet to the stability and significance of Microsoft's monopoly. The RPFJ does nothing to restore the specific competitive threat posed by an independent Internet browser. It does nothing to restore the threat of cross-platform Java. And it does nothing to protect any other middleware threat—in the unlikely event that another such threat might arise within the short duration of the RPFJ—from much similar exclusionary conduct, or indeed from the identical commingling of code that sealed Netscape's fate. Rather, the RPFJ appears to assume that it is still 1995, and that the threat of the Internet browser can begin anew without confronting a more thoroughly entrenched Microsoft. The RPFJ does not take account of the impact on participants at different levels of the computer and software industries of an additional seven years of Microsoft's anticompetitive abuses. That view does not accord with reality, and the provisions intended to permit open competition in that counterfactual world cannot achieve their goal.

C. The Obligations That Supposedly Restore Competitive Conditions In Fact Make Microsoft Do Virtually Nothing Against Its Will

The RPFJ purports to give current and future middleware the ability to present the same threats to the Microsoft monopoly that Netscape and Java presented before the onset of Microsoft's illegal conduct. DOJ describes the obligations in the RPFJ as if they would have stopped Microsoft's suppression of Netscape, and as if they would allow rival middleware vendors to obtain the technical information that they need to ''emulate Microsoft's integrated functions'' (Testimony of Charles James before Senate Judiciary Committee 7 (Dec. 12, 2001)) and to step into the shoes of Microsoft middleware in relation to Windows and the Windows monopoly. The RPFJ does not achieve those goals. Most of the RPFJ reduces to two sets of obligations, along with some prohibitions on exclusive deals and on retaliation against those who take advantage of Microsoft's obligations. One set of obligations appears to restrain Microsoft from taking particular actions to interfere with OEMs'' placement of the icons of Non-Microsoft Middleware on their machines, or with end-users'' use of those products. These OEM flexibility provisions principally rely on the OEMs to provide a remedy for Microsoft's misconduct. The other set of obligations requires a certain degree of disclosure of APIs and Communications Protocols to allow competing software products can ''interoperate'' -an undefined term—with the monopoly OS. For the most part, the obligations placed on Microsoft by the RPFJ simply replicate current options voluntarily provided by Microsoft. For example, Microsoft must continue to disclose the APIs it currently discloses in the Microsoft Developers'' Network (MSDN), a program Microsoft developed to further its self-interest in making the Windows platform popular with software developers. And Microsoft must continue to allow end-users to delete icons from the desktop and start menu. Such provisions at most simply prohibit Microsoft from making matters worse than they are after Microsoft's years-long anticompetitive campaign. Indeed, the RPFJ in some instances specifically approves potential misuse of Microsoft's current voluntary implementations of the flexibility and disclosure provisions. To begin with the flexibility provisions, their chief flaw is their focus on icons rather than on middleware functionality. This is literally a superficial approach. Microsoft can include its own middleware and middleware APIs on every PC. Developers will know those APIs are there and consequently will write to them in preference to the APIs of a competing product that may or may not be on a particular machine. No provision of the RPFJ restricts Microsoft's insertion and commingling of middleware code into the ''Windows Operating System Product'' bundle that Microsoft receives the right to define for decree purposes ''in its sole discretion.'' RPFJ § VI(U). From the point of view of developers—and thus of the ability of middleware to erode the applications barrier to entry—these ''flexibility'' provisions are meaningless. Even to the extent that competing middleware vendors might obtain favorable placement for their products'' icons in preference to the icons for Microsoft products, that achievement would be both superficial and temporary. The functionality of the Microsoft product would remain on the machine, and Microsoft could insist on its invocation for a variety of functions. And, 14 days after a PC first boots up, Microsoft would be free to nag users to click a ''Clean Desktop Wizard'' which would organize icons in the way that suited Microsoft. There is nothing in the RPFJ to stop that ''Wizard'' from resetting default applications to coincide with Microsoft's preferences as well, or even from enhancing the product so that it becomes a Clean File Wizard to remove code of competing middleware with a single click. These provisions place responsibility for restoring competition on innocent OEMs and ISVs rather than on Microsoft. And many provisions give end-users what they have now: the ability to remove an icon from the desktop or a program menu by right-clicking it and selecting ''Delete,'' or by dragging it to the Recycle Bin. The provisions do change the status quo in one way. The ''Add/Remove'' function, which now removes some underlying code for applications, will only remove a few icons when the removed application is Microsoft middleware. The disclosure provisions are no better. The RPFJ requires Microsoft to disclose APIs between ''Microsoft Middleware'' and a ''Windows Operating System Product,'' but the definitions of those terms are so completely within Microsoft's control that it is impossible to tell whether Microsoft ever would have to disclose an API that might have competitive significance. As noted above, a ''Windows Operating System Product'' is whatever Microsoft says it is. ''Microsoft Middleware'' must be distributed separately from the OS (unlike, e.g., the current version of Windows Media Player). ''Microsoft Middleware'' must be ''Trademarked'' in a way that would exclude Windows Messenger, may exclude Windows Media Player, and certainly would exclude any products that followed Microsoft's practice of simply combining the Microsoft(r) or Windows(r) marks with a generic or descriptive term. Indeed, because ''Microsoft Middleware'' need not mean any more than the user interface of a middleware functionality that meets the other definitional requirements, see RPFJ § VI(J)(4), the only APIs that must be disclosed are those between the middleware user interface and ''Windows,'' which Microsoft in its discretion can define to include all of any given middleware functionality. See id. § VI(U). Microsoft need not disclose how the middleware actually invokes Windows to work, except for the way that the OS displays the middleware's shell. The disclosure provisions applying to Communications Protocols are similarly weakened by non-existent definitions. The disclosable Protocols are those required to ''interoperate''—whatever that may mean—with equally undefined ''Microsoft server operating products.'' RPFJ § III(E). In addition, the Communications Protocol disclosure provisions are limited by sweeping exceptions applying to security protocols that are intertwined with all significant computer-to-computer communication. See id. § III(J)(I). Microsoft can withhold parts of those Protocols (and, indeed, parts of APIs) on the basis that disclosure would compromise security of an installation. If this exemption were limited to the customer-specific data like encryption keys or authorization tokens, it would be necessary, not objectionable. But the exemption explicitly permits Microsoft to withhold portions of the Protocols and APIs themselves, which necessarily makes ''interoperation'' (as that term normally is used) incomplete. Interoperation, however, is an all-or-nothing state. Software that can use only parts of APIs and Communications Protocols simply cannot ''interoperate'' with the software on the other side of the API or Protocol. But that is not all. RPFJ § III(J)(2) permits Microsoft to refuse to disclose security-related Protocols or APIs to any company that does not meet Microsoft's standards of business viability or its standards for a business need. Again, little if anything is left of this disclosure requirement if Microsoft chooses to resist disclosure when that serves its anticompetitive goals. One thing is certain. Unless Microsoft and DOJ alike render the RPFJ irrelevant by simply ignoring it, the District Court will be faced again and again with the task of interpreting the RPFJ's indistinct provisions. Microsoft has demonstrated its incentive and ability to contest even the most seemingly obvious points of any court order.

D. The Public Interest Requires An Effective Remedy That The RPFJ Does Not Provide

Despite the belated efforts of DOJ to minimize the scope of this case, it remains the largest, most successful prosecution for monopolization liability since at least the Second World War. The DC Circuit affirmed ''the District Court's holding that Microsoft violated § 2 of the Sherman Act in a variety of ways.'' 253 F.3d at 59. The breadth of that holding is clear from the 20 Federal Reporter pages consumed by the court's detailed discussion of Microsoft's array of exclusionary behavior. The competitive significance of the conduct condemned by that holding is explained both in the opinion, in the Declaration of Joseph E. Stiglitz and Jason Furman (''Stiglitz/Furman Dec.'') 16–20, and in the Comment of Robert E. Litan, Roger G. Noll, and William D. Nordhaus (''Litan/Noll/Nordhaus Comment'') 12–31, among other submissions for this Tunney Act proceeding. The difficulties encountered by peripheral claims are irrelevant, particularly because all of the challenged conduct supported monopolization liability in addition to one or more of the since-abandoned theories. The supposed ''narrowing'' left a huge monopolization case with a stark judgment affirming the government's theory. The RPFJ does not provide a remedy commensurate with that liability.

The RPFJ is insufficient for another overarching reason. The passage of time has only exacerbated the problem of Microsoft's successful abuse of its operating systems monopoly to extend that monopoly to embrace other sectors of computing and to forestall threats to the monopoly from those sectors. Microsoft's monopoly over Internet browsing is complete, as its current 91% market share indicates. Julia Angwin, et al., AOL Sues Microsoft Over Netscape in Case That Could Seek Billions, WALL ST. J., Jan. 23, 2002, at B1. Even the RPFJ recognizes, albeit through toothless provisions, that Microsoft is using its desktop OS monopoly to force greater use of its server operating systems. And Microsoft's efforts to use the inclusion of its Passport authentication software on every Windows machine as a means of directing through a Microsoft server all authentication and identification transactions—gaining a literal chokehold over the communications aspect of Internet computing—is so significant that Microsoft sought and obtained an exemption in the RPFJ specifically designed to excuse that known monopolistic strategy. See RPFJ § III(H)(1)[second] [2]; see also id. § III(J).

Microsoft has made ample use of the seven years since the beginning of the conduct at issue in this case. The RPFJ is wholly inadequate even on its own terms, which assume that the world has returned to 1995. But the RPFJ does not begin to address what has happened since then. The public interest in a remedy that achieves what antitrust law says it must cannot be obscured by focusing either on the preference of the technology industry for standards, or on the never-litigated assumption that Microsoft obtained its original operating systems monopoly legally in the 1980s. The last premise, after all, still suggests that the last ten years or so of Microsoft's hegemony have resulted from the illegal acts that prompted two government antitrust lawsuits. If DOJ's enforcement history is to be credited, Microsoft has at least doubled the life of its monopoly through illegal conduct. In addition, even if the nature of software platforms generally, or computer operating systems in particular, results in transitory single-firm dominance, that does not mean that competition has no place, or that entrenched monopoly is somehow without social costs. See Stiglitz/Furman Dec. 13–16. Innovation results in the periodic replacement or ''leapfrogging'' of one standard by another. This is not some meaningless replacement of one monopoly with another, as some would have it. To the contrary, as economists—including those of the Chicago school—have recognized, ''competition * * * 'for the field''' provides consumers with substantial benefits. See Microsoft III, 253 F.3d at 49 and sources cited therein. But if competition in a market is limited in scope to serial competition for transitory dominance, predatory conduct is especially harmful. See generally Stiglitz/Furman Dec. 13–16. The monopolist may need to eliminate only a few incipient but significant threats in the course of a decade in order to transform transitory dominance into a durable, even impregnable monopoly. That is what happened here. Although Netscape Navigator had not developed into a competing applications platform when Microsoft cut off its revenue sources, Netscape contemplated just such a development—and Microsoft both contemplated and deeply feared it. The outcome of the competition that Microsoft thwarted is unknowable. But there will be no further competition—much less competitive outcomes—if Microsoft is allowed to repeat the course of conduct it undertook here. But the RPFJ permits Microsoft to continue to fortify and expand its monopoly. Indeed, the RPFJ provides an imprimatur for Microsoft to continue and expand a whole range of additional, related anticompetitive practices. As a consequence, the RPFJ is an instrument of monopolization, not a remedy for it. The Court should not add judicial endorsement to DOJ's agreement to give up the case. The ''public interest,'' within the meaning of the Tunney Act, 15 U.S.C. § 16(e), requires far more effective relief.

I. THE TUNNEY ACT REQUIRES CLOSE SCRUTINY UNDER THE PRESENT CIRCUMSTANCES

The Tunney Act exists ''to prevent 'judicial rubber stamping''' of proposed antitrust consent decrees. United States v. Microsoft Corp., 56 F.3d 1448, 1458 (DC Cir. 1995) (quoting H.R. Rep. No. 1463, 93d Cong. 2d sess. 8, reprinted in 1974 U.S.C.C.A.N. 6535, 6538) (''Microsoft''); United States v. BNS, Inc., 858 F.2d 456, 459 (9th Cir. 1988); In re IBM, 687 F.2d 591, 600 (2d Cir. 1982). Upon enactment it was immediately clear that ''Congress did not intend the court's'' review of a proposed settlement ''to be merely pro forma, or to be limited to what appears on the surface.'' United States v. Gillette Co., 406 F. Supp. 713,715 (D. Mass. 1975) (Aldrich, J.). The Tunney Act requires particularly close scrutiny of the RPFJ in this case. The government seeks to remedy a proven, well-defined, serious violation of the antitrust laws. Microsoft's heavy lobbying of the executive and legislative branches in order to bring political pressure for a lenient settlement heightens the need for scrutiny, and in addition makes necessary the Court's active investigation into Microsoft's failure to disclose the bulk of that lobbying despite the command of 15 U.S.C. § 16(g). The lenient terms of the RPFJ itself further underscore the need for close judicial scrutiny. Never in the history of the Tunney Act has a Court been confronted with this combination of an impregnable judgment of liability, pervasive lobbying, and apparent surrender by the federal government. The circumstances here indicate exactly the sort of ''failure of the government to discharge its duty''—whether or not actually ''corrupt''—that even DOJ concedes warrants close judicial scrutiny of a settlement. CIS 66, 66 Fed. Reg. 59,476 (quoting United States v. Mid-America Dairymen, Inc., 1997–1 Trade Cas. ¶61,508, at 71,980, 1977 WL 4352 at *8 (W.D. Mo. 1977)).

A. The Government's Victory On Liability Removes Litigation Risk And Therefore Limits Deference

The CIS suggests (at 65–68, 66 Fed. Reg. at 59,475–476) that the Court owes nearly absolute deference to DOJ's decision to retreat from its appellate victory. That is not true. The affirmance of liability on appeal removes any speculation that ''remedies which appear less than vigorous'' simply ''reflect an underlying weakness in the government's case.'' Microsoft I, 56 F.3d at 1461. There is no ''underlying weakness''; liability is a given, and provides a clear benchmark for measuring whether the proposed relief is sufficiently effective to come ''within the reaches of the public interest.'' Id. at 1460. Those ''reaches'' are narrower when liability is proved and affirmed than when it is merely alleged, as it was in Microsoft I.

1. The Imposition And Affirmance Of Liability Remove Any Constitutional Concerns About Searching Review And Require The Court To Perform Its Constitutional Duty

Most important, the current posture of this case places it beyond the scope of the prudential and constitutional concerns expressed by some courts (and dissenting Justices) about judicial scrutiny of DOJ's charging decisions, or of its settlement of unproven claims. It may be that when ''the government is challenged for not bringing as extensive an action as it might, a district judge must be careful not to exceed his or her constitutional role.'' Microsoft I, 56 F.3d at 1462. Such concerns did not persuade the majority of the Supreme Court, however, which over a dissent rejected similar arguments in summarily affirming the modifications imposed by the district court in the AT&T consent decree. See Maryland v. United States, 460 U.S. 1001 (1983). In any

[2] RPFJ § III(H) contains two subsections (1) and (2). We distinguish between the two sets of subsections with the bracketed terms ''first'' and ''second.''

event, when the action has been brought, tried, and won, and the only question is whether the proposed relief is adequate, the constitutional concerns dissipate. Because DOJ already made the discretionary decision to bring the case, and successfully proved liability to the satisfaction of two courts, the Court in reviewing this settlement runs no risk that by exercising its normal remedial discretion under established legal principles it somehow might be said ''to assume the role of Attorney General.'' Microsoft I, 56 F.3d at 1462. It was precisely the absence of a ''judicial finding of illegality'' that might impede the Tunney Act from ''supply[ing] a judicially manageable standard for review.'' Id. at 1459. Here, two courts have provided the ''findings that the defendant has actually engaged in illegal practices'' that were missing in both Microsoft I and AT&T (like other cases settled before trial). Id. at 1460–1461 (emphasis added). In addition, the appellate affirmance imposed monopolization liability for all of the significant conduct that had been alleged to support the additional, largely supererogatory legal theories that were rejected as ground for additional liability.

It is accordingly entirely appropriate, and indeed necessary, for the Court in this case ''to measure the remedies in the decree as if they were fashioned after trial,'' Microsoft I, 56 F.3d at 1461, because they were ''fashioned after trial'' and appellate affirmance. The Court need not ''assume that the allegations in the complaint have been formally made out'' (id.), but rather knows beyond doubt exactly which allegations were proved. There is a ''judicial finding of relevant markets, closed or otherwise, to be opened'' and ''of anticompetitive activity to be prevented.'' Maryland v. United States, 460 U.S. at 1004 (Rehnquist, J., dissenting). ''[T]hat there was an antitrust violation,'' and ''the scope and effects of the violation,'' were not assumed, as they must be in a pretrial settlement, but proved to the satisfaction of two courts. Id. Very limited prosecutorial discretion remains in this situation. The amorphous, policy-laden choices whether to bring a case and how much to allege, are behind us. The predictive judgment as to the chances of success on liability likewise is beyond serious dispute in light of the unanimous affirmance of monopolization liability by the en banc court of appeals. DOJ has some leeway in choosing a remedy, but its chosen remedy must be ''adequate to remedy the antitrust violations alleged in the complaint,'' United States v. Bechtel Corp., 648 F.2d 660, 665 (9th Cir. 1981), under the well-established legal standards for antitrust relief. See Microsoft III, 253 F.3d at 103. Those standards inform the ''public interest'' determination under the Tunney Act, and, by contrast with the ''public interest'' standing alone, are judicially manageable without a doubt. The DC Circuit has made crystal clear that a consent decree ''even entered as a pretrial settlement, is a judicial act,'' so that ''the district judge is not obliged to accept one that, on its face and even after government explanation, appears to make a mockery of judicial power.'' Microsoft I, 56 F.3d at 1462. Judicial approval of the settlement in this case is far more of a classic ''judicial act'' than the typical settlement without proof of liability. As in the context of post-conviction criminal sentencing, the Court must act as more than a passive recipient of arrangements made between the parties There is no serious question that a federal court may reject a plea bargain in its sound discretion, Fed. R. Crim. P. 11, Santobello v. New York, 454 U.S. 257, 262 (1971), for reasons that may include the ''court's belief that the defendant would receive too light a sentence under the circumstances.'' United States v. Adams, 634 F.2d 830, 835 (5th Cir. 1981).[3] Granted, plea bargains in the criminal context generally involve admissions of liability. But the case here, if anything, is stronger here, where liability has been, not admitted, but established after extensive litigation and affirmed by an en banc court of appeals over the vigorous objection of the defendant.

At this stage, ''the discrepancy between the remedy and undisputed facts of antitrust violations'' can ''be such as to render the decree 'a mockery of judicial power.'''' Massachusetts School of Law, Inc. v. United States, 118 F.3d 776, 782 (DC Cir. 1997) (quoting Microsoft I, 56 F.3d at 1462). By contrast with the concerns expressed in the pretrial settlement context about the intrusion of Tunney Act courts on functions that are constitutionally allocated to the executive branch, the situation after liability is established presents opposite concerns under our system of separated powers, and of checks and balances between the branches of government. Constitutional concerns in this case would arise only if the Court failed to apply the legal standards governing antitrust relief to the adjudicated liability here. DOJ asks the Court not only to abandon its traditional power over the relief to be imposed in an adjudicated case, but also to ignore the clear command of Congress to provide a check on the irresponsible exercise of power by a suddenly and inexplicably compliant prosecutor. The Court should refuse that suggestion.

2. The Extensive Record And Judicial Opinions Provide Clear, Manageable Standards For Substantive Review Of The RPFJ

None of the authorities on which DOJ relies involved a full trial in which liability was proved, much less one in which liability was affirmed on appeal. Indeed, the statements quoted in the CIS draw heavily on that fact—that in each case there had been no finding of liability, and that review of the settlement at issue necessarily involved second-guessing DOJ's prosecutorial discretion in making two rather standardless assessments: (1) whether to bring a case at all, and thus place the matter in a judicial forum, see Microsoft I, 56 F.3d at 1459–1460, and (2) the chances for success. See, e.g., Mid-America Dairymen, 1977 WL 4352, at *8 (Tunney Act ''did not give this Court authority to substitute its judgment about the advisability of settlement by consent judgment in lieu of trial'') (emphasis added).

Here, neither of these fundamentally discretionary prosecutorial judgments is at issue. The decision to bring the case was made years ago, and the case was litigated and won, establishing liability to a known extent. It is telling that in asking for broad deference DOJ places heavy reliance on language from the Ninth Circuit's decision in United States v. Bechtel Corp., 648 F.2d 660 (9th Cir. 1981). See CIS 66–67 & n.4; 66 Fed. Reg. 59,476. One could hardly find a setting more distant from this one. Not only did Bechtel not involve a finding of liability after full litigation and affirmance on appeal; and not only did the setting there—alleged complicity in the ''Arab boycott'' of Israel in the mid-1970s—implicate the foreign policy powers of the executive branch; but the issue before the court in Bechtel was the defendant's effort to avoid its own settlement by arguing that the settlement to which it had agreed was ''not in the public interest.'' Bechtel, 648 F.2d at 665.[4]

As it happens, however, the court of appeals in Bechtel enunciated the legal standard that should be applied here: ''whether the relief provided for in the proposed judgment was adequate to remedy the antitrust violations alleged in the complaint.'' Bechtel, 648 F.2d at 665 (emphasis added). That is precisely the standard that DOJ wishes to avoid. Where liability is a given, as it is here, the Court must ensure that the ''remedies negotiated between the parties and proposed by the Justice Department clearly and effectively address the anticompetitive harms'' that have been proved. United States v. Thomson Corp., 949 F. Supp. 907, 913 (D.DC 1996). When the ''anticompetitive harms'' and their illegality have been proved, the fit between those harms and the proposed remedies must be closer than when those harms merely have been ''initially identified,'' id., as is usually the case in Tunney Act proceedings. Even if there were no finding a liability, the Court would not be compelled ''unquestionably [to] accept a consent decree as long as it somehow, and, however inadequately, deals with the antitrust problems implicated in the lawsuit.'' United States v. Alcan Aluminum, Ltd., 605 F. Supp. 619, 622 (W.D. Ky. 1985) (citing United States v. AT&T, 552 F. Supp. 131,151 (D.DC 1982), aff'd sub nom. Maryland v. United States, 460 U.S. 1001 (1983). With liability in place, however, the Court need not proceed ''on the assumption that the government would have won.'' Gillette, 406 F. Supp. at 716 n.2. The government did win. The Court in this case need not ''speculate in regard to the probability of what facts may or may not have been established at trial.'' United States v. Mid-America Dairymen, Inc., 1977 WL 4352, at *1. Those facts are a matter of record. Whatever narrow deference may be afforded here amounts only to the tested rule

[3] See also, e.g., United States v. Robertson, 250 F.3d 500, 509 (6th Cir. 2001); United States v. Greener, 979 F.2d 517, 521 (7th Cir. 1992); United States v. McGovern, 822 F.2d 739, 742 n.4 (8th Cir. 1987); United States v. Randahl, 712 F.2d 1274, 1275 (8th Cir. 1983).

[4] Decided in an equally remote context was United States v. BNS, Inc., 858 F.2d 456 (9th Cir. 1988), in which the Ninth Circuit approved a preliminary injunction, entered over DOJ's objection, against a tender offer for an acquisition that a proposed consent decree would have permitted.

that ''[i]t is not the court's duty to determine whether this is the best possible settlement that could have been obtained.'' Gillette, 406 F. Supp. at 716 (emphasis added). Although the Court may not be able to insist on the ''best possible'' decree, the proof and affirmance of liability require the Court to ensure that the RPFJ is at least adequate on that record under well-established remedial principles. Bechtel, 648 F.2d at 665. The differences are real, but not dramatic, between the Court's role in deciding whether to accept this settlement in Track I, and in deciding in Track II what relief to impose at the request of those plaintiffs who have not abandoned the pursuit of a full and effective remedy in this case. In each track, the Court must measure proposed remedies against the legal standards set out by the DC Circuit and by the Supreme Court. In each track, the Court should not approve a remedy that is inadequate to meet those standards. In evaluating the RPFJ, the Court is not at liberty to substitute its view of equally effective, or marginally more effective relief, if the terms of the RPFJ are fully adequate to the task as the law defines it. That is, the DOJ's choices among adequate alternatives warrant deference, but its determination of what is adequate warrants none. In the other track, the Court does have the liberty, not merely to go beyond any decree that might be entered in this track, but also to insist that the final decree address the competitive issues in a way that satisfies the Court's view as to the best and most effective means of opening the operating systems market to competition, depriving Microsoft of the fruits of its illegal conduct, and preventing similar monopolistic abuses in the future. That is, while in this track of the proceeding the Court cannot insist on the ''best possible settlement,'' Gillette, 406 F. Supp. at 716, so long as the proposed relief meets the remedial standards anchored in antitrust law, in Track II the Court has not only the power but the duty to impose the ''best possible'' decree. B. Broad Deference Is Particularly Inappropriate Because The Circumstances Are Suspicious

1. Microsoft's Manifestly Inadequate Disclosure Under The Tunney Act's Sunshine Provisions Weighs Strongly Against Judicial Deference To The Terms Of The RPFJ

Section 2(g) of the Tunney Act requires Microsoft to file a ''true and complete description'' of ''any and all written or oral communications'' by it or on its behalf ''with any officer or employee of the United States concerning or relevant to'' the proposed settlement. 15 U.S.C. § 16(g) (emphasis added). The only exception from this requirement is for settlement negotiations between ''counsel of record alone'' and ''employees of the Department of Justice alone.'' Id. (emphasis added).

When Senator Tunney first introduced his bill, he focused on the significance of the disclosure provision. ''Sunlight is the best of disinfectants,'' he explained (quoting Justice Brandeis), and thus ''sunlight * * * is required in the case of lobbying activities attempting to influence the enforcement of the antitrust laws.'' 119 Cong. Rec. 3449, 3453 (1973). Minor amendments to Section 2(g) were designed ''to insure that no loopholes exist in the obligation to disclose all lobbying contacts made by defendants in antitrust cases culminating in a proposal for a consent decree.'' H.R. Rep. No. 1463, at 12 (emphasis added). The breadth of Microsoft's effort to use political pressure to curtail this case has no parallel in the history of the antitrust laws. The ITT episode that prompted the Tunney Act pales in comparison. It has been widely known that since 1998 Microsoft has comprehensively lobbied both the legislative and executive branches of the federal government in an effort to create political pressure to end this case.[5] But Microsoft did not disclose any of these contacts, much less all of them, as the Tunney Act requires.

Rather, Microsoft disclosed only meetings that occurred during the last round of settlement negotiations ordered by the Court. Microsoft's insupportable interpretation of its statutory disclosure duty effectively nullifies the sunshine provisions of the Act, which are crucial to the Act's protection of the public interest.

a. Contacts With All Branches Must Be Disclosed.

All contacts with ''any officer or employee of the United States'' must be disclosed. As Senator Tunney explained, Included under [section 16(g)] are contacts on behalf of a defendant by any of its officers, directors, employees, or agents or any other person acting on behalf of the defendant, with any Federal official or employee. Thus, * * * the provision would include contacts with Members of Congress or staff, Cabinet officials, staff members of executive departments and White House staff. 119 Cong. Rec. at 3453 (emphasis added). In other words, the disclosure applies equally to contact with any branch of Government, including the Congress. * * * [T]here is a great deal to be gained by having a corporate official who seeks to influence a pending antitrust case through congressional pressure, know that this activity is subject to public view. Id. Indeed, it is firmly established in other areas of the law that ''officer'' of the United States includes Members of Congress and their employees.[6]

But Microsoft did not disclose its extensive and heavily reported lobbying of Congress. Indeed, upon the remand to the District Court, Microsoft's lobbying of Congress produced a letter signed by more than 100 Members urging a swift settlement. But Microsoft did not disclose even that lobbying, aimed at pressuring a swift capitulation by the government despite its victory on appeal, directly before the last round of settlement negotiations.

b. The ''Counsel of Record'' Exception Is Very Narrow.

Section 16(g) provides a narrow exception from disclosure for contacts between ''counsel of record alone'' (emphasis added)—that is, without any other corporate officers or employees also involved—and ''the Attorney General or the employees of the Department of Justice alone.'' As Senator Tunney explained, this ''limited exception'' for attorneys of record ''is designed to avoid interference with legitimate settlement negotiations between attorneys representing a defendant and Justice Department attorneys handling the litigation. * * * [T]he provision is not intended as loophole for extensive lobbying activities by a horde of 'counsel of record.'" 119 Cong. Rec. at 3453. The House Report further clarifies that this ''limited exception'' distinguishes '''lawyering'' contacts of defendants from their 'lobbying contacts'.'' H.R. REP. No. 1463, supra, at 9. Microsoft did not disclose the well-publicized participation in the last round of settlement negotiations of its lobbyist-lawyer, Charles F. ''Rick'' Rule. It appears that the critical ''negotiations'' leading to the RPFJ took place, not in the offices of Microsoft's counsel of record, but ''in Justice's offices and those of Microsoft legal consultant Rick Rule.'' Paul Davidson, Some States Fear Microsoft Deal Has Big Loopholes, USA TODAY, Nov. 5, 2001. Rule has been a registered lobbyist for Microsoft for some years, but was not named as counsel of record until November 15, 2001, after the settlement negotiations were complete. See Notice of Appearance (D.DC filed Nov. 15, 2001). That designation—long after the settlement deal had been struck—cannot retroactively shield his extensive prior contacts with Mr. James or other executive or legislative officials from disclosure. Contacts by ''[a]ttorney not counsel of record'' must be disclosed. Id. Of course, Microsoft's many other lobbyists do not conceivably come within this exception. But Microsoft concealed all of those lobbying contacts.

c. All Communications Urging The Government To Abandon Or Settle The Case Were ''Relevant To'' The Proposed Settlement

Section 16(g) requires the disclosure of all contacts ''concerning or relevant to'' a proposed settlement. This statutory definition is intentionally broad. Microsoft's disclosure interprets the word ''concerning'' very narrowly, so that the provision covers only actual settlement discussions—and only the last round of them. In Microsoft's view, the Tunney Act would require disclosure only of the very meetings that must precede any settlement. Microsoft reads the words ''relevant to'' right out of the statute. That this statutory provision is broad is obvious by

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[5] See generally Declaration of Edward Roeder (attached). See also, e.g., Ian Hopper, Microsoft Lobbied Congress Over Case, SAN JOSE MERCURY NEWS, Jan. 11, 2002, at C3; Heather Fleming Phillips, Washington Politicians Chime In On Microsoft, SAN JOSE MERCURY NEWS, June 30, 2001, at Al; Rajiv Chandrasekaran & John Mintz, Microsoft's Window of Influence; Intensive Lobbying Aims to Neutralize Antitrust Efforts, WASH. POST, May 7, 1999, at Al; James Grimaldi & Jay Greene, Microsoft Hard At Work Outside Courtroom, SEATTLE TIMES, Feb. 17, 1999, at Al. See also Microsoft's Political Donation In Question; South Carolina COP Says Decision To Quit Lawsuit Coincidental, CHI. TRIB., Dec. 25, 1998, at 3.

[6] See, e.g., Williams v. Brooks, 945 F.2d 1322, 1325 n.2 (5th Cir. 1991) (''a congressman is an 'officer of the United States'' within the meaning of [28 U.S.C. § 1442(a)(1)]''); Nebraska v. Finch, 339 F. Supp. 528, 531 (D. Neb. 1972) (''It is * * * clear that a representative to the Congress of the United States is an officer of the United States, not an officer of the district in which he was elected.''); United States v. Meyers, 75 F. Supp. 486, 487 (D.DC 1948) (''Obviously, a Senator of the United States is an officer of the United States.'').

its very terms; in order for the phrase ''relevant to'' not to be mere surplusage, it must encompass contacts less directly focused on the settlement than those that ''concern[]'' that agreement. Senator Tunney gave an example: ''the provision would require disclosure * * * of a meeting between a corporate official and a Cabinet officer discussing ''antitrust policy'' during the pendency of antitrust litigation against that corporation.'' 119 Cong. Rec. at 3453. The Act borrows from evidentiary concepts, including the privilege for settlement discussions, which prompted the narrow exception for counsel of record. The evidentiary concept of relevance is very broad. See Fed. R. Evid. 401. ''Relevance of evidence is established by any showing, however slight, that the evidence'' makes a legally important factor ''more or less likely.'' United States v. Mora, 81 F.3d 781, 783 (8th Cir. 1996) (emphasis added) (citation omitted). Plainly ''relevant'' to the question whether a defendant's lobbying activities influenced the existence and terms of a consent decree are contacts with the administration, and with members of Congress, that touch on the desirability of the government's agreeing to end the case. It is startling, for example, that Microsoft would omit reference to its efforts to enlist support for congressional proposals that would have cut DOJ's funding for the pursuit of this case, and for antitrust enforcement in high technology industries in general.[7]

Disclosure under Section 2(g) is not usually burdensome; most defendants do not try to win their case politically rather than in the courtroom. Microsoft's massive and unprecedented effort to distort the judicial process through political pressure makes its compliance burdensome, but all the more necessary. It is exactly this sort of manipulation that the Tunney Act was designed to discourage by bringing it to light.

d. Microsoft's Flouting Of Its Statutory Duty Counsels Painstaking Judicial Scrutiny Of The RPFJ Microsoft's cunning ''interpretation'' of the statutory disclosure requirements -so that disclosures reach only the very settlement discussions that the Tunney Act was not concerned about—sheds considerable light on Microsoft's likely ''interpretations'' of any remedy imposed on it, especially one like the RPFJ of which it can claim to be an equal drafter, if not the principal author.

Microsoft's disclosure is so inadequate as to raise questions about Microsoft's good faith. The filing includes no disclosure of any lobbying contacts between Microsoft and the administration; it includes no disclosure of any contacts between Microsoft and members of Congress; it includes no disclosure of any contacts whatsoever before September 27, 2001, although it is well known that Microsoft and the government have tried to settle the government's antitrust action since before it was filed, and that Microsoft lobbied Congress to bring pressure on DOJ to settle or simply abandon the case.

Microsoft should face contempt sanctions for its certification ''that the requirements of [Section 16(g)] have been complied with and that such filing is a true and complete description of such communications known to the defendant or which the defendant reasonably should have known.'' DOJ should refuse to acquiesce in Microsoft's deception. Although DOJ cannot be expected to be aware of all of Microsoft's lobbying of Congress in an effort to create pressure for a favorable settlement, DOJ should reveal the end-product of that pressure in the form of communications from Members and their staffs. And there is no excuse for DOJ to be complicit with Microsoft when it comes to contacts with DOJ itself. In particular, DOJ certainly is aware of Mr. Rule's lobbying contacts with before he belatedly appeared as counsel after the settlement had been concluded. The proper resolution of this issue is the appointment of a special master with the ability to examine the relevant participants under oath. In view of its responsibility to enforce 15 U.S.C. 16(g) along with the rest of the antitrust laws, DOJ should request (and support) the implementation of such a procedure by the Court.

2. The RPFJ Represents A Swift And Significant Retreat By DOJ Another factor counseling against deference here is the DOJ's striking capitulation to Microsoft's view of an appropriate remedy, despite the unanimous affirmance of the core of DOJ's case. The insubstantial provisions of the RPFJ provide ample ''reason to infer a sell-out by the Department,'' Massachusetts School of Law, 118 F.3d at 784.

After prevailing on liability in the district court, DOJ sought and obtained not only structural relief—as is ''common'' in broad monopolization cases, see Microsoft III, 253 F.3d at 105—but also ''interim'' conduct restrictions that clearly could not stand alone as a monopolization remedy. DOJ earlier recognized that the interim conduct remedies were stopgaps to keep the competitive situation from continuing to decline in the year or so before divestiture jumpstarted competition. See Plaintiffs'' Memorandum in Support of Proposed Final Judgment 30–31 (corrected version) (filed May 2, 2000). On remand, DOJ abandoned the structural relief that it formerly found necessary, even though liability on the monopolization claim—which alone could support structural relief in the first place—was affirmed with minor modifications. DOJ stated that it would pursue relief ''modeled upon'' the interim ''conduct-related provisions,'' along ''with such additional provisions as Plaintiffs may conclude are necessary to ensure that the relief is effective, given their decision not to seek a structural reorganization of the company.'' Joint Status Report 2 (filed Sept. 20, 2001).

Instead of fortifying the proposed decree to compensate for the abandonment of structural relief, however, DOJ moved considerably backward from the interim remedies, narrowing Microsoft's duties and providing broad exceptions. Indeed, the RPFJ is weaker than the final proposal in the settlement negotiations that took place during Spring 2000, before any judgment of antitrust liability, much less appellate affirmance.[8] Then, there was litigation risk as to liability. Now there is none. Nonetheless, the definitions and obligations in the current RPFJ fall short of those in the pre-judgment offer.

3. The CIS Overstates The Terms Of The RPFJ, Reflecting The Indefensibility of the RPFJ Itself The CIS underscores the need for close scrutiny of the actual terms of the RPFJ and their effectiveness. The CIS seeks to convey an image of stringency by adding terms to provisions of the RPFJ that are absent from the RPFJ itself. But it is the RPFJ, not the CIS, that defines the enforceable bargain between the parties. As the Supreme Court has recognized, ''any command of a consent decree * * * must be found within its four comers, and not by reference to any purposes of the parties.'' United States v. ITT Continental Baking Co., 420 U.S. 223,233 (1975) (citations and internal quotation marks omitted). While the CIS may be useful in interpreting ambiguous terms in the RPFJ, the wording of the CIS is not independently enforceable. Only the RPFJ would be entered as a judgment, and ''[t]he government cannot unilaterally change the meaning of a judgment.'' Bechtel, 648 F.2d at 665. It would be different, of course, if the CIS or its relevant refinements were ''expressly incorporated in the decree.'' ITT Continental, 420 U.S. at 238.

In particular, the CIS goes beyond the text of the RPFJ to paint a far stricter picture of Microsoft's disclosure obligations than the RPFJ supports. It is no wonder that DOJ seeks to defend a document—the CIS—to which Microsoft would not be bound, rather than the far weaker RPFJ that alone would be judicially enforceable. The CIS cannot transform the RPFJ into a better deal for competition and consumers than it is.

II. THE RPFJ MUST MEET THE LEGAL STANDARDS NORMALLY APPLICABLE TO ANTITRUST REMEDIES

The ''public interest'' standard in the Tunney Act is not without content. Rather, those ''words take meaning from the purposes of the regulatory legislation,'' NAACP v. Federal Power Comm'n, 425 U.S. 662, 669 (1976). The well-developed jurisprudence of antitrust remedies provides sound guidance for the public interest determination.

Although a district court should not ''engage in an unrestricted evaluation of what relief would best serve the public,'' Microsoft I, 56 F.3d at 1458 (quoting Bechtel, 648 F.2d at 666) (emphasis added), principled restrictions for that evaluation in this case arise from the extensive, unvacated Findings of Fact, the comprehensive opinion affirming

[7] See Chandrasekaran & Mintz, supra, WASH. POST, May 7, 1999, at Al; Grimaldi & Greene, supra, SEATTLE TIMES, Feb. 17, 1999, at Al.

[8] That final proposal, known as Draft 18, was formerly posted on a now-defunct website, www.contentville.com, in connection with a review of a book that detailed the progress of this case. The text of Draft 18 may now be viewed at www.ccianet.org/legal/ms/draft18.php3. ''[T]he government's virtual abandonment of the relief originally requested'' is ''a sufficient showing that the public interest was not * * * adequately represented'' in the RPFJ. United States v. Associated Milk Producers, Inc., 534 F.2d 113, 117 (8th Cir. 1976). It is precisely when DOJ appears to have ''abruptly ''knuckled under,'' id. at 118, as here, that judicial scrutiny under the Tunney Act should be most substantive and searching.

monopolization liability on appeal, and the long-standing remedial principles of antitrust law, principles that the DC Circuit instructed the District Court to apply to any proposed relief on remand. See Microsoft III, 253 F.3d at 103. The ''appropriate'' inquiry (Bechtel, 648 F.2d at 666) is ''whether the relief provided for in the proposed judgment [i]s adequate to remedy the antitrust violations'' that were proved at trial and affirmed on appeal, ld. at 665.

The DC Circuit provided benchmarks rooted in Supreme Court jurisprudence to guide the evaluation whether a remedy is ''adequate.'' A remedy in this case must serve ''the objectives that the Supreme Court deems relevant,'' Microsoft III, 253 F.3d at 103. That is, a remedy must ''seek to * * * [1] ''terminate the illegal monopoly, [2] deny to the defendant the fruits of its statutory violation, and [3] ensure that there remain no practices likely to result in monopolization in the future.'' ld. at 103 (quoting Ford, 405 U.S. at 577, and United Shoe, 391 U.S. at 250).[9]

A. The Relief Should ''Terminate The Illegal Monopoly'' In a monopolization case, the problem to be remedied is the monopoly itself. Because the RPFJ would leave the illegally maintained monopoly in place without making the market structure more competitive, to satisfy this criterion relief must exclude the possibility that Microsoft again will prolong its monopoly power by abusing it. At a minimum, however, a monopolist should emerge from a remedy facing competitive threats of similar scope and significance to those it illegally stamped out. The DC Circuit recognized that the illegal conduct in this case was aimed at increasing and hardening the applications barrier to entry that insulates Microsoft's OS monopoly. See ld. at 55–56, 79. The CIS similarly recognized that ''[c]ompetition was injured in this case principally because Microsoft's illegal conduct maintained the applications barrier to entry * * * by thwarting the success of middleware.'' CIS 24, 66 Fed. Reg. 59,465. A remedy that does not literally terminate the monopoly accordingly must undermine the applications barrier to entry that was strengthened by the illegal conduct.

B. The Relief Should Prevent ''Practices Likely To Result In Monopolization In The Future'' To satisfy this criterion, any remedy must both (1) prevent the monopolist from engaging in the same sorts of conduct that underlie the current finding of liability, and (2) prevent other types of conduct that could preserve the monopoly. The ''monopolization in the future'' that must be prevented includes both the simple maintenance of the current monopoly and the expansion of that monopoly's scope. Relief should make it impossible for the monopolist to continue its pattern of using current market power to foreclose imminent or contemplated competitive threats. Because Microsoft has been ''caught violating the [Sherman] Act,'' it ''must expect some fencing in.'' Otter Tail Power Co. v. United States, 410 U.S. 366, 381 (1973).

A monopolist that has been litigating for years no doubt has developed anticompetitive techniques that achieve the same goals through slightly different means. Microsoft embarrassed DOJ by obtaining language in the 1995 consent decree that was tailored to exclude, at least arguably, the company's next planned anticompetitive initiative. Exemptions, provisos, and narrow definitions should be scrutinized on the assumption that Microsoft again has tried to ensure that the RPFJ will not impede currently planned anticompetitive acts.

C. The Relief Should ''Deny To The Defendant The Fruits Of Its Statutory Violation'' Relief in an antitrust case not only must prevent ''recurrence of the violation,'' but also must ''eliminate its consequences.'' National Society of Professional Engineers v. United States, 435 U.S. 679, 697 (1978). Thus, a remedy should prevent a monopolist from retaining the accrued competitive benefits of its illegal conduct. These advantages may permit a monopolist to maintain its monopoly without additional antitrust violations. Relief that allows a wrongdoer the full benefit of its illegal activity fails the most basic test of any remedy under any branch of the law.

In this case, the ''fruits'' of Microsoft's illegal conduct may be the most important target of a responsible remedy. One of the chief advantages that Microsoft gained by incorporating the Internet browser into the Windows monopoly was the ability to control not only the browser for its own sake, suppressing the possibility that the Internet browser would provide a source of alternate, OS-neutral APIs, but also the browser as the gateway to all Internet computing. As the Litan/Noll/Nordhaus Comment explains (at 5860), one of the most important fruits of monopolistic conduct is the suppressed development of competitive threats. That is why a forward-looking remedy must be rooted in current market conditions, and must seek to restore competition to where it likely would have been in the absence of the anticompetitive conduct. Litan/Noll/Nordhaus Comment 35–36, 40–42, 58–59.

D. Broader Principles Applicable To Injunctive Relief Also Should Inform The Analysis Of The RPFJ

The remedial analysis here resembles other remedial undertakings. Although civil antitrust relief is not punitive, effective antitrust relief shares with criminal sentencing the broad goals of incapacitation and deterrence. As much as possible, an illegal monopolist should be flatly prevented from engaging in the same or similar suppression of competition in the future. In addition, the remedy should be enforceable with sufficient speed and certainty to make stiff contempt sanctions likely if the monopolist nonetheless manages to engage in anticompetitive conduct again.

The point of antitrust relief after a finding of liability is to learn from history, not to permit the offender to repeat it. This consideration is particularly acute here, where the purposes of the expiring 1995 consent decree clearly have not been realized, but rather have been evaded or neutralized.

Because antitrust relief necessarily is forward-looking, a remedy's effectiveness should be judged with respect to where the market is going, not where it has been. Microsoft has directed its efforts to destroy the competitive threat of Internet computing. The more functionality that is performed on the Web, the less significant the operating system on a particular client device connected to the Web. Thus, Internet computing represents the maturation of the competitive threat posed by the Internet browser and squelched by Microsoft's illegal conduct. The current industry-wide focus on Web-based services reflects the realization that a competitive market still survives in this sector. The Court will have to consider whether the RPFJ in fact is ''all about the past, not the future battle in Internet services[, and] doesn't touch the company's ability to use Windows XP to extend its monopoly to these new areas.'' Walter Mossberg, For Microsoft, 2001 Was .4 Good Year, WALL ST. J., Dec. 27, 2001, at B1. See Stiglitz/Furman Dec. 38–39.

III THE RPFJ FALLS FAR SHORT OF PROVIDING A REMEDY FOR PROVEN OFFENSES UPHELD ON APPEAL

The RPFJ lights upon narrowly defined practices and prohibits narrowly defined versions of them, in ways that might have mitigated, but would not have ended, the very conduct at issue in this case. The RPFJ does not measure up to the sweeping monopolization violations found by two courts. The RPFJ's provisions do not address Microsoft's ability and incentives to strengthen the applications barrier to entry, which was the underlying issue at the core of the case, instead focusing on techniques of monopolization that have been defined so narrowly that Microsoft's actual behavior need not change. And when addressing a precise technique that directly implicated the reinforcement of the applications barrier to entry—Microsoft's ability to stop porting its Office productivity suite to the Apple Macintosh platform—the RPFJ permits Microsoft to retain the ability to repeat that threat in slightly altered contexts.

A. DOJ's Effort To Minimize The Scope Of The DC Circuit's Affirmance Cannot Obscure The Failure Of The RPFJ To Remediate Clear, Proven Violations

DOJ has tried to lower the bar for approval of its proposal by minimizing the most significant appellate imposition of monopolization liability in the past half-century, and adopting Microsoft's crabbed view of its own liability. In Senate testimony,

[9] It is telling that the CIS ignores the remedial standard that the DC Circuit set out. See CIS 24, 66 Fed. Reg. 59,465. The CIS submerges the need to craft relief that tends to ''terminate'' the illegally maintained monopoly, despite the court of appeals'' contrary instructions. See 253 F.3d at 103. Rather, the CIS endorses a watered-down standard in order to set a lower bar for the RPFJ to clear, in tacit recognition that the RPFJ cannot satisfy the DC Circuit's standard. The CIS would require relief only to ''[e]nd the unlawful conduct,'' to prevent recurrence of the violation ''and others like it,'' and to ''undo its anticompetitive effects.'' CIS 24, 66 Fed. Reg. 59,465. The RPFJ falls short even of these modified, more modest objectives, however, particularly when measured by its failure to prevent future violations that work slight variations on the conduct condemned by two courts, and its failure to ''undo'' any of the ''anticompetitive effects'' of Microsoft's sweeping, coordinated, and successful anticompetitive campaign.

Assistant Attorney General James made the remarkable assertion that the DC Circuit, despite affirming ''the District Court's holding that Microsoft violated 2 of the Sherman Act in a variety of ways,'' 253 F.3d at 59, somehow precluded any consideration, for remedial purposes of Microsoft's astonishing anticompetitive campaign as a whole. See James Testimony 5. To the contrary, the court of appeals never rejected the common-sense notion that ''Microsoft's specific practices could be viewed as parts of a broader, more general monopolistic scheme''; much less did the court of appeals insist (or even hint) that ''Microsoft's practices must be viewed individually'' for all purposes, ld. Rather, the court of appeals clearly considered some illegal acts in the context of others. Thus, the court held that Microsoft's exclusive contracts with ISVs, though affecting only ''a relatively small channel for browser distribution,'' had ''greater significance because * * * Microsoft had largely foreclosed the two primary channels to its rivals.'' 253 F.3d at 72.

The DC Circuit's examination of the divestiture remedy is telling. If the many separately illegal monopolistic acts could not be viewed as cumulatively contributing to the illegal maintenance of Microsoft's monopoly, divestiture would have been an unthinkable remedy, since no specific act held illegal on appeal changed the structure of the company or of the market. But the court of appeals recognized that divestiture could be justified if the many separate illegal acts, taken together, were shown to have had a sufficiently certain causal connection to justify using structural relief to undermine, if not end, the monopoly. See 253 F.3d at 80, 106–107.

The court of appeals did ''reverse [the] conclusion that Microsoft's course of conduct separately violates ''2 of the Sherman Act.'' 253 F.3d at 78 (emphasis added). But the reversal occurred because the district court purported to find that a series of acts that did not constitute separate, free-standing antitrust violations had a ''cumulative effect * * significant enough to form an independent basis for liability''—but never specified acts other than those that separately violated Section 2 that might be aggregated into such a violation, ld.

It is a remarkable leap from this unremarkable holding to the absurd notion that Microsoft's extraordinary series of separate adjudicated antitrust violations cannot be considered together for any purpose. Even the CIS recognizes that those violations are part of one coordinated and ''extensive pattern of conduct designed to eliminate the threat posed by middleware.'' CIS 11, 66 Fed. Reg. 59,462. They should be remedied as such.

B. The RPFJ Simply Restates The Antitrust Laws At Critical Points And Thus Forfeits The Clarity And Efficiency Of The Contempt Process

Another striking feature of the RPFJ is its repeated reliance on a reasonableness standard of conduct that simply imports full rule-of-reason analysis under the antitrust laws. Antitrust remedies, like other injunctive decrees, are supposed to be amenable to swift and sure enforcement, according to standards that give warning of what is forbidden and what is permitted both to the wrongdoer and to its potential victims. But the RPFJ would regularly require the decree Court to determine whether Microsoft's conduct was ''reasonable.'' For example, the Court would have to determine

* whether volume discounts were ''reasonable'' or exclusionary (RPFJ III(B)(2));

* whether technical requirements for the bootup sequence that Microsoft imposed on OEMs were ''reasonable'' (id. § III(C)(5));

* whether the terms on which Microsoft makes Communications Protocols available are ''reasonable'' (id. § III(E));

* whether exclusivity requirements imposed on ISVs were ''reasonable'' in ''scope and duration'' (id. § III(F)(2)); see also id. § (III(G)(2));

* whether technical requirements designed to force the invocation of Microsoft Middleware despite contrary consumer or OEM preferences are ''reasonable'' (id. III(H)(2)[second]);

* whether the licensing terms accompanying required disclosures, and terms of mandatory cross-licenses required for access to the disclosures, are ''reasonable'' (id. III(I)(1), III(I)(5));

* and whether Microsoft's bases for excluding ISVs from access to security-related protocols are ''reasonable'' (id. § III(J)(2)(b)-(c)).

It is telling that the RPFJ states so many of its provisions in terms that simply duplicate the antitrust rule of reason. Rule of reason disputes are notoriously difficult to litigate, see Arizona v. Maricopa County Medical Soc., 457 U.S. 332, 343 (1982) (noting ''extensive and complex litigation'' involving ''elaborate inquiry'' at ''significant costs''),—and difficult for plaintiffs to win. These provisions add nothing to the antitrust laws themselves, either in clarity of obligation or in efficiency of enforcement. That is no remedy at all.

C. The RPFJ Provides No Remedy For Microsoft's Suppression Of The Browser And Java. As noted above, perhaps the most glaring deficiency of the RPFJ is that it does nothing to restore the competitive threats to Windows posed by the Internet browser and cross-platform Java. That cannot be an oversight. The bulk of the evidence, and much of the opinion of the court of appeals affirming liability, focused on Microsoft's successful efforts to suppress these threats to the applications barrier to entry. See Microsoft III, 253 F.3d at 58–78. Even the CIS recognizes the primacy of these products in the case. See CIS 10–17, 66 Fed. Reg. 59,462–463. Yet the RPFJ does not change the competitive picture for either product in the least. The RPFJ does not deprive Microsoft of these ''fruits'' of its illegal conduct, but instead takes that illegal conduct, and the advantages derived from it, as a tacit baseline for future competition. The RPFJ leaves Microsoft with the full benefit not only of the years of insulation from the competitive threats posed by those products, but also of the expanded power it has accumulated by incorporating Internet Explorer into the Windows monopoly. Microsoft thus has more, and stronger, weapons to suppress any middleware threats that it identifies in the future, since its monopoly control over the browser—now labeled part of the Windows monopoly product—provides Microsoft with complete control over the universal client for Internet computing. The RPFJ's approach is like sentencing a bank robber to probation, but letting him keep his weapons and the loot.

But the RPFJ's failure to provide relief that restores the specific competitive threats that Microsoft illegally suppressed is worse than that. In a platform technology market like that for PC operating systems, single standards tend to prevail, so that only sweeping changes can dislodge the incumbent. Platform threats are very rare. It could easily be another five or ten years or more before a comparable threat arises again; certainly no threat of similar strength to the Internet browser or Java has surfaced in the nearly seven years since Microsoft began the course of illegal conduct condemned by the court of appeals. See Stiglitz/Furman Dec. 35–36. That is what makes anticompetitive conduct directed at them so potentially profitable. The RPFJ makes that conduct profitable beyond any rational actor's wildest dreams, and greatly increases the incentives for its repetition. Having been caught illegally suppressing two related platform threats, Microsoft retains all the benefits that it sought through its illegal acts.

By eliminating Navigator, Microsoft has not only eliminated consumer choice in browsers, but it also seized the power to control the interfaces and protocols through which an enormously valuable set of Internet applications—ranging from instant messaging and e-mail to streaming video and e-commerce—are delivered to desktop computers and other digital devices.

Microsoft's Internet Explorer is now the bottleneck through which all Internet-related middleware must pass. Instant messaging and media player technology are equally dependent on browser software. Microsoft has also seized the power to decide whether that browser functionality will be ported to any competing operating system, and, if so, to which ones. Finally, in destroying Navigator, Microsoft has also destroyed an important alternative distribution channel, one free of Microsoft's control or influence, through which Microsoft's competitors could formerly distribute middleware runtimes and products to desktop consumers and application developers.

Although Navigator has practically disappeared from the competitive scene, Java has not. But Java's importance has been limited to servers, where Microsoft has a leading share but not yet an operating systems monopoly. Microsoft's conduct appears to have assured that Java will not function as cross-platform middleware for client computers. Java thus poses no threat to the desktop OS monopoly. But the RPFJ lets Microsoft keep that anticompetitive benefit of its conduct.

IV. THE ICON-FOCUSED OEM FLEXIBILITY PROVISIONS ARE INEFFECTIVE

RPFJ §§ III(H)(1)-(2)[first] superficially allow OEMs and end users to rearrange icons

and menu entries relating to middleware.[10] These provisions are hollow, however. Section III(H)(1) duplicates only what Microsoft unilaterally agreed to permit OEMs to do back on July 11, 2001.

And the end-user provisions simply restate and preserve end-users'' longstanding options to delete icons and menu entries if they right-click and delete or drag the icon or menu entry to the Recycle bin. The default provisions in Section III(H)(2) are so limited, and so fully subject to Microsoft's architectural control, as to be competitively meaningless as well.

The icon provisions do not adequately address the competitive harms of Microsoft's adjudicated misconduct because Microsoft remains able to ensure that the Microsoft versions of middleware will appear, ready to be invoked by applications, on every PC. Even if the icon provisions had greater competitive significance in theory, they are unlikely to have any significance in fact, because few if any OEMs are likely to take advantage of the options provided. DOJ cannot claim to be unaware of this market reality. These provisions are mere window-dressing. See Stiglitz/Furman Dec. 35.

A. The PFJ Permits Microsoft's To Continue Illegally Commingling Middleware Code With The Code For The Monopoly Operating System

The RPFJ capitulates on DOJ's most hard-fought and significant substantive victory: the finding that Microsoft illegally preserved its monopoly by commingling the middleware code with the operating system, foreclosing the competitive threat to Windows while effectively expanding the scope of the monopoly to encompass middleware. DOJ's inability to enforce the 1995 consent decree against the binding of IE to Windows, see United States v. Microsoft, 147 F.3d 935 (DC Cir. 1998) (''Microsoft''), was widely viewed as prompting this action. The conduct itself was viewed as the most successful in furthering Microsoft's anticompetitive goals.

Rather than repeat and strengthen the prohibition in the 1995 decree that failed to achieve its goals, the RPFJ does not even impose the type of superficial prohibition applied to other conduct condemned at trial and on appeal. To the contrary, under the RPFJ, the operating system is whatever Microsoft says it is, and Microsoft can commingle any new product to the monopoly product—foreclosing competition for the OS and the new product alike. See Stiglitz/Furman Dec. 34–37. Not only does Microsoft preserve its anticompetitive gains, but it obtains a green light to repeat the same conduct to destroy any new middleware threats. In a market characterized by serial dominance, an incumbent monopolist may need only to suppress one threat every few years in order to make its monopoly virtually permanent. Cf. id. at 35–36. A continued ability to commingle middleware gives Microsoft limitless tenure over the OS market. If Microsoft emerges from this case free to bind middleware to the OS, this action will be an exercise in futility.

1. The DC Circuit Specifically Condemned Commingling Twice DOJ's victory on the commingling point was crystal clear, and repeatedly underscored by the court of appeals. The court of appeals recognized that ''Microsoft's executives believed'' that ''contractual restrictions placed on OEMs would not be sufficient in themselves'' and therefore ''set out to bind'' IE ''more tightly to Windows 95 as a technical matter.'' Microsoft III, 253 F.3d at 64 (quoting Findings, 84 F. Supp.2d at 50 (¶160)). In the CIS (and in Assistant Attorney General James'' Senate testimony), DOJ appears to assume that icon-based relief that subjects some Microsoft Middleware Products to the Add/Remove utility equates with relief for commingling code. Thus, the CIS blends the two offenses in stating that Microsoft violated Section 2 when it ''integrated Internet Explorer into Windows in a non-removable way while excluding rivals.'' CIS 7, 66 Fed. Reg. 59,461. In affirming liability for both courses of conduct, however, the court of appeals clearly distinguished between Microsoft's ''excluding IE from the ''Add/Remove Programs'' utility'' and its ''commingling code related to browsing and other code in the same files.'' 253 F.3d at 64–65, 67. The court of appeals found no justification for commingling code or, indeed, more broadly, for ''integrating the browser and the operating system.'' ld. at 66. One could hardly ask for a clearer statement. Microsoft argued bitterly against liability for commingling, and for a declaration that its product design decisions were beyond the reach of the antitrust laws. Instead, the DC Circuit pointedly rejected Microsoft's argument that it ''should vacate Finding of Fact 159 as it relates to the commingling of code.'' Microsoft III, 253 F.3d at 66; see Findings, 84 F. Supp.2d at 49–50 (¶159). And the court of appeals ''conclude[d] that such commingling has an anticompetitive effect,'' because it ''deters OEMs from pre-installing rival browsers, thereby reducing the rivals'' usage share and, hence, developers'' interest in rivals'' APIs as an alternative to the API set exposed by Microsoft's operating system.'' 253 F.3d at 66 (emphasis added). See generally id. at 64–67. That is, commingling helps reinforce the applications barrier to entry that shields the Windows monopoly.

The DC Circuit's holding reflected a principle of critical importance to the enforcement of the antitrust laws in the software industry, where the complementarity of different programs makes product design a potentially devastating weapon to foreclose competition: a ''monopolist's product design decisions'' can violate the antitrust laws just as any other economic conduct can.

253 F.3d at 65. Product design decisions may be grossly anticompetitive, particularly in the software industry where lines of code can be packaged (and marketed) in many different ways without affecting the operation of programs once they are installed. As Microsoft's James Allchin recently acknowledged, software ''code is malleable,'' so that ''[y]ou can make it do anything you want.'' Microsoft Net Profit Fell 13% in Recent Quarter, Wall St. J. Europe, Jan. 18, 2002, 2002 WL-WSJE 3352885 (quoting Allchin).

Lest there be any doubt on the matter, the court of appeals flatly rejected Microsoft's rehearing petition aimed squarely at the remedial issue. Microsoft specifically sought to preclude relief that addressed the commingling violation, and instead to treat the commingling and the lack of add/remove functionality as the same. Microsoft's reheating petition made clear that the ''ruling with regard to ''commingling'' of software code is important because it might be read to suggest that OEMs should be given the option of removing the software code in Windows 98 (if any) that is specific to Web browsing [as opposed to] removing end-user access to Internet Explorer.'' Appellant's Petition for Reheating, at 1–2 (July 18, 2001). Microsoft argued that affirmance only on the ground of the add/remove issue would ensure that the remedy was tightly confined, because the ''problem will be fully addressed by including Internet Explorer in the Add/Remove Programs utility, which Microsoft has already announced it will do in response to the Court's decision.'' ld. at 2. The court of appeals rejected this argument out of hand, adding this remarkable sentence in a terse per curiam order denying reheating: ''Nothing in the Court's opinion is intended to preclude the District Court's consideration of remedy issues.'' Order at 1 (DC Cir. Aug. 2, 2001) (per curiam). Nonetheless, the RPFJ would settle this case as if rehearing had been granted, requiring Microsoft only to allow OEMs and end users to ''add/remove'' the icons for middleware. This is insufficient to remedy technological binding—commingling [] since it does nothing to remove the underlying middleware code on which developers will continue to rely. If only the Internet Explorer icon is removed from the desktop, the IE middleware remains, and with it the same applications barrier issues that Microsoft preserved by stifling competition by Netscape and Java.

It is true that the interim conduct relief in the vacated Final Judgment required only that Microsoft offer an operating system where OEMs and end-users were permitted to remove end-user access to the middleware components, United States v. Microsoft Corp., 97 F. Supp.2d 59, 68 (D.DC 2000), vacated, 253 F.3d 34 (DC Cir. 2001), a provision similar to that in RPFJ § III(H)(1)[first]. That transitional provision of course assumed the existence of structural relief that would remove Microsoft's economic incentive to bind middleware to the OS unless the binding was independently justifiable. Without a structurally more competitive market, those modest provisions would be meaningless, and would permit Microsoft to follow much the same course that triggered the lawsuit.

There is no excuse for DOJ's failure to do anything about one of the principal, and most easily replicable, violations in the case. Even one of Microsoft's vocal, libertarian defenders, University of Chicago law professor Richard Epstein, recognized that the minimum plausible remedy after the DC Circuit decision would involve ''undoing a few product-design decisions.'' Richard Epstein, Phew/, Wall. St. J., June 29, 2001, at Al0. But DOJ did not even insist on that. Instead, the RPFJ's omission of any relief for this violation gives Microsoft something the DC Circuit twice refused: a victory on the

[10] 10 See n.2, supra.

hardest-fought legal issue in the case. Given the central importance of middleware to the theory of the case, failing to address the principal means by which Microsoft bundled browser middleware to Windows would be plainly inadequate.

2. The Failure To Limit Commingling Is Critical Because Ubiquity Trumps Technology In Platform Software Markets

The failure to prohibit commingling of middleware deprives the RPFJ of any significant procompetitive effect on the emergence and adoption of competing platform software. The critical competitive phenomenon in this case was not middleware in itself, but rather the potential, and deeply feared, development of particular middleware into a competing platform for software applications. Middleware can develop into a competing applications platform by attracting software developers to use its Application Programming Interfaces (APIs) in preference to, or at least in addition, to the APIs offered by Microsoft in Windows. Developers will write their applications to invoke particular APIs—i.e., to run on a particular platform—based on how widely available the APIs will be.

Although potential platform software not distributed by Microsoft must attract users in order to achieve the widespread availability of their APIs that will attract developers, it is the expected presence of the APIs that matters, not how much consumers directly use the application exposing the APIs. Non-Microsoft middleware depends on the availability of the application in order to gain the critical mass of users that, in turn, may attract developers.

The availability and prominence of the application's icon may be significant for the purpose of attracting end-users. In platform competition, however, the availability of the application is only a means to the desired end. Developers don't write to icons; they write to APIs. The inclusion of Microsoft Middleware functionality in every copy of Windows is determinative, regardless of how or whether the icons are featured, and regardless even of the presence of the user interface or shell.[11] If developers know that the plumbing for a Microsoft version of middleware will be on every PC because it is commingled with Windows, then developers will write to the Microsoft version's APIs. Because the RPFJ permits Microsoft to include the APIs accompanying the software functionality that mimics middleware that is a potential platform threat, Microsoft will be able to defeat any middleware threat in exactly the same way it destroyed the threat of Netscape and Java on the PC desktop. See Stiglitz/Furman Dec. 36.

Under the RPFJ, developers will continue to assume that Windows Media Player, for example, is present on every computer. This will be true regardless of whether ''end user access'' is removed, because the remedy does not require Microsoft to remove the middleware. The result is that software developers will write applications to, for example, the Windows Media Player APIs, rather than to the APIs supplied by rival platforms. That is an advantage that no competitor can overcome.

It is no answer to say that OEMs can offer rival middleware even if the code for a Microsoft version of the same product is commingled with Windows, so that the Microsoft version of middleware appears on every desktop PC. If Microsoft's version of a product is everywhere, few OEMs will go to the effort of providing another product that does largely the same thing. The district court and court of appeals alike recognized that OEMs faced strong disincentives to install two competing products with similar middleware functionality, disincentives arising largely from support costs and disk space. See 84 F.Supp.2d at 49–50, 60–61 (¶¶159, 210); 253 F.3d at 61. If the Microsoft Middleware is there, the OEM will have to support it, even if—perhaps especially if—the end-user does not know that it is there.

Thus, rival middleware cannot undermine Microsoft's monopoly unless (1) the rival middleware is ubiquitous, or (2) the Microsoft version is not ubiquitous. If developers do not feel compelled to write to the rival middleware as well as the Microsoft middleware, the rival middleware will not undermine the monopoly. And if Microsoft's version of particular middleware can be ubiquitous by virtue of its inclusion in the monopoly operating system, as the RPFJ plainly allows, there is virtually no likelihood that rival middleware will ever achieve the ubiquity needed to present a platform challenge. See Stiglitz/Furman Dec. 36–37; see generally Litan/Noll/Nordhaus Comment 44–47.

3. The RPFJ Retreats From The 1995 Consent Decree Microsoft uses Windows as an instant, universal distribution channel for Microsoft software that represents a response to a threat to the dominance of Windows as a program development platform. As a consequence, ''Windows'' has become whatever bundle Microsoft needs it to be to forestall competition. The 1995 Consent Decree contained a prohibition on contractual tying of applications to the operating system in order to prevent anticipated conduct that would maintain the operating systems monopoly by anticompetitive means. That the earlier provision failed in its purpose suggests that the provision should be broader, not that it should be abandoned, particularly since this case began as a way to stop conduct that had escaped summary condemnation under the earlier decree. It would be senseless as a matter of enforcement policy to bring and win an action prompted by an evasion (if not a violation) of a monopolization consent decree, win the case on the monopolization theory most closely related to the object of the earlier consent decree, and then reward the violator by removing the relevant restriction upon the expiration of the earlier decree rather than broadening it as proposed here. Microsoft's monopoly gives it the power to make all systems integration and software bundle decisions, a power that Microsoft is exercising more broadly, as the breadth of the Windows XP bundles clearly illustrates. The RPFJ should not step back from the 1995 Consent Decree.

4.The RPFJ Encourages Illegal Commingling By Placing The Critical Definition of Windows Under Microsoft's Exclusive Control.

But the RPFJ does step back from the 1995 Decree, and makes matters still worse. Not only does the RPFJ completely fail to prevent future illegal commingling, but it effectively approves that conduct by permitting Microsoft ''in its sole discretion'' to ''determine[]'' exactly which ''software code comprises [sic] a Windows Operating System Product.'' RPFJ VI(U). That provision permits Microsoft an unearned advantage in repelling any future challenges to illegal commingling of applications code with Windows. Were the Court to enter this provision as part of its judgment, Microsoft could point to DOJ's capitulation on this issue—and the Court's approval—as extraordinarily persuasive evidence that its monopoly product was as broad as it says it is, and that, despite the contrary holding of the DC Circuit, any commingling of an application with the operating system is per se legal.

The Court can and should disapprove provisions that appear to endorse practices of apparent anticompetitive effect and dubious legality. Thomson Corp., 949 F. Supp. at 927–930 (refusing to approve fee schedule for mandatory license for legally dubious copyright). The Court should not approve this provision, which defangs many of the other obligations in the RPFJ.

Rather than learning from the difficulties with the ''integration proviso'' in that Decree, DOJ has ceded the issue to Microsoft, permitting Microsoft to decide for purposes of the decree obligations where the OS stops and where middleware begins. Much of the RPFJ rests on the relationship between the Windows OS and middleware. But the RPFJ places Microsoft firmly in control of every technical aspect of the proposed decree by permitting Microsoft absolute control over the definition of ''Windows

Operating System Product.'' That subjects many of Microsoft's purported obligations to Microsoft's own discretion.

No term is more important in the RPFJ than ''Windows Operating System Product,'' which appears fully 46 times in the RPFJ: 26 times in the descriptions of substantive obligations, and 20 times in the definitions that circumscribe those obligations. The definition of Application Programming Interfaces (APIs) is the starkest example. ''Windows Operating System Product'' appears three times among the 41 words of the API definition. See RPFJ VI(A.). Thus, Microsoft can determine ''in its sole discretion'' what an API is, and thus what must be disclosed.

One would think that DOJ would do everything possible to ensure that a new decree did not contain an analogue to the ''integration proviso'' that nullified much of the anti-tying provision of the 1995 decree. See generally Microsoft II, 147 F.3d 935. Instead, Section VI(U) ensures that few, if any, of the technical provisions of the RPFJ will mean anything except what Microsoft wants them to mean, and that none can be enforced without lengthy litigation that will

[11] The user interface is especially insignificant because the browser window already can serve as the user interface for many products, and could easily be adapted to serve as the user interface for many more.

further shrink the tightly limited duration of the proposed relief.

B. Empirical Evidence Shows That The Icon Flexibility Provisions Will Not Be Used Not only do the icon flexibility provisions address the wrong problem, but the market already has tested their consequences. On July 11, 2001, Microsoft announced that OEMs and end users would be permitted to remove access to Microsoft's Internet Explorer browser, just as RPFJ III(H)(1) permits. As of this writing, not one OEM has availed itself of this new liberalized policy. Windows XP is shipping with Internet Explorer on every single personal computer shipped by every single OEM. This real-world experience speaks volumes about the practical significance of this relief.

C. The Icon Flexibility Provisions Require—And Accomplish—Little

1. The icon flexibility provisions do not permit OEMs to swap out Microsoft Middleware Products and replace them with other products. Rather, the OEMs at most can hide the Microsoft icon, but need to be prepared to support the underlying Microsoft software when another software application invokes it. That means that these provisions do not address the added ''product testing and support costs'' that discourage OEMs from including more than one version of particular functionality. Microsoft III, 253 F.3d at 66.

This is a step backward from DOJ's settlement posture before liability was established. At that time, DOJ insisted that OEMs be allowed to alter or modify Windows, and that Microsoft provide OS development tools for that purpose. See Draft 18, 4(1)(d), 4(g). The RPFJ provisions, by contrast, only permit OEMs to display icons, shortcuts, and menu entries for Non-Microsoft Middleware. The RPFJ does not require Microsoft to permit OEMs to remove any Microsoft Middleware Products, although even current Microsoft practice permits this. The RPFJ requires Microsoft only to allow the removal of ''icons, shortcuts, or menu entries.'' RPFJ III(H)(1)[first].

2. Section III(H)(2)[first] seems to permit OEMs and end-users to choose default middleware for particular functions. Microsoft's obligations are far less than they appear.

The provision applies only where a Microsoft Middleware Product would launch into a top-level display window (rather than operating within another interface) and would either display ''all of the user interface elements'' or the ''Trademark of the Microsoft Middleware Product.'' RPFJ III(H)(2)(i)-(ii) (emphasis added). Thus, the provision does not apply if Microsoft designs the slightest variation on the interface elements that launch from within another application, so long as the trademark also is not displayed in the top-level window. These do not present serious programming challenges. Microsoft's ability to preclude OEM installation of desktop shortcuts that ''impair the functionality of the [Windows] user interface'' (RPFJ III(C)(2)) provides another, largely unreviewable set of opportunities to impede the use of innovative shortcuts to innovative software. Microsoft asserted similar reasons to defend some of the conduct condemned by the DC Circuit. See Microsoft III, 253 F.3d at 63–64. The DC Circuit rejected Microsoft's approach, but the RPFJ adopts it.

3. As explained above, the code beneath the surface is critically important to the success of middleware in undermining the applications barrier to entry in the OS market. The RPFJ contains exceptions that ensure that, however icons may be displayed on the surface, Microsoft Middleware will be firmly (and unchallengeably) established in the plumbing of each PC. Sections III(H)(1)-(2)[second], undo what might be left of the obligations earlier in Section III(H). Section III(H)(1)[second] permits Microsoft to ensure that Microsoft Middleware Products are invoked whenever an end-user is prompted to use Microsoft Passport or the group of Microsoft web services now known as Hailstorm. Section III(H)(2)[second] ensures that Microsoft need only program in functions that invoke Active X or other similar Microsoft-proprietary implementations of common functions, in order to ensure that Microsoft Middleware Products constantly appear regardless of an end-user's stated preferences. And none of the provisions in Section III(H) would apply unless the corresponding Microsoft Middleware Products existed seven months before the last beta version of a new Windows release. As with other provisions, Microsoft would be constrained by these requirements only if it paid no attention to them when it decided when and how to release its products.

D. The 14-Day Sweep Provision Effectively Nullifies RPFJ § III(H) Even if these provisions otherwise might mean something, the RPFJ ensures that they will be competitively meaningless by permitting Microsoft to nag users to give permission for Microsoft to override any array of non-Microsoft icons and menu entries 14 days after the initial boot-up of a PC. See RPFJ III(H)(3). Thus, Microsoft only needs to prompt users with a dialog box inviting them to ''optimize the Windows user interface'' every time they boot up, or when they download the inevitable bug fixes and security patches among Windows updates, in order to undo any OEM's or end-user's customization of icons. Microsoft apparently provided DOJ with the name for this feature, which DOJ uses in the CIS: ''Clean Desktop Wizard.'' CIS 48, 66 Fed.

Reg. 59,471. What user would not agree to have a cleaner desktop? No ISV is likely to pay an OEM a fee sufficient to cover the trouble of rearranging icons, and supporting additional software, for the privilege of having non-Microsoft software icons displayed advantageously for as little as two weeks.

The CIS suggests that the ability of Microsoft to sweep away icons of competing middleware and other products 14 days after a computer first boots up (RPFJ III(H)(3)) applies only to ''unused icons'' (CIS 48, 66 Fed. Reg. 59,471), but the decree terms contain no such limitation. Once its ''Clean Desktop Wizard'' (id.) secures a click of user consent, Microsoft can hide any icons that offend it. Indeed, there is nothing in the RPFJ that would stop Microsoft from including similar ''wizards'' that would prompt users to reset middleware defaults, or even to remove Non-Microsoft Middleware,'' in order to ''optimize performance'' or to ''take full advantage of powerful new Windows features.''

E. By Placing The Burden To Restore Competition On OEMs, The PFJ Leads To No Remedy At All For Much Of The Misconduct At Issue

One of the most misguided elements of the RPFJ is its allocation to OEMs, ISVs and end-users of the primary responsibility for injecting competition into the OS market. The icon and default flexibility provisions of the RPFJ allocate to the OEMs almost all of the financial risk and responsibility for remediating Microsoft's antitrust violation, while the monopolist has no obligations except to allow others to make changes to hide (or add to) Microsoft's middleware.

That approach ignores the fact that OEMs are motivated by their own fiduciary and economic considerations, not by the drive to remedy a monopolization offense. OEMs are risk-averse, as they operate in a low-margin, highly competitive environment in what has become a commodity-product market. In that environment OEMs are highly dependent on the good graces of Microsoft, not only for favorable pricing on Microsoft's monopoly software products [] Office as well as Windows [] but also for timely technical assistance, and access to technical information.

The Stiglitz/Furman Declaration confirms (at 32–34) that the economics of the OEM industry—a commodity industry captive to a bottleneck monopolist—discourage expenditures of this kind. It is bizarre and counterproductive to place the burden to restore competition on the innocent, low-margin OEMs rather than the monopolist. The ''hapless makers of PCs'' still ''aren't in any position to defy Microsoft,'' Walter Mossberg, For Microsoft, 2001 Was A Good Year, But At Consumers'' Expense, Wall. St. J., Dec. 27, 2001, at B1, any more than they were when the illegal conduct in this case first occurred. See, e.g., Findings, 84 F. Supp.2d at 62 (¶214) (Hewlett-Packard observation to Microsoft that ''[I]f we had a choice of another supplier, * * * I assure you [that you] would not be our supplier of choice''). But if OEMs choose not to exercise their new ''flexibility'' under the middleware provision [] a choice that seems likely in view of the demonstrated lack of a response to Microsoft's offer of July 11, 2001 ?? the [12] government is left with no antitrust remedy for much of its case.

Nor can ISVs be expected to pay OEMs to take advantage of the limited flexibility provided by

RPFJ III(C) and III(H). The RPFJ gives ISVs very slight incentives to subsidize OEM

[12] Similarly, the RPFJ places no limits on Microsoft's conduct toward one of its largest current groups of licensees—direct corporate licensors of bulk Windows licenses. The corporate market has always been Microsoft's point of leverage, and those buyers now often buy direct. Microsoft has made clear its intention to make Windows and other software a renewable ''service.'' Microsoft can undo all of the provisions applying to OEMs upon the first license renewal with an end-user.

alterations of Microsoft's preferred desktop display, since the ISVs who sell middleware that competes against a Microsoft offering cannot buy exclusivity on the desktop of any computer. Rather, at best an ISV can obtain parity in the availability to developers of its middleware's code. No matter what ISVs and OEMs do, Microsoft Middleware will be ubiquitous. And ISVs could buy only 14 days of advantageous icon display before a Microsoft ''Clean Desktop Wizard'' (CIS 48, 66 Fed. Reg. 59,471) would begin prompting users to undo the OEM's arrangement of icons and reinstate the arrangement favored by Microsoft. No ISV would pay more than a pittance for such a shallow and short-lived advantage on the desktop. F. The RPFJ Permits Microsoft To Control Consumers'' Access To Innovation To Suit Its Monopolistic Aims The RPFJ allows Microsoft to exercise full control over the pace of innovation in middleware because Microsoft can ensure that consumers are denied access—or have only severely impeded access—to competitively threatening middleware products to which Microsoft has no analogue.

Section III(C)(3) allows Microsoft to prohibit OEMs from configuring PCs to launch non-Microsoft middleware from any point unless Microsoft already has a competing product that launches from that point. Microsoft can prohibit OEMs from configuring non-Microsoft middleware from launching automatically at the end of the boot sequence or upon the opening or closing of an Internet connection unless a Microsoft Middleware Product with similar functionality would launch automatically. RPFJ § III(C)(3).

Even after this catch-up provision serves its delaying purpose, Microsoft can control how competing middleware products reach and serve consumers, so that products launch only in the way that best suits Microsoft. This provision appears designed to protect Microsoft from competition, and to give the monopolist a clear imprimatur to control the pace of innovation. See Stiglitz/Furman Dec. 28.

V. THE API AND COMMUNICATIONS PROTOCOL DISCLOSURE PROVISIONS ARE INEFFECTIVE

The API Provisions Require Little, If Anything, Beyond Current Disclosure Practices In Microsoft's Self-Interest

The API and Communications Protocol disclosure provisions (§§ III(D)-(E)) contain little in the way of hard, fast, enforceable obligations, and do not appear to add anything significant to Microsoft's current disclosure practices. As the CIS recognizes:

Through its MSDN [Microsoft Developer's Network] service, Microsoft presently makes widely available on the Internet an extensive and detailed catalog of technical information that includes, among other things, information about most Windows APIs for use by developers to create various Windows applications. MSDN access is presently broadly available to developers and other interested third parties.

CIS 34,66 Fed. Reg. 59,468.

Microsoft already discloses literally thousands of APIs to software developers through MSDN for the good reason that it is in Microsoft's self-interest to promote the Microsoft Windows platform to software developers. The extent of information disclosure required by the RPFJ must be understood in the context of Microsoft's current information disclosure practices. A ''requirement'' that Microsoft disclose APIs for the most part simply ''requires'' that Microsoft do what it does voluntarily.

Microsoft has a business incentive not only to disseminate Windows APIs but to assist ISVs in understanding and implementing Windows APIs in their products. Microsoft and other platform software vendors compete to attract developers by disclosing technical information, creating easy-to-use development tools, and ''evangelizing'' their development platforms. Attracting developers helps Microsoft perpetuate the substantial network effects that produce the applications barrier to entry protecting the Windows monopoly. Because the strength of the Windows monopoly and the power of the applications barrier to entry are directly related to the number of developers writing applications for Windows, it is in Microsoft's interest to provide a robust information disclosure program.

By widely disclosing APIs, Microsoft ensures that applications will continue to be written for its platform software rather than for rival platforms. Properly understood, Section III(D) does not actually require Microsoft to provide any new disclosure of APIs and technical information to promote interoperability; Microsoft already engages in these disclosures. Rather, the incremental effect of the API disclosure provisions of the RPFJ is at most to prevent Microsoft from selectively withholding certain APIs from certain vendors. As explained below, however, the disclosure ''requirements'' in the RPFJ are too insubstantial and too easily manipulated to accomplish even that limited goal.

B. The RPFJ Does Not Require Disclosure of Windows APIs, But Rather Lets Microsoft Determine The Scope of Disclosure Through The Design and Labeling of Its Operating System And Middleware

To begin with, the API disclosure requirements aim at the wrong thing. The RPFJ defines APIs as the interfaces used by Microsoft Middleware to invoke resources from a Windows Operating System Product. RPFJ § VI(A). But innovative rival software vendors do not need APIs between Microsoft Middleware and Windows. The really threatening innovators are threatening precisely because their products perform functions that Microsoft's do not. In those cases, by definition, there will not be any fully analogous Microsoft middleware—just as Microsoft did not have an Internet browser when Netscape Navigator first appeared. Those developers need full access to Windows APIs—APIs for all functionalities enabled by the Windows platform, whether Microsoft calls them ''internal'' calls within Windows or external APIs that may be distributed to ISVs—not to the limited subset used by a Microsoft version of similar middleware.

That is what Netscape needed in 1995; there was no Internet Explorer to speak of at that time, and certainly Microsoft's rudimentary browser did not perform anywhere near the range of functions performed by Netscape Navigator. See Findings, 84 F. Supp.2d at 31–32 (¶¶82–84), 33–34 (¶¶91–92). The RPFJ provisions would not have helped Netscape then. See Letter from James L. Barksdale, former CEO of Netscape, to Chmn. Leahy & Sen. Hatch, Senate Comm. on the Judiciary, Attachment, Question 1 (Dec. 11, 2001)[13] And they will not help any software developer whose products exceed the functionality of existing Microsoft middleware. The API disclosure provisions in the RPFJ thus ensure that Microsoft can control the pace of middleware innovation, providing another level of assurance that non-Microsoft products will not gain the type of head start that might result in ubiquity before a similar Microsoft product can be included That limitation on API disclosure is severe enough. But it is just a beginning. The disclosure obligation is further limited by the definition of APIs at RPFJ § VI(A): in the bundle of products sold with every Windows operating system.

Setting aside the circularity, the malleability of the two principal defined terms renders this definition (and the corresponding obligations) a practical nullity. The API definition depends on the relationship between two ''products,'' each of which is defined solely by Microsoft. As noted above, Microsoft has ''sole discretion'' to identify software code as part of a ''Windows Operating System Product.'' RPFJ § VI(U). Many APIs can disappear from view simply as a result of Microsoft's unreviewable decision to relabel certain interfaces as internal to Windows. If Microsoft says that an operation takes place entirely within Windows, rather than requiring the interaction of a middleware and Windows, then there is no API to disclose.[14]

C. The Definition of ''Microsoft Middleware'' Gives Microsoft Further Leeway to Limit Its Disclosure Obligation

The only APIs that need be disclosed are those used by ''Microsoft Middleware.'' But ''Microsoft Middleware,'' too, is defined in a way that gives Microsoft tight control over the scope of its own obligations. Remarkably, Assistant Attorney General James testified that this definition would have been difficult for DOJ to achieve in a litigated proceeding. Statement of Charles James to Senate Judiciary Committee 8 (Dec. 12, 2001). But it is difficult to imagine what Microsoft would

[13] Mr. Barksdale's letter in lieu of hearing testimony is available at http://java.sun.com/features/2002.01.barksdale-letter.html, and the attachment is available at http://java.sun.com/features/2002.01.barksdale-attach.htm ''Application Programming Interfaces (APIs)'' means the interfaces, including any associated callback interfaces, that Microsoft Middleware running on a Windows Operating System Product uses to call upon that Windows Operating System Product in order to obtain any services from that Windows Operating System Product.

[14] Moreover, the term ''interfaces'' is not defined in the RPFJ. The CIS explains that '''[i]nterfaces'' includes, broadly, any interface, protocol or other method of information exchange between Microsoft Middleware and a Windows Operating System Product.'' CIS 33–34, 66 Fed. Reg. 59,468. But that definition would not be part of the judgment.

have contested. Just as in the dispute whether Internet Explorer is part of Windows, Microsoft can simply relabel software as part of one product rather than another. The label does not affect the commands and operations in the software.

1. The RPFJ Requires Microsoft To Disclose Only The APIs Used By The ''User Interface'' Or Shell Of Microsoft Middleware

The APIs that must be disclosed are those that ''Microsoft Middleware * * * uses to call upon [a] Windows Operating System Product.'' RPFJ § VI(A); see id. Ill(D). But Microsoft determines how much code performing a Microsoft Middleware function is part of the Middleware, and how much is part of the Windows Operating System Product, since the latter definition is within Microsoft's ''sole discretion.'' Id. § VI(U). The only code in Microsoft Middleware that Microsoft must consider separate for the purposes of API disclosure is the user interface, or shell, of the Middleware—or, rather, ''most'' of the shell. Id. § VI(J)(4). The only limit is that ''Microsoft Middleware'' must ''[i]nclude at least the software code that controls most or all of the user interface elements of that Microsoft Middleware.'' Id. Thus, the terms of the RPFJ permit Microsoft to provide only the APIs that go between 51% of the user interface elements of Microsoft Middleware and the rest of the Windows bundle of products. None of the APIs used by the Middleware's functionality—the APIs that permit the Middleware perform its functions while running on Windows—need be disclosed, so long as the shell APIs are disclosed. This definition appears to be designed to have nothing to do with developer preferences, or with the applications barrier to entry.

2. The RPFJ Requires Microsoft To Disclose APIs Only For ''Microsoft Middleware'' That Is Distributed Separately From Windows, Yet Is Distributed To Update Windows

To come within the disclosure obligation, Microsoft Middleware must be ''distributed separately from a Windows Operating System Product.'' That restriction alone is enough to take Windows Media Player 8 outside the definition, as that product is available only as part of the Windows XP bundle. But not all separate distributions prompt the API obligations; Microsoft must characterize the distribution as one that ''update[s] th[e] Windows Operating System Product.'' See RPFJ § VI(J)(1). Thus, the scope of the obligation depends entirely on the labeling of the product, which Microsoft can easily manipulate.

3. The Limitation Of Microsoft Middleware To ''Trademarked'' Products Further Eviscerates The API Disclosure Provision But that is not all. At least equally significant is the restriction of the Microsoft Middleware definition, and thus the API disclosure obligation, to Middleware that is ''Trademarked.'' RPFJ § VI(J)(2). The definition of ''Trademarked'' allows Microsoft to exclude current middleware from the API disclosure obligation, and to prevent future middleware from becoming subject to the API disclosure obligation, simply by manipulating its use of trademarks. a. Microsoft Easily Can Ensure That Middleware Is Not ''Trademarked'' By Using A Generic Or Descriptive Name Combined With Microsoft(r) or Windows(r) The definition of ''Trademarked'' does not include ''[a]ny product distributed under * * * a name compris[ing] the Microsoft(r) or Windows(r) trademarks together with descriptive or generic terms.'' Id. § VI(T). That is how Microsoft has chosen to name some of its newest and most important products: the combination of a monopoly brand with a simple descriptive mark that helps identify an entire software function with the Microsoft implementation of it. Windows(r) Messenger instant messaging software is one example. Moreover, by the terms of the RPFJ Microsoft disclaims any rights in the use of such combinations of the Microsoft(r) or Windows(r) marks with generic or descriptive terms, and abandons any rights that may be acquired in the future. RPFJ § VI(T). These provisions suggest that Microsoft can change the scope of the definition of Middleware, and thus of the API disclosure obligation, by abandoning some marks it has registered as combinations of Microsoft(r) or Windows(r) with generic or descriptive terms—if the RPFJ does not accomplish that in itself. Windows Media Player is an example. Although Microsoft has registered the combination of Windows(r) and the generic term ''Media'' as Windows Media(r), at bottom the name Windows Media Player is a combination of the Windows(r) mark with the generic term ''media player.'' Indeed, Microsoft could plausibly argue that the Windows Media(r) mark does not come within the ''Trademarked'' definition as it is, since even that mark consists of no more than the Windows(r) mark in combination with the generic term ''media.''15 RPFJ § VI(T) may therefore embody Microsoft's ''disclaim[er of] any trademark rights in such descriptive or generic terms apart from the Microsoft(r) or Windows(r) trademarks.'' But even if Section VI(T) does not go so far, Microsoft could easily get Windows Media(r) Player outside of the ''Trademarked'' definition —and thus outside the scope of the disclosure obligations that apply only to ''Microsoft Middleware''—simply by abandoning the registration mark and moving the registration symbol to the left. Thus, Microsoft can transform ''Windows Media(r) Player,'' which might be subject to API disclosure requirements, into ''Windows(r) Media Player,'' which clearly is exempt. 15. In this discussion we set aside the non-trivial question whether ''Windows'' itself is a generic, or at best descriptive, mark for the type of ''windowing'' graphical user interfaces invented at the Xerox Palo Alto Research Center in the 1970s, popularized by the Apple Lisa and Macintosh in the 1980s, and since used by Microsoft and many other software vendors. b. The ''Microsoft Middleware'' Definition Governing Disclosure Obligations Is Far Narrower Than The ''Microsoft Middleware Product'' Definition Governing OEM Flexibility That this highly restrictive definition is no accident is clear from comparison with the ''Microsoft Middleware Product'' definition which governs the icon-display obligations. To provisions paralleling the ''Microsoft Middleware'' definition, the ''Microsoft Middleware Product'' definition adds several named current products, including ''Internet Explorer, Microsoft's Java Virtual Machine, Windows Media Player, Windows Messenger, Outlook Express and their successors,'' RPFJ § VI(K)(1), although only to the extent that Microsoft ''in its sole discretion'' (id. § VI(U)) decides that those products are ''in a Windows Operating System Product.'' Id. § VI(K)(1). Thus, Microsoft's icon display/removal obligations for those named products would not change merely because of a strategic product renaming or abandonment of a trademark that combines the Microsoft(r) or Windows(r) name with generic or descriptive terms. But none of those current products is named in the ''Microsoft Middleware'' definition that governs the disclosure obligations. That enables Microsoft to manipulate whether those products, although surely middleware, also satisfy the four subparts of RPFJ § VI(J).

c. The CIS Broadens The ''Trademarked'' Definition Beyond Its Terms

The CIS overstates the breadth of the ''Trademarked'' definition, contending that it ''covers products distributed * * * under distinctive names or logos other than by the Microsoft?? or Windows?? names by themselves.'' CIS 22, 66 Fed. Reg. 59,465. The CIS further claims that the exception for products known by combinations of generic terms with Microsoft?? or Windows?? does not cover marks that ''are presented as a part of a distinctive logo or another stylized presentation because the mark itself would not be either generic or descriptive.'' CIS 23, 66 Fed. Reg. 59,465 (emphasis added). To the contrary, the terms of the RPFJ definition of ''Trademarked'' focus entirely on ''names,'' not ''logos'' or ''marks'' as a whole. RPFJ § VI(T). The distinction is striking: the word ''name'' appears five times in the definition, and ''descriptive or generic terms'' appears three times. Neither ''logo'' nor ''mark'' appears at all.

Microsoft clearly appreciates the distinction. Although Microsoft apparently has not yet formally abandoned the mark ''Internet Explorer'' (U.S. Trademark Reg. No. 2277122), it does not assert that mark when it lists its trademarks as a warning to the public. See http://www.microsoft.com/misc/info/cpyright.htm. Microsoft does list its trademark for the Microsoft Internet Explorer logo, however. Id.; see U.S. Trademark Reg. No. 2470273.

d. Microsoft Can Easily Manipulate Which Middleware Releases Are ''New Major Versions'' Indeed, even a ''Microsoft Middleware Product'' satisfying that four-part test may not be ''Microsoft Middleware'' subject to the disclosure obligation unless it is a ''new major version'' of the product, that is, if the release is ''identified by a whole number or by a number with just a single digit to the right of the decimal point.'' RPFJ § VI(J). That has two implications. First, Microsoft can simply adopt a different method of naming new releases. Second, even under current practice a version with two digits to the right of the decimal point may fix significant errors, so that disclosure only of the prior version of the APIs might leave developers without the ability to invoke some needed functionality with the disclosed APIs.

D. The Disclosure Provisions—Particularly Those concerning ''Communications Protocols''—Depend On An Undefined And Thus Unenforceable Concept of ''Interoperability''

Both the API and Communications Protocol disclosure provisions define the scope of the data to be disclosed as that necessary to permit non-Microsoft products to ''interoperate'' with the Windows client OS and to ''interoperate natively'' with Microsoft server operating system products. See RPRJ §§ III(D), (E). The disclosure obligations are limited to ''the sole purpose of interoperating with a Windows Operating system. Product.'' Id.

The obligations depend on the meaning of ''interoperate,'' but the RPFJ never defines that term, and there is no non-discrimination provision attached to this obligation. That is critical because interoperability is not something that can be achieved half way. Either two software products interoperate for all functions that they must perform together, or they do not. Any impediment in any aspect of the interoperation nullifies the interoperability. The CIS seems to equate ''inteoperate'' with ''fully take advantage of,'' see CIS 36, 66 Fed. Reg. 59,468, but there is no such language in the RPFJ itself.

The Communications Protocol disclosure provision (RPFJ § III(E)), outlines a seeming ''obligation'' that is entirely undefined. Section III(E) seems to require disclosure of Communications Protocols on Windows clients that are ''used to interoperate natively * * * with a Microsoft server operating system product.'' But just as ''interoperate'' is not defined, neither does the RPFJ define ''Microsoft server operating system product.''

One of the most important aspects of the Windows 2000 Server product bundle is Microsoft's web server, IIS. In the absence of a definition of ''Microsoft server operating system product,'' however, it is unclear whether the disclosure obligation encompasses protocols used to interoperate with this and other aspects of the current server product. Cf. RPFJ § VI(U) (defining ''Windows Operating System Product'' as all software code ''distributed commercially * * * as Windows 2000 Professional'' and other named products, and ''Personal Computer versions'' of their successors).

Again, the CIS attempts to provide assurances that go beyond the terms of the proposed judgment. The CIS states (at 37, 66 Fed. Reg. 59469):

The term ''server operating system product'' includes, but is not limited to, the entire Windows 2000 Server product families and any successors. All software code that is identified as being incorporated within a Microsoft server operating system and/or is distributed with the server operating system (whether or not its installation is optional or is subject to supplemental license agreements) is encompassed by the term. For example, a number of server software products and functionality, including Internet Information Services (a ''web server'') and Active Directory (a ''directory server''), are included in the commercial distribution of most versions of Windows 2000 Server and fall within the ambit of ''server operating system product.''

That definition would be appropriate. But no corresponding language—no enforceable definition—appears in the RPFJ. E. The Narrow Scope Of The Disclosure Provisions Contrasts Sharply With The Broader Definitions In DOJ's Earlier Remedy Proposals

Before liability had been confirmed on appeal, DOJ took a far broader view of what should be disclosed. The interim remedies in the vacated judgment required disclosure of APIs, Communications Interfaces, and ''technical information'' needed to enable competing products ''to interoperate effectively with Microsoft Platform Software.'' 97 F. Supp.2d at 67 (3(b)). That disclosure requirement was backed up by a requirement, absent from the RPFJ, that Microsoft create a secure facility so that developers could work with Windows source code to ensure that their applications worked properly on the Microsoft platform. See id

The definition of ''technical information,'' moreover, helped ensure that disclosure would be complete and not subject to many different methods of manipulative narrowing. The ''technical information'' definition encompassed the following items: all information regarding the identification and means of using APIs and Communications Interfaces that competent software developers require to make their products running on any computer interoperate effectively with Microsoft Platform Software running on a Personal Computer.

Technical information includes but is not limited to reference implementations, communications protocols, file formats, data formats, syntaxes and grammars, data structure definitions and layouts, error codes, memory allocation and deallocation conventions, threading and synchronization conventions, functional specifications and descriptions, algorithms for data translation or reformatting (including compression/decompression algorithms and encryption/decryption algorithms), registry settings, and field contents.

97 F. Supp.2d at 73 (§ 7(dd)).

Indeed, DOJ's position was stronger even before liability had been imposed at all. Draft 18 from the Posner mediation imposed a disclosure obligation using this definition of ''technical information'': all information, regarding the identification and means of using APIs (or communications interfaces), that competent software developers require to make their products running on a personal computer, server, or other device interoperate satisfactorily with Windows platform software running on a personal computer. Technical information includes reference implementations, communications protocols, file formats, data formats, data structure definitions and layouts, error codes, memory allocation and deallocation conversions, threading and synchronization conventions, algorithms for data translation or reformatting (including compression/decompression algorithms and encryption/decryption algorithms), registry settings, and field contents.

The RPFJ, by contrast, contains no analogue to these precise and inclusive definitions. Instead, the RPFJ relies solely on the circular (and completely manipulable) definition of API (RPFJ § VI(A)), a similarly narrow definition of ''Communications Protocol'' (id § VI(B)), and a definition of ''Documentation'' that is wholly dependent on the API definition (id. § VI(E)).

F. The ''Security'' Exceptions in Section Ill(J) Permit Microsoft To Avoid Its Disclosure Obligations RPFJ § III(J) provides Microsoft with two additional lines of defense in the event that any competitively sensitive APIs nonetheless fall within the malleable definition of API. Section III(J)(1) severely undercuts the disclosure requirements to the extent they apply in the modem world where security protocols are critical to any communication between networked computers, particularly over the Internet. And Section III(J)(2) provides Microsoft with seemingly unfettered discretion to decide who is worthy to receive technical information necessary to make middleware function on the Internet.

Microsoft can plausibly rely on Section III(J) to decline to comply with disclosure requests based on concerns with authentication and security that it will be able to assert with respect to any program that involves communication between a PC and a server on the Internet (or even within many private networks). Authentication, security, and similar protection mechanisms are and will continue to be integral parts of the functioning of those products. See, e.g., Comment, William A. Hodkowski, The Future of Internet Security.'' How New Technologies Will Shape the Internet and Affect the Law, 13 SANTA CLARA COMPUTER 8: HIGH TECH. L.J. 217 (1997). Indeed, security and rights-protection are particularly critical to Internet-based economic activity, which encompasses much of the computing on the Internet. As a consequence, the security mechanisms are critically important to any Internet-based middleware threat to the Windows OS monopoly.

For example, digital rights management (''DRM'') has become a principal part of Windows Media Player. Allowing Microsoft to withhold data needed to permit rivals to interoperate with the DRM specifications in Windows Media Player—specifications that Microsoft is making universal by including Windows Media Player on every PC -may well end effective competition for media players within the next upgrade cycle for Windows. Similarly, any distant remaining possibility of Internet browser (or even e-mail client) competition should be squelched by the RPFJ's approval for Microsoft to withhold parts of encryption-related protocols (again, as distinct from the customer-specific keys that make use of those protocols). For another example, Secure Socket Layer (SSL) is an open standard that has been critical to the open development of a relatively secure Internet. As Microsoft implements a proprietary version of SSL—one that others will have to follow given the ubiquity of the Microsoft browser as a result of the misconduct at issue in this case—it will be able to conceal critical layers of that altered protocol from rivals, essentially ending the possibility of competition for client software for Internet computing. And by giving Microsoft a basis to conceal authentication

protocols (not merely data), the RPFJ frees Microsoft Passport from scrutiny and permits Microsoft to bind a proprietary universal password and identity utility to its monopoly operating system without hope of interoperation.

By permitting Microsoft to withhold key parts of encryption, digital rights management, authentication, and other security protocols, the RPFJ effectively allocates Web-based computing to the monopolist of the desktop. A decree could hardly try to place a clearer stamp of approval on an expansion of the scope of an illegally maintained monopoly.

1. The Exclusions for Security-Related APIs and Protocols in RPFJ(J)(1) Permit Microsoft To Hobble Disclosures That Are Critical in Internet Computing

It is no coincidence that Bill Gates has now emphasized the centrality of security concerns in Microsoft's future software offerings. See, e.g., John Markoff, Stung by Security Flaws, Microsoft Makes Software Safety a Top Goal, N.Y. TIMES, Jan. 17, 2002, at C1. That is no more than an acknowledgment of market and technical realities that have been widely known throughout the industry for years as Internet computing has taken hold. That market reality should have been sufficient to make clear that an indistinct exception of the type in RPFJ § III(J)(1) would allow Microsoft to disclose ''crippled'' versions of APIs and Communications Protocols. Microsoft's sudden dedication to security leaves no doubt that it will inject security aspects into its proprietary APIs and its proprietary, extended implementations of Communication Protocols. Under the terms of Section III(J)(1), Microsoft can easily argue that disclosure of those aspects—necessary for one machine to communicate with another—will compromise the security from any installation or group of installations. See also Stiglitz/Furman Dec. 30.

The CIS maintains that Section III(J)(l) simply protects Microsoft and its customers from disclosure of customer-specific ''keys, authorization tokens, or enforcement criteria,'' and states that the exception ''does not permit [Microsoft] to withhold any capabilities that are inherent in the Kerberos and Secure Audio Path features as they are implemented in a Windows Operating System Product.'' CIS 52, 66 Fed. Reg. 59,472. But that reading does not square with the text of the exemption. The quoted examples are specifically presented ''without limitation.'' RPFJ § III(J)(1). The RPFJ language easily permits Microsoft to contend that any release of the way, its proprietary security protocols work ''would compromise the security of a particular installation.''

Most important, Section III(J)(1) clearly permits Microsoft to withhold portions of APIs or Communications Protocols, but the examples given of keys and authorization codes are not parts of APIs or Communications Protocols. They may be part of customer-specific Documentation, rather than the Documentation used by customers, consultants, and developers to create or identify and implement particular keys, tokens, or enforcement criteria.) The APIs and Communications Protocols for security-related applications are not customer-specific, nor does their disclosure compromise security. To the contrary, the most powerful encryption and other security-related software is openly disclosed, as is the Kerberos standard, or even open source, as is the federal government's new encryption standard. See, e.g., Watch your AES: A new encryption standard is emerging, Red Herring (Dec. 1, 1999) (open source government standard). Unless RPFJ § III(J)(1) refers to a null set, however, Microsoft will have a basis to withhold some parts of Communications Protocols and APIs. The CIS states that Communications Protocols ''must be made available for third parties to license at all layers of the communications stack,'' (CIS 36–37, 66 Fed. Reg. 59,468 (emphasis added)) but the RPFJ to which Microsoft agreed—and which alone is potentially enforceable -says no such thing. To the contrary, Section III(J)(1) explicitly relieves Microsoft from the obligation to license some ''portions or layers of Communications Protocols'' (and some ''[p]ortions of APIs'')—not just client-specific data. If part of a Communications Protocol is withheld, not ''all layers of the communications stack'' are ''available * * * to license.'' And if part of a Communications Protocol is unavailable, interoperation is impossible; at certain points, the interaction between two computers will break down.

Limited withholding of APIs or Communications Protocols (rather than merely withholding customer-specific data) will render middleware non-functional, since software cannot interoperate with other software partially. Carving off some aspects of interoperability means that there is no interoperability, thwarting the premise of the disclosure provisions altogether.

The CIS also describes other limits that do not exist in the text of the RPFJ. The CIS claims that the RPFJ requires disclosure of the Communications Protocols used for the Microsoft-proprietary implementation of the Kerberos security standard—a ''polluted'' Kerberos that is the strict analogue to the ''pollute[d]'' Java that figured prominently at trial. See Microsoft III, 253 F.3d at 76–77 (quoting 22 J.A. 14,514). But Section III(J) explicitly relieves Microsoft of the obligation to disclose ''portions'' of APIs or Communications Protocols that would ''compromise the security of a particular installation or group of installations of'' security software. That is an open invitation to withhold some part of the Microsoft-proprietary variation of Kerberos.

The type of customer-specific information that the CIS claims is all that can be withheld could and should be described much more accurately and specifically in the RPFJ, not as [p]ortions of APIs or * * * portions or layers of Communications Protocols,'' but rather as ''customer-specific or installation-specific data the disclosure of which would compromise the security of a particular installation or group of installations of anti-piracy, anti-virus, software licensing, digital rights management, encryption or authentication systems, including without limitation keys, authorization tokens or enforcement criteria.'' But that is not the approach the RPFJ takes. Rather, the RPFJ makes clear that Microsoft is entitled to withhold, not merely customer- or installation- specific data, but some ''portions'' of APIs and some ''portions or layers'' of Communications Protocols. All communication of substance between desktops (or other client computers) and server computers over the Internet increasingly involves layers of security protocols, anti-virus routines, and the like. And one of Microsoft's principal current efforts is to foist its own version of digital rights management (DRM) upon providers of copyrighted content over the Internet.

When Microsoft asserts a right to withhold information, it will be difficult indeed for the Technical Committee, DO J, or the Court to exclude the possibility that particular ''portions or layers of Communications Protocols,'' or ''[p]ortions'' of the APIs that permit middleware programs to operate atop Microsoft operating systems, in fact ''compromise the security of a particular installation or group of installations.'' RPFJ § III(J)(1). Any such determination is likely to be time-consuming, and related enforcement therefore would be slow. It should be a simple matter for Microsoft to delay disclosures of this type long enough to disadvantage competitors.

2. RPFJ III(J)(2) Permits Microsoft To Refuse Effective Disclosure To A Range Of Potentially Effective Competitors

While RPFJ § III(J)(1) allows Microsoft to refuse to disclose portions of APIs, RPFJ § III(J)(2) permits Microsoft to withhold all of any ''API, Documentation, or Communications Protocol'' having to do with ''anti-piracy systems, anti-virus technologies, license enforcement mechanisms, authentication/authorization security, or third party intellectual property protection mechanisms of any Microsoft product.'' The RPFJ allows Microsoft to select to whom it will disclose this information by imposing several tests that may be based on standards apparently committed to Microsoft's sole discretion as much as is the definition of Windows Operating System Product.

Thus, RPFJ § III(J)(2)(b) permits Microsoft to evaluate whether a competitor has a ''reasonable business need'' for the desired information. What Microsoft is likely to consider a ''reasonable'' business need by a competitor may be narrow indeed. As the DC Circuit observed, Microsoft viewed its desire ''to preserve its'' monopoly ''power in the operating system market'' as a procompetitive justification for exclusionary conduct. Microsoft III, 253 F.3d at 71. No doubt Microsoft will view direct or indirect efforts to undermine its hammerlock on the OS market as unreasonable efforts to confuse consumers or impair the ''Windows experience.''

Even bona fide attempts by a monopolist to objectively evaluate a potential competitor's ''reasonable business need'' can scarcely be expected to produce consistent or foreseeable results.

Rather, that amorphous standard is likely to produce a flood of disputes—each of which will delay the competitor's receipt of technical information while Microsoft gains more time to respond (by legal or illegal means) to the competitive threat. Moreover, the ''reasonable business need'' must be for

a ''planned or shipping product.'' If the product is already ''shipping,'' it may be too late for disclosure to be helpful in the market. How fully ''planned'' a product must be raises further questions that Microsoft will be able to resolve to its own disadvantage.

In addition, Microsoft need not provide security-related APIs, protocols, or documentation to any vendor that does not ''meet[] reasonable, objective standards established by Microsoft for certifying the authenticity and viability of its business.'' RPFJ § III(J)(2)(c) (emphasis added).

That provides Microsoft with a basis for excluding almost all nascent competitors except for those associated with established, profitable companies. It would not be difficult to craft ''reasonable, objective standards'' for ''viability of [a] business'' that would exclude any Internet-focused startup, including Netscape in 1995. Indeed, the history of the software industry both before and after the dot-com bubble shows that very few software companies have had ''viable'' businesses. Certainly Section III(J)(2)(c) would give Microsoft at least a debatable basis for withholding the APIs and Communications Protocols needed to interoperate with Microsoft software over the Internet from all open source ISVs—who are more interested in constantly improving the quality of software than in obtaining licensing profits. Although open source software is widely recognized as a major threat to Microsoft's monopoly power, the business models even of the leading Linux providers might fail any number of ''reasonable, objective standards'' for ''viability.'' Indeed, Microsoft's CEO Steve Ballmer describes open source software as a ''cancer'' that threatens the viability of any software business. See Mark Boslet, Open Source: Microsoft Takes Heat, INDUSTRY STANDARD, July 30, 2001; Dave Newbart, Microsoft CEO Takes Launch Break with the Sun-Times, CHI. SUN-TIMES, June 1, 2001, at 57. For that matter, it is not entirely unreasonable to regard head-to-head competition with Microsoft in platform software as a less than viable business plan; certainly most venture capitalist and other investors hold that view. It would not be difficult for Microsoft to craft ''objective'' standards of business viability that would exclude Corel and Novell, to name two examples. Microsoft should be able to exclude many sources of potential cross-platform middleware threats through RPFJ § III(J)(2)(c) alone.

Yet RPFJ § III(J)(2) contains yet another method for screening competitors from access to technical information needed by Internet-centric middleware applications. Any ISV that clears the hurdles and receives the information nonetheless must submit its implementation of the APIs, Documentation or Communications Protocols for review by a Microsoft-approved third party (likely a captive commercial ally) ''to test for and ensure verification and compliance with Microsoft specifications for use of the API or interface, which specifications shall be related to proper operation and integrity of the systems and mechanisms identified in this paragraph.'' RPFJ § III(J)(2)(d). ''[P]roper'' no doubt will mean ''the way Microsoft does it,'' making this provision into yet another way in which Microsoft can control the pace of innovation to ensure that the market has no or limited access to products that improve upon Microsoft's offerings. This mechanism means that vendors who tried to adapt APIs to function as bridges to other platforms would have to give Microsoft the ammunition to defeat that function—if not simply disapprove it and await the slow operation, if any, of the RPFJ enforcement mechanism.

The CIS suggests that there are strict limits on Microsoft's discretionary ability to deny access to security-related aspects of Communications Protocols and APIs, CIS 53, 66 Fed. Reg. 59,473, but those limits are absent from the decree language. The CIS contends that these exceptions ''are limited to the narrowest scope of what is necessary and reasonable, and are focused on screening out individuals or firms that * * * have a history of engaging in unlawful conduct related to computer software * * *, do not have any legitimate basis for needing the information, or are using the information in a way that threatens the proper operation and integrity of the systems and mechanisms to which they relate.'' Id. Setting aside the opportunity for Microsoft to argue, as it has in other contexts, that the injection of competing software ''threatens the proper operation and integrity'' of its products, see Microsoft III, 253 F.3d at 63–64, the CIS simply does not address the broadest basis for withholding APIs and Communications Protocols under Section III(J)(2): Microsoft's ability to decide, based on criteria within its own discretion, that an ISV is not ''authentic[]'' and ''viab[le].'' RPFJ § III(J)(2). That provision could provide a basis for excluding all but a handful of other software companies.

G. RPFJ § III(1) Would Place A Judicial Imprimatur On Microsoft's Use Of Technical Information As A Lever To Extract Competitors'' Intellectual Property

The RPFJ would actually increase Microsoft's bargaining power by explicitly placing a judicial imprimatur on demands by Microsoft that recipients of APIs cross-license any intellectual property developed using the APIs. Section III(I) of the RPFJ permits Microsoft to use intellectual property licensing terms to impede whatever competitive benefits otherwise might have arisen from its disclosure obligations. Microsoft's licenses ''need be no broader than is necessary to ensure'' the licensee's ability to ''exercise the options or alternatives expressly provided'' by the RPFJ. RPFJ 111(I)(2). A welter of litigation over the breadth that is ''necessary''—and the collateral restrictions that are permissible—is certain to continue through the life of the decree.

Similarly, Microsoft should have no difficulty delaying the use of any option for which it is entitled to charge a royalty, simply by setting a ''reasonable'' royalty (RPFJ § (I)(1)) beyond what any OEM could afford to pay in that competitive, low-margin business. If OEMs have to pay Microsoft to exercise any of their icon-shuffling options—a state of affairs clearly envisioned in RPFJ § III(I)—the slim likelihood that any OEM will take advantage of those provisions will be lessened still further. Microsoft need not permit transfers or sublicenses of API rights, imposing yet another barrier to entry. Id. III(I)(3). And Microsoft could ensure, through licenses, that end-users could not make competitively significant alterations to the Microsoft-approved package.

Most important, however, the RPFJ specifically permits Microsoft to use its monopoly as a means to force access to others'' intellectual property. Microsoft can assert a right to license ''any intellectual property rights'' a competitor ''may have relating to the exercise of their options or alternatives provided by'' the RPFJ. RPFJ § III(J)(5). Thus, to take advantage of a competitive option, an ISV will need to license its product to Microsoft, and hope that Microsoft does not use that license as a means to produce a copycat program and bundle it into Windows. Many companies long since departed the software industry after entering into what they thought were limited exchanges of intellectual property with Microsoft. [16]

Although the CIS states that Microsoft could demand only any IP rights it would need to comply with its own disclosure obligations under the RPFJ, CIS 50–51, 66 Fed. Reg. 59,472, the broad ''relating to'' language does not compel that narrow reading, and may not support it at all. The vague limitations in Section III(I)(5) are unlikely to reassure ISVs that Microsoft will not use its license to analyze the ISV's IP rights well enough to design around it and bundle a copycat program into Windows or Office, as has happened many times before. This weapon should give Microsoft additional ability to prevent industry participants from taking advantage of the superficially appealing provisions of the RPFJ.

VI. BUILT-IN DELAYS EXACERBATE THE DECREE'S UNJUSTIFIABLY BRIEF DURATION

It is remarkable that the RPFJ would reward Microsoft for litigating and losing broadly on liability with a consent decree that is shorter than other such decrees, and may be the shortest ever. DOJ antitrust consent decrees now routinely last ten years.[17] Section V of the RPFJ provides for a term of only five years, however, less time even than Microsoft has engaged in the illegal conduct that was the subject of this litigation. The decree plainly should be longer than the period between the initiation of the misconduct and the imposition of relief, and at least as long as the typical

[16] See, e.g., Testimony of Mitchell Kertzman before the Sen. Jud. Comm., July 23, 1998 (detailing Sybase's difficulties in this regard); Statement of Michael Jeffress before the Sen. Jud. Comm., July 23, 1998 (after TVHost revealed its intellectual property to Microsoft in failed negotiations to sell the company, Microsoft imitated the product).

[17] As of 1998 it was the policy of the Antitrust Division that consent decrees last for at least 10 years. See ANTITRUST DIVISION MANUAL, at IV:54 (3d ed. Feb. 1998); see also V VON KALINOWSKI ET AL., ANTITRUST LAWS AND TRADE REGULATION 96.0112], at 96–4; 96.0211] at 96–10 (2d ed. 2000).

relief.[18] Microsoft has enjoyed the benefits of its misconduct for at least seven years. The RPFJ not only would allow Microsoft to retain those benefits, but would subject Microsoft to its light and uncertain obligations for no more than five years, and scarcely four and one-half years for the many obligations that are delayed.

The RPFJ further abbreviates its already brief duration, and undermines its already insubstantial requirements, by building in long delays before Microsoft must comply with its limited duties. Thus, Microsoft need not comply with the icon-related requirements until November 2002, see RPFJ § III(H)(1), although Microsoft needed only two weeks after the DC Circuit decision to offer OEMs roughly the same flexibility with icon display as the RPFJ requires, and needed no more than three additional months to implement that flexibility on Windows XP. See Microsoft Announces Greater OEM Flexibility for Windows (Microsoft press release July 11, 2001).

Similarly, Microsoft need not comply with its API disclosure requirements or the OEM flexibility provisions until November 2002, RPFJ §§ III(D), (H), and need not comply with the Communications Protocol disclosure requirements until August 2002. Id. § III(E). See also Stiglitz/Furman Dec. 30. These built-in delays cut far into the unusually brief term of the decree. The ''Timely Manner'' governing Microsoft's disclosure obligations in RPFJ §§ III(D)-(E)—after the initial delay—permits Microsoft to withhold that disclosure until a product version has been distributed to 150,000 beta testers. See RPFJ § VI(R). ''Beta testers'' in undefined. Until recently, Microsoft, like other vendors, distinguished between ''beta testers'' who agreed to provide substantial feedback to the software manufacturer, and ''beta copies'' of a program that might be distributed without such obligations or expectations. Few, if any, beta testing programs involved 150,000 beta testers under that usage. A return to the former terminology could postpone the ''Timely Manner'' until commercial release. And in any event, it should be a simple matter for Microsoft to delay distribution of any beta version to 150,000 testers, however defined.

Here again, the contrast with the interim remedies of the original decree is striking. The ''Timely Manner'' definition in that judgment required Microsoft to disclose ''APIs, Technical Information and Communications Interfaces * * * at the earliest of the time that'' those items were (1) disclosed to Microsoft's applications developers, (2) used by Microsoft's own Platform Software developers in software released by Microsoft in alpha, beta, release candidate, final or other form, (3) disclosed to any third party, or (4) within 90 days of a final release of a Windows Operating System Product, no less than 5 days after a material change is made between the most recent beta or release candidate version and the final release.

97 F. Supp.2d at 73–74 (§ 7(ff)) (emphasis added). While the vacated judgment made a strong effort to place outside developers on the same footing as Microsoft's applications developers throughout the development process, the RPFJ permits Microsoft to delay disclosure until the last minute, without any analogue to the requirement that Microsoft promptly update changes made in the final pre-release stage.

Another significant built-in delay results from the definition of ''Non-Microsoft Middleware Product'' to include only products that have one million users. RPFJ § VI(N) (ii). That definition governs the extent of the anti-retaliation provisions in RPFJ §§ III(A)(1), III(C), and III(H).

Moreover, the icon flexibility and information disclosure provisions apply only to Microsoft Middleware and Microsoft Middleware Products, each of which must have functionality similar to a Non-Microsoft Middleware Product. See RPFJ §§ VI(J)(3), VI(K)(2)(b)(ii). By restricting all of these protections to middleware products that have distributed more than one million copies, the RPFJ encourages Microsoft to crush new middleware threats at the earliest stages. That is, the RPFJ puts a premium—indeed, a judicial imprimatur—on the monopolistic exclusion of nascent threats before the innovations in those products reach a sizable mass of consumers. That flies in the face of the concerns behind the judgments of liability in this case. See Microsoft III, 253 F.3d at 54, 79.

VII. ADDITIONAL WEAKNESSES UNDERCUT THE RPFJ

A. The Anti-Retaliation Provisions Are Deeply Flawed

Although anti-retaliation provisions are clearly necessary, the provisions in the RPFJ proceed from a misguided premise that retaliation by the monopolist—abuse of monopoly power—is permitted unless squarely forbidden. The well-meaning restrictions in the RPFJ leave Microsoft with ample recourse to use its monopoly power to retaliate against those who aid competitive threats. See Stiglitz/Furman Dec. 31–32.

Most important, the anti-retaliation provisions permit Microsoft to withdraw the Windows license of any OEM (or other licensee) that does not serve Microsoft's anticompetitive bidding. The CIS (at 27, 66 Fed. Reg. 59,466) suggests that the provision of RPFJ § III(A) requiring notice and opportunity to cure a violation provides some kind of protection to OEMs. But the protection is evanescent, disappearing entirely after two notices within a license term. See RPFJ Ill(A). See also Stiglitz/Furman Dec. 31–32.

Such notices will become routine, quickly and completely nullifying this provision. In the rough-and-tumble of everyday business, parties frequently diverge in minor respects from the terms of their agreements. The CIS admits that ''Windows license royalties and terms are inherently complex.'' CIS 28, 66 Fed. Reg. 59,466. Given that complexity, it would be surprising if most OEMs did not transgress some term of their Windows licensing agreements every year or so, if not more often. Such transgressions would provide ample basis for Microsoft to retaliate without fear of interference from the RPFJ.

There is no limit on what Microsoft can invoke as a reason for termination, that is, there is no requirement that terminations be for cause, much less for a material breach of the license agreement. Indeed, the sudden termination that Microsoft may impose after two notices—even notices of purported violations that were promptly and completely cured—need not even be based on something the OEM could cure.

The anti-retaliation provisions for software and hardware vendors contain another weakness. Section III(F)(1)(a) forbids retaliation against hardware and software vendors who support software that competes with Microsoft Platform Software or that runs on other platforms. But that provision therefore permits Microsoft to use its Windows monopoly to crush middleware vendors if Microsoft does not yet have competing middleware (see RPFJ §§ VI(K)-(L)) and whose middleware applications are used on the Windows platform—where any middleware would have to start in order to be a practical bridge to another platform.

Moreover, when prohibiting a specific type of retaliation would also help undermine the applications barrier to entry, the RPFJ hews to a general approach rather than focusing on precise adjudicated conduct. For example, Microsoft threatened to discontinue its port of Microsoft Office for the Macintosh unless Apple ceased supporting Netscape Navigator. See Microsoft III, 253 F.3d at 73–74. Yet the RPFJ does not require Microsoft to continue to offer Mac Office (much less to keep the port current)—an expedient that would take away Microsoft's weapon rather than merely admonishing it to behave well, and would tend to undermine the applications barrier to entry as well.

B. Microsoft Can Evade The Price Discrimination Restrictions

The uniform pricing provisions in RPFJ § III(B) have too narrow a reach to provide significant limits on Microsoft's ability to engage in price discrimination in order to force OEMs to eschew non-Microsoft products that may threaten Microsoft's OS monopoly. Microsoft's well-known market position in other products permits easy evasion of these limits. For example, nothing prevents Microsoft from discriminating in the pricing of its monopoly suite of desktop productivity applications, Microsoft Office, to which every OEM of any size needs access. Moreover, the leading PC OEMs all build server computers using Intel-based hardware, and increasingly rely on revenue from servers to make up for the exceptionally low margins on desktop PCs. To continue in the Intel-based server business, PC OEMs must license Microsoft's server operating systems, which are dominant on the Intel-based platform. The RPFJ places no limits on Microsoft's pricing of server operating systems, providing another outlet for the nullification of RPFJ § III(B).

Even on their own terms, however, the RPFJ pricing provisions contain a substantial loophole. Microsoft can reward an OEM for an ''absolute level * * * of promotion'' of Microsoft products. RPFJ § III(A). That

[18] If Microsoft actually and convincingly lost its monopoly before the expiration of a decree of appropriate length, it could, of course, move for modification or termination of the decree under Rufo v. Inmates of Suffolk County Jail, 502 U.S. 367 (1992).

provides a means for Microsoft to distinguish between OEMs who make sure that Microsoft software dominates their offerings, and OEMs who either promote competing software or simply do not interfere with consumers'' choices.

C. Microsoft Can Enforce De Facto Exclusivity

Despite a superficial prohibition, Sections III(F)(2) and III(G) permit Microsoft to impose practical, effective exclusivity obligations on ISVs and others who need access to Windows to develop their products. Microsoft need do no more than recast its agreements with ISVs as contracts to ''use, distribute, or promote * * * Microsoft software'' or ''to develop software for, or in conjunction with, Microsoft,'' RPFJ § III(F)(2), or as a ''joint venture,'' joint development * * * arrangement'' or ''joint services arrangement.'' Id. § III(G). New ''joint development agreements'' or ''joint services arrangements'' likely will supersede the current licenses for use by ISVs of Microsoft software developments tools and perhaps also the current arrangements for preferential access under MSDN. At best, a decree court would have to undertake a full antitrust analysis of whether the joint venture was ''bona fide.'' Id. § III(G). To nullify RPFJ § III(F)(2), Microsoft could simply change its development tools agreements to require use of Microsoft software -which literally would be ''a bona fide contractual obligation * * * to use * * * Microsoft software.'' Since any ISV that wants its software to run on Windows almost certainly would need to use Microsoft's development tools, the anti-exclusivity provision, like so many others in the RPFJ, would have no practical effect.

DOJ has defended this provision as necessary to permit legitimate ''procompetitive collaborations.'' CIS 44, 66 Fed. Reg. 59,470. But the broad terms of the RPFJ itself provide little basis for hope that the objects of joint ventures permitting exclusivity will not include a variety of ''new'' products that amount to little more than routine alterations to Windows and other Microsoft products in conjunction with requests from other industry participants. It is not uncommon for an ISV to ask for a new API, or for an IHV to ask for some other specification in Windows. These exercises soon may become objects of ''joint ventures'' or ''joint development agreements'' under RPFJ § III(G).

RPFJ § III(G)(1) undercuts its superficial prohibition on contracts that would require participants at different levels of the market to install or promote Microsoft Platform Software to a ''fixed percentage'' of those participants'' own customers. Section III(G)(1) permits Microsoft to impose such contracts so long as it ''in good faith obtains a representation that it is commercially practicable for the entity to provide equal or greater distribution, promotion, use or support for software that competes with Microsoft Platform Software.'' Such representations should be easy to come by, so long as Microsoft pays enough. There is nothing to require a single party making such a representation actually to carry out the parallel distribution that it told Microsoft was ''commercially practicable.'' And it should be easy enough for Microsoft, through a wink and a nod, to ensure that any such representations were not accompanied by efforts to prove that commercial practicability to Microsoft's detriment.

VIII. THE RPFJ'S ENFORCEMENT MECHANISMS ARE FUNDAMENTALLY INADEQUATE.

As we have shown above, the RPFJ fails adequately to prevent Microsoft from engaging in illegal and anticompetitive practices, and allows it to continue the patterns of behavior that led to this litigation in the first place. The RPFJ suffers from an important secondary flaw, however: the enforcement mechanisms contained in Section IV are fundamentally inadequate. The RPFJ commits much of the practical enforcement responsibility to a ''Technical Committee,'' RPFJ IV(B), that would monitor ''enforcement of and compliance with'' the RPFJ. Id. IV(B)(1). The Technical Committee is likely to impede enforcement rather than aid it. First, Microsoft—the antitrust violator—could exert inappropriate control over the membership of the Technical Committee. Rather than creating a special master or an independent review committee to monitor compliance with the consent decree, the RPFJ allows Microsoft to have an equal voice with the plaintiffs in choosing the members of the Technical Committee; indeed, Microsoft may choose one of the three members outright. Id. IV(B)(3). Although appointing a special master with real (though reviewable) power might make sense as a matter of judicial administration, allowing Microsoft to choose its own monitor makes no sense at all. The composition of the Technical Committee suffers from a second defect. The RPFJ provides that ''[t]he Technical Committee members shall be experts in software design and programming.'' RPFJ IV(B)(2) (emphasis added). The interpretation of the RPFJ is largely a legal matter, however, dependent on adequate knowledge of the antitrust Section after section of the RPFJ is extraordinarily vague.[19] Experts in software design simply will not have any basis adequately to review complaints that Microsoft's behavior fails to comply with the RPFJ. However, that is the entire purpose of the Technical Committee.

Not only is the selection and composition of the Technical Committee problematic; the RPFJ's restrictions on how the Technical Committee can go about its business are equally inadequate. For example, it is likely that all third-party allegations of misconduct by Microsoft will be reviewed by the Technical Committee.[20] But the Technical Committee lacks any real power, and operates almost entirely in secrecy. Even if the Technical Committee finds Microsoft to be violating the RPFJ, its sole recourse is to ''advise Microsoft and the Plaintiffs of its conclusion and its proposal for cure.'' Id. IV(D)(4)(c). If DOJ or the settling State plaintiffs proceed with a complaint, none of the ''work product, findings or recommendations by the Technical Committee may be admitted in any enforcement proceeding before the Court for any purpose, and no member of the Technical Committee shall testify by deposition, in court or before any other tribunal regarding any matter related to [the RPFJ].'' Id. IV(D)(4)(d). Enforcement would have to start over from scratch.

In effect, the Technical Committee's investigation is simply a waste of time. Even were the plaintiffs to decide, based on a Technical Committee report, that Microsoft had violated the RPFJ, the plaintiffs would need independently to investigate that violation under Section IV(A)(2). Indeed, the Technical Committee's reports to the plaintiffs will be secret. See RPFJ IV(B)(8)(e), (9). Ultimately, the Technical Committee simply injects delay into the process. But delay is indisputably in Microsoft's interest; Microsoft's monopolies bring it $1 billion each month in free cash flow, see Rebecca Buckman, Microsoft Has the Cash, and Holders Suggest a Dividend, WALL ST. J., Jan 18, 2002, at A3. Microsoft not only can afford to contest enforcement vigorously, but would not have to postpone enforcement for long before the RPFJ expires.

Finally, the ''crown jewel'' provision in the RPFJ is grossly inadequate. If at any point the court were to find that Microsoft had ''engaged in a pattern of willful and systematic violations,'' RPFJ V(B) (emphasis added), the RPFJ provides only one remedy for plaintiffs or the court: to extend the inadequate, and already overly-short, consent decree by ''up to two years.'' But that is no deterrent. Willful and systematic violations should result in divestiture that terminates the illegally maintained monopoly once and for all. See Microsoft III, 253 F.3d at 103; United Shoe, 391 U.S. at 250. Slightly prolonging a failed decree makes no sense at all.

CONCLUSION

The Revised Proposed Final Judgment should be rejected as contrary to the public interest.

Respectfully submitted.

Donald M. Falk
Mayer, Brown & Platt
555 College Avenue
Palo Alto, California 94306
(650) 331–2030
(650) 331–2060 facsimile
David M. Gossett
Mayer, Brown & Platt

[19] For example, as we discussed above the RPFJ relies heavily on a ''reasonableness'' standard of conduct that simply reproduces a full analysis under the antitrust laws. Antitrust remedies, like other injunctive decrees, are supposed to be amenable to swift and sure enforcement, according to standards that give warning of what is forbidden and what is permitted both to the wrongdoer and to its potential victims. But again and again, the RPFJ would require both the Technical Committee and eventually the decree court to determine whether Microsoft's conduct was ''reasonable.''

[20] While third parties have the right to raise complaints with the Internal Compliance Officer, see RPFJ IV(C)(3)(g), the RPFJ gives them no incentive to do so; such complaints would merely allow a proven antitrust violator itself to determine whether it has violated the RPFJ or again violated the antitrust laws. Although the RPFJ also allows third parties to submit complaints directly to the plaintiffs, see id. IV(D)(1), the plaintiffs can thereafter at their sole discretion refer any such complaints to the Technical Committee, id. IV(D)(4)(a), or to the Internal Compliance Officer, id. IV(D)(3)(a).

1909 K Street, NW
Washington, DC 20006
(202) 263–3000
Edward J. Black
Jason M. Mahler
Computer and Communications
Industry Association
666 11th Street NW Washington, DC 20001
(202) 783–0070
Dated: January 28, 2002

MTC–00030611

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA, Plaintiff, v. Civil Action No. 98–1232 (CKK)
MICROSOFT CORPORATION, Defendant.

SIWTE OF NEW YORK, et al., Plaintiffs, v. Civil Action No. 98–1233 (CKK)
MICROSOFT CORPORATION, Defendant.

DECLARATION OF EDWARD ROEDER

Edward Roeder declares under penalty of perjury as follows:

I. INTRODUCTION

1. I am a Washington journalist, author, lecturer, and editor, expert on the U.S. Congress, elections and efforts to influence the U.S. government. My byline has appeared in most major U.S. newspapers, many top magazines, and on all major wires and networks. I have written, edited, produced and reported on money in politics, Congressional ethics and the American political economy for more than three decades. My experience includes work as a Senate subcommittee counsel, House select committee chief investigator, United Press International editor, publisher, White House speechwriter, government aide at level GS-15, freelance reporter and publisher.

I founded Sunshine Press Services, Inc., a Washington news service and publishing house specializing in ''Casting Light on Money and Politics.'' Sunshine has developed References to Use, Not Just Peruse TM, computer-based reference works on U.S. politics. As National Political/Finance Editor for United Press International, I produced the nation's first weekly state-by-state computer-generated reports on federal election financing.

In 1974, I became the first freelance correspondent fully accredited to U.S. House & Senate Press Galleries. As a freelance print and broadcast reporter, I specialized in covering elections and election financing. In Roeder v. FEC, I successfully sued Federal Election Commission under the federal Freedom of Information Act, forcing a reduction in fees for records and release of computerized data.

My experience includes lecturing about covering influences on government at the graduate schools of journalism at Columbia, Northwestern (Medill), American, Maryland and other universities, and at the Hastings Center, the Heritage Foundation, and many other forums, and testifying before U.S. House and Senate committees. I also taught a public affairs course, Shadow Government in the Sunshine State, for three terms at Florida State University. I have appeared on ABC's Nightline, the CBS Evening News, World News Tonight (ABC), NBC Nightly News, All Things Considered (NPR), John McLaughlin, and many other broadcast outlets. My reference publications include PACs Americana, the 1,150-page authoritative reference on political action committees and their interests, Congress On Disk TM, the pioneer diskette publication on politics, PAC-Track TM, covering all transactions by political action committees and party committees, FatCat-Track TM, covering ''soft money'' and all contributions of $200-and-up from individuals to any federal party, campaign or PAC, and Ready Money Reports TM, comparing relative financial standings of each federal campaign. A partial list of news clients is attached as Appendix B.

2. I was commissioned by the Computer & Communications Industry Association to conduct a review of publicly available documents, news reports, and commentary regarding Microsoft's lobbying and political contributions since the United States Department of Justice and 19 States filed suit against Microsoft in 1998.[1]

3. My review of the available documents has led me to conclude that over the past five years Microsoft has engaged in a ''pattern and practice'' of political influence peddling in many ways unprecedented in modem political history.[2] What makes Microsoft's lobbying efforts so unique is not necessarily the size (i.e. level of political contributions) but the scope of its efforts and the speed at which Microsoft went from having almost no political presence in Washington DC to having one of the largest and most sophisticated political operations in history.

4. By ''scope'' I am referring to the breadth of Microsoft's efforts. Microsoft has not merely established one of the largest Political Action Committees, or leapt to the top of the corporate contributor list in ''soft money,'' unregulated corporate contributions. Over the past five years Microsoft has also assembled a large lobbying office and retained dozens of high-powered consultants; Microsoft has created numerous ''front'' groups and has contributed heavily to a variety of think tanks and other organizations willing to espouse Microsoft's view of antitrust policy and this case; and Microsoft has created a variety of grassroots capabilities that appear to be directed at state-level government.

5. Two key factors indicate that Microsoft's lobbying efforts were designed and directed to try to minimize the impact of its lawsuit and try to achieve a result in the political process that it is apparent it could not achieve in the legal process. First, Microsoft's efforts are new. Their onset coincides with the time the government sued Microsoft and they have continued and escalated ever since. Second, Microsoft's efforts are completely out of proportion to the rest of the high-technology industry. There is not one other example of a software, computer hardware, or Internet firm that comes anywhere near Microsoft's level of campaign contributions.

6. I am not a lawyer, an expert on antitrust or an expert on the Tunney Act. My substantive views of of the Proposed Final Judgment are based primarily on the analysis of Nobel economist Joseph Stiglitz, whose declaration also supports the CCIA submission.

7. The Tunney Act was enacted after the ITT scandal during the Watergate affair. As

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[1] I am aware that Microsoft has undertaken an effort to use the Court discovery process to build a political case against its competitors. The relevancy of Microsoft's strategy will have to be determined by the Court since Microsoft—and not its competitors—have been found to be liable under the antitrust laws. I took input and advice from a broad range of sources in conducting this research, including CCIA and its members. This research is nonetheless based on the extraordinary public record of Microsoft's political activities during the timeframe of this case. I have also undertaken extensive original review of the records of the Federal Election Commission regarding election finance. These records covering all election cycles since 1970–80 have been available in computerized format since the court-ordered settlement of Roeder v. FEC, a Freedom of Information lawsuit I filed in this very courthouse two decades ago.

[2] ''Microsoft Targets Funding for Antitrust Office.'' Dan Morgan and Juliet Eilperin. Washington Post October 15, 1999. ''Pro-Microsoft lobbying to limit antitrust funding irks top lawmakers.'' The Wall Street Journal October 15, 1999. ''Microsoft Paid For Ads Against DoJ Case.'' Madeleine Acey. TechWeb September 20, 1999. ''Microsoft Paid For Ads Backing Its Trial Position.'' David Bank. The Wall Street Journal September 20, 1999. ''Microsoft Paid For Ads Backing It In Trial.'' Seattle Times September 19, 1999. ''Pro-Microsoft Ads Were Funded by Software Giant.'' Greg Miller. Los Angeles Times September 18, 1999. ''Microsoft Paid for Ads About Trial.'' Associated Press September 18, 1999. ''Microsoft Covered Cost of Ads Backing It in Antitrust Suit.'' Joel Brinkley. New York Times September 18, 1999. ''Rivals fear Microsoft will cut a deal.'' John Hendren. The Seattle Times June 21, 2001. ''Bush's Warning: Don't Assume Favors Are Due.'' Gerald F. Seib The Wall Street Journal January 17, 2001. ''Bounty Payments are offered for pro-Microsoft letters and calls.'' The Wall Street Journal October 20, 2000. ''Microsoft is Source of 'Soft Money'' Funds Behind Ads in Michigan's Senate Race.'' John R. Wilke. The Wall Street Journal October 16, 2000. ''Microsoft leans creatively on levers of political power as breakup decision looms, 'stealth'' lobbying efforts aim for survival.'' Jim Drinkard and Owen Ulmann. USA Today May 30, 2000. ''Microsoft's All-Out Counterattack.'' Dan Carney, Amy Borrus and Jay Greene. BusinessWeek May 15, 2000. ''Aggressiveness: It's Part of Their DNA.'' Jay Greene, Peter Burrows and Jim Kerstetter. BusinessWeek May 15, 2000. ''The Unseemly Campaign of Microsoft.'' Mike France. Business Week April 24, 2000. ''Microsoft's Lobbying Abuses.'' Editorial. New York Times November 1, 1999 ''Awaiting Verdict, Microsoft Starts Lobbying Campaign.'' Joel Brinkley. New York Times November 1, 1999. ''Microsoft Seeks Help Of Holders.'' John R. Wilke. The Wall Street Journal November 1, 1999. ''Microsoft's Bad Lobbying.'' Editorial. Washington Post October 24, 1999. ''Microsoft Attempt To Cut Justice Funding Draws Fire.'' David Lawsky. Reuters October 17, 1999. ''Microsoft Targets Funding for Antitrust Office.'' Dan Morgan and Juliet Eilperin. Washington Post October 15, 1999. ''Pro-Microsoft lobbying to limit antitrust funding irks top lawmakers.'' The Wall Street Journal October 15, 1999. ''Microsoft Paid For Ads Against DoJ Case.'' Madeleine Acey. TechWeb September 20, 1999. ''Microsoft Paid For Ads Backing Its Trial Position.'' David Bank. The Wall Street Journal September 20, 1999. ''Microsoft Paid For Ads Backing It In Trial.'' Seattle Times September 19, 1999. ''Pro-Microsoft Ads Were Funded by Software Giant.'' Greg Miller. Los Angeles Times September 18, 1999. ''Microsoft Paid for Ads About Trial.'' Associated Press September 18, 1999. ''Microsoft Covered Cost of Ads Backing It in Antitrust Suit.'' Joel Brinkley. New York Times September 18, 1999.

the court is aware, Watergate spurred a number of political reforms requiring ''sunshine'' on the political activities of special interests, in particular. But the Tunney Act was also enacted during a different political era, when political influence peddling was far less sophisticated than it has become after a quarter-century of efforts to circumvent the ''reforms'' of the 1970s. By necessity, political influence peddling is no longer necessarily marked by a single ''transaction'' or a single ''meeting,'' or even an overt ''quid pro quo.'' In fact, one of the effects of the modern reforms has been to legalize many activities—especially the transfer of funds from corporate to political coffers—that had long been illegal under laws in effect since 1907 or 1934. Lobbying today is marked by incrementalism, where there may not be any single meeting, or any single contribution, or any single agreement. Rather, over time, what may develop is an ''understanding'' of the respective parties'' interests, objectives, and desired outcomes. Instead of corruptly influencing politicians to buy a discreet government decision, the money exerts far broader influence over appointments, policy frameworks or positions, and ultimately, decisions. Much of it may be legal, but it's far more corrupting than simple bribery.

The simple matter of paying off a corrupt politician to obtain a favorable government decision is certainly offensive and unfair to the voters and those who are disadvantaged by the decision. Yet such petty or grand corruption, if isolated, does not seriously threaten the American system. What Microsoft has accomplished over the past half decade, however, presents a far darker prospect. By pouring money into America's institutions of political pluralism, rewarding those organizations and individuals that do its bidding and denying or limiting funding to its opponents, Microsoft has in some ways corrupted American political discourse itself.

Newspapers that have run an editorial or opinion article sympathetic to a Microsoft position, reporters who have interviewed a professor, politician, or pundit about this antitrust action, and anyone who has hosted or observed public discourse on the subject must now wonder: Were the views expressed independent and sincere, or were they purchased by an unseen hand, smothering the American marketplace of ideas?

As is detailed below, Microsoft's efforts to subvert democratic institutions such as political campaigns and debates, party organizations, news outlets, think tanks and government offices have been so vast as to be a new phenomenon, unenvisioned and unaddressed by existing political mechanisms intended to check the influence of special interests. Limited campaign contributions can serve the purpose of encouraging, facilitating, extending and opening political discussion. But political money in such vast amounts is a substitute for politics, not a means of undertaking political action. While the modem-day political pressure brought to bear by Microsoft in the last decade may not be precisely the same as that undertaken by ITT in the 70%, it is no less objectionable to the Court's charge of acting on behalf of the ''public interest.''

8. Based on my review of the public record and the declaration provided by Dr. Stiglitz, it is apparent that the Department of Justice undertook a major ''change in policy'' at a critical moment this past fall. My belief-again based largely on Dr. Stiglitz'' analysis and substantiated by a wide array of antitrust experts and scholars—is that the Proposed Final Judgment cannot be reconciled with the government's extensive court victory. The public record suggests a Microsoft strategy that appears to defeats in the legal process, but which focuses on winning an acceptable outcome through the political process. It appears to be working. Indeed, if it weren't working, such vast expenditures might give rise to a shareholder suit for breach of fiduciary duty. If Microsoft's money has had the desired effect of inducing the U.S. government to throw in the towel on the biggest antitrust suit in history, such a suit could be easily defended. But to argue that Microsoft had no such intent is tantamount to suggesting that its corporate spending it in the control of squandering fools.

9. I have also reviewed Microsoft's lobbying disclosures filed before the court as part of the Tunney Act. Again, while I am not a lawyer, my review of public documents, press reports and the plain language of the statute leads me to believe that disclosures made to the court can not possibly be reconciled with Microsoft's lobbying activities surrounding both this case and this settlement.

10. Various press reports indicate that Microsoft is trying to convince the court and the public that the litigating states have been ''put up to this'' (i.e. continuing to litigate through the remedy phase) by Microsoft's competitors, and therefore cannot be acting in the public interest. My review of public documents suggests this theory is backwards and should be particularly alarming to the Court. The far more likely scenario, into which the Court must inquire, is whether the Department of Justice has executed Administration policy in response to the unprecedented campaign to influence the new Administration's antitrust policy generally, and as antitrust policy applies to the high-technology sector and Microsoft, in particular.

11. In fact, with the benefit of hindsight, various Justice Department actions make perfect sense in the context of my research. The Department went to great lengths to create the appearance they were going to be ''tough'' with Microsoft, beginning with enlisting President Bush's renowned litigator, Phillip Beck. What actually occurred, however, is they systematically appear to have given away their hard-fought court victory. First, the Department unilaterally abandoned its pursuit of structural relief, and informed the court it would not seek a review of the Sherman Act Section 1 tying claim on remand. Then the Department suggested it would base its remedy on the interim conduct remedies ordered by Judge Jackson. Then the Department began speaking of the extensive litigation risk involved in pursuing a remedy based on the need for immediate relief. Finally, the Department—outside of public scrutiny—emerges with the Proposed Final Judgment, which based on Dr. Stiglitz'' analysis appears to be woefully inadequate.

12. I declare to the court that where ''there is smoke there is typically fire.'' Even if the ''fire'' in the context of modem day political influence peddling is very subtle, it nonetheless does not serve the public interest. My view is that Microsoft's political campaign has been so extensive the court should take immediate notice. In modem political influence-peddling and purchasing, Microsoft has set a new bar. South Korea's spreading cash throughout Washington in the 1970s Tongsun Park scandal paled in comparison.

13. During the course of my research I was struck by the similarities between Microsoft and the current scandal involving Enron Corporation. While Enron, of course, is in an entirely different business, it seems the core issue—from a public disclosure perspective—is its campaign contributions and its ability to influence the nation's energy policy. Microsoft's campaign contributions significantly surpassed those of Enron; Microsoft was a defendant in a major governmental lawsuit; and it appears Microsoft may have successfully influenced the Administration's antitrust policy, with major implications for legal antitrust precedent.

14. My recommendation to the court is to undertake an immediate review of Microsoft's lobbying activities surrounding this settlement, with particular attention to meetings with the Justice Department or the White House by Microsoft or its agents. Included in this review should also be contacts made on Microsoft's behalf to the Justice Department or the White House by Members of Congress, their official staff, and campaign staff. The court should also interview Department of Justice staff who do not operate within the sphere of political appointees. And the court should interview the political appointees of the Attorney General and their staff. Moreover, the court should review any contacts or communications between the Republican National Committee, the National Republican Senatorial Committee, the Republican Congressional Campaign Committee, and the White House or the Justice Department. Lastly, the court should review any contacts or communications between Microsoft and the settling states. Anything less would clearly not vindicate the public interest.

II. REVIEW OF PUBLIC RECORD

15. Since May 1998, Microsoft has fought strenuously in the courtroom to defend its ''freedom to innovate'' and to continue with business as usual. In fact, plugging in ''Microsoft + trial'' into the Google search engine produces more than 697,000 article hits. When ''Microsoft + politics'' is entered into the search engine, Google produced nearly 448,000 articles and links. But as hard as it fought inside the courtroom, Microsoft fought far harder—often secretly—outside the courtroom to influence the outcome of the trial. In a campaign unprecedented in its size, scope, and cost, Microsoft used campaign contributions, phony front groups, intensive lobbying, biased polling, and other creative, if not possibly unethical, pressure and public relations tactics to escape from the trial with its monopoly intact. According to media accounts, experts, and my own research,

Microsoft spent tens of millions of dollars to attempt to create an aura outside the courtroom of what it could not prove inside—innocence. According to Business Week Magazine: ''Even seasoned Washington hands say they have never seen anything quite as flamboyant as the Microsoft effort.'' [3]

16. In late 2001, when the Department of Justice and a group of state Attorneys General agreed to the currently proposed settlement, it appeared as if Microsoft's efforts were successful. Fortunately, two obstacles stand in the way of Microsoft and the continued monopolization of the software industry: the remaining state Attorneys General who are continuing to litigate for a more effective remedy and the Tunney Act, which—among other things—requires Microsoft to divulge all of its dealings with the Administration and Congress in conjunction with the antitrust trial.

A. Campaign Contributions

17. In 1995, before the United States Department of Justice and state Attorneys General from 19 states and the District of Columbia brought an antitrust case against it, Microsoft had virtually no presence in Washington, DC The company had only one lobbyist working out of a Chevy Chase, Maryland sales office and had contributed less than $50,000 in the previous election cycle.[4] Its lobbyist, Jack Krumholtz, had no secretary and its PAC was financed by only $16,000. In those days, the Microsoft lobbying operation was affectionately referred to in press reports as ''Jack and his Jeep.''

18. However, since the beginning of the antitrust case against Microsoft, the company has become a major political contributor and was the fifth largest during the 2000 election cycle,[5] alongside the giants of the tobacco, telecommunications, pharmaceuticals and insurance industries. Microsoft's political contributions to elected leaders in a position to help the software giant in this election cycle when the trial was at its peak, was greater than all previous, cumulative campaign contributions. In the history of American PACs, only three companies that have raised at least $50K in one election cycle have increased receipts by 500% in the next. In 1984–86, Drexel Burnham Lambert, the corrupt and now-defunct securities brokerage, increased its receipts from just under $67,000 to more than $446,000, a 567% jump. In that same cycle, AT&T, facing antitrust divestiture, increased its PAC receipts by 745%, from $215,000 to $1.8 million.

In the history of corporate PACs, only 68 have increased their spending by half in one election cycle after reaching a level of a quarter of a million dollars. Only 15 have doubled their spending in one election cycle after reaching that level. Only one—Microsoft—has approached tripling its spending after reaching that threshold. Microsoft increased its spending almost fivefold, from $267,000 to more than $1.2 million, between the 1997–98 and 1999–2000 election cycles. (Table 5.)

20. Every year, Microsoft tops itself. The company's political giving in the 2000 cycle—the time leading up to its day of judgment in federal court—was again more than it contributed in all previous cycles combined. Campaign money to candidates and political parties in just one state was greater than Microsoft's contributions from 1990 through 1996 to every state and federal candidate combined. (Note that the government first levied antitrust charges against Microsoft in 1995.)

Except for Microsoft, no corporate PAC sponsor in American history has increased its PAC receipts by an order of magnitude, starting from a base of $50,000 or more. Since 1986, the only such firm that has increased its PAC receipts by as much as 500% in one election cycle is Microsoft. Receipts for Microsoft's PAC rose a record-setting 903%, from $59,790 in 1995–96 to just under $600,000 in 1997–98. (Table 1.)

Microsoft followed this by another jump of 165% in 1999–2000, to $1.59 million. (Table 2.) In the history of corporate PACs, only 15 have had as much as a 300% rise in receipts after achieving a base of $50,000. (That requires rising from at least $50,000 to at least $200,000.) None has ever followed such a rise with another three-digit percentage increase in receipts, except Microsoft. (That would require a subsequent rise to at least $400,000.)

21. Between 1995 and 2000, Microsoft donated more than $3.5 million to federal candidates and to the national parties, about two-thirds of which was contributed during the 2000 election cycle alone.[6] Including company and employee donations to political parties, candidates and PACs in the 2000 election cycle, Microsoft's giving (that of the company, its PAC and its employees) amounted to more than $6.1 million, far more than has been previously reported.[7] Nearly $1 million came in the 40 days immediately before the November 7th election. As most political operatives know, these late contributions often are made by donors who don't want their participation known until after the election, when financial reports for the final days of a campaign are due, and public and news media attention are no longer focused upon the election. The effect of delaying contributions until very near the election is to thwart efforts by the news media and the political opposition to make disclosures meaningful to voters before they vote.

i. Federal Contributions

(a) ''Soft'' Money

22. Comprising the majority of Microsoft's campaign contributions was soft money.[8] Like their overall presence in Washington, Microsoft's soft money donations grew substantially since the beginning of the antitrust trial. In fact, in the seven days preceding Judge Thomas Penfield Jackson's ruling against Microsoft, the company donated more in soft money to the national political parties than it gave to federal candidates and political parties between 1989 and 1996.

23. During the 1999–2000 election cycle, Microsoft and its executives accounted for some $2,298,551 in ''soft money'' contributions, according to FEC records. For context, consider that this was two-thirds more than the $1,546,055 in soft money contributed by the now-bankrupt Enron and its executives during the same period.

As one business commentator put it: ''...there's something quite disturbing about watching the world's richest man trying to buy his way out of trouble with Uncle Sam... Gates's actions undermine the legal system itself.''[9]

(b) Political Action Committee (PAC) Money

24. Microsoft's PAC donations also grew substantially in the years since the beginning of the antitrust trial. In 1998, the company made a concerted effort to increase the size of its PAC. Within a matter of days, the company grew its PAC from $31,000 to $326,000.[10] Employees contributed $1.6 million to Microsoft's PAC for the 2000 election cycle which allowed the PAC to contribute more than $1.2 million.

The PAC began the 2002 election cycle with an impressive $772,000 cash-on-hand—more than any other American corporate PAC. Microsoft's unprecedented rise as a political player took its PAC from just under $60,000 in 199596 receipts to just under $1.6 million in 1999–2000. In the history of corporate PACs, only two have had a rise of more than 1,000% in receipts over four years (two election cycles), after attaining $50,000. Only one, Microsoft, has had an increase of more than 2,000%. From 1995–96 through 1999–2000, Microsoft's PAC increased in size by more than 2,500%. (Table 4.)

(c) Party Breakdown

25. While Microsoft has donated to both national political parties, the company has tended to favor Republicans, who have been more vocal in their defense of the company. Between 1995 and 1998, 72% of Microsoft's contributions went to Republicans, while the GOP received only 55% of the company's donations during the 2000 election cycle.[11] Republicans received a total of $3.2 million, about half of which—$1.69 million—went to the national Republican Party.

26. Yet, when analyzing Microsoft's campaign contributions by donating entity, some stark disparities emerge. Virtually all of the money donated by individual Microsoft employees ($222,750) benefited Democratic 527s, groups that raise and spend money independent of political campaigns During this same period Microsoft employees gave $15,000 to Republican affiliated 527s. Democratic PACs also benefited from Microsoft's employees largesse, receiving $222,100 compared to just $42,875 for Republican PACs.

27. But Republicans enjoyed an edge in every other category; the majority of

[3] BusinessWeek, May 15, 2000, Carney

[4] ''The Microsoft Playbook'' Common Cause

[5] San Francisco Chronicle, July 1,2001, Wildermuth

[6] Common Cause

[7] Independent analysis of giving to elective office candidates and political parties and PACs federally and in all 50 states.

[8] ''Soft'' money is the term generally applied to unregulated, unlimited corporate and individual contributions that can not go to candidates but typically goes to political parties in support of party ''efforts.''

[9] BusinessWeek, April 24, 2000, France

[10] ibid.

[11] ibid.

donations to leadership PACs, state parties and candidates went to the Republican Party. The following table illustrates the disparity.

	Republican	Democrat
Leadership PACs	$162,000	$41,500
State Parties	$255,025	$38,887
Candidates	$1,053,792	$818,951

(ii) State Contributions

28. Along with the Department of Justice, 19 states and the District of Columbia initially prosecuted Microsoft. Naturally, then, Microsoft concentrated a good deal of its campaign contributions on state races.

29. Candidates and political parties in all 50 states received contributions from Microsoft, but none more so than the company's home state of Washington, which received $830,478. Republicans received $359,000 while $458,000 went to Democrats. Nearly all of the $100,000 edge for the Democrats came from contributions to the State Democratic Party, which totaled $85,387.

30. One of the original states participating in the suit was South Carolina, whose attorney general, Charles Condon, was facing re-election in 1998. Shortly before the election, Microsoft contributed $25,000 to the South Carolina Republican Party. According to the Chairman of the South Carolina Republican Party this was the largest unsolicited donation ever received. Three weeks after he won,

Attorney General Condon withdrew from the antitrust case. Two years ago, Condon solicited and received a $3,500 donation from Microsoft.[12]

31. In California, a state represented by Attorney General Bill Lockyer, Microsoft contributed $25,000 to the 1998 election campaign for challenger Dave Stirling, a Republican; a contribution made nine days before election day. The company contributed an additional $10,000 to gubernatorial democratic candidate Gray Davis, whose opponent was among the original 19 state attorneys general to bring the antitrust suit against Microsoft.

32. Within weeks of the 2000 election, Microsoft CEO Steve Ballmer made late contributions of $50,000 each to two state Republican Parties, Michigan and Washington, where Microsoft found its defenders under fire. Then U.S. Senator Spencer Abraham, a Michigan Republican who is now Secretary of Energy, had been an outspoken supporter of Microsoft. Former U.S. Senator Slade Gorton, a Washington state Republican, who proudly called himself ''the Senator from Microsoft'' had even sought to cut the funding of the Justice Department's Antitrust Division while the court case was ongoing.

33. Microsoft used back channels to direct even more undisclosed soft money into the 2000 Michigan Senate race. According to The Wall Street Journal, Microsoft ''funneled'' soft money into the race by secretly making undisclosed contributions to the Michigan Chamber of Commerce to fund negative ads aimed at Abraham's opponent, now U.S. Senator Deborah Stabenow. Some close to the Chamber have estimated that the contributions, while legal and not requiring reporting, may have amounted to more than $250,000.[13] Such contributions are usually made to organizations to support the organization's activities, not political ads—which is why there is no disclosure requirement. Microsoft knew this and took advantage of the loophole in Michigan. Political operatives throughout the country reported similar occurrences in other political races considered ''top targets'' by both national parties, but efforts to gain access to contributor lists from some of the ''independent'' groups believed to be accepting the contributions have unsuccessful.

34. Significant contributions were also made in Missouri by Microsoft to help re-elect Senator John Ashcroft, the current U.S. Attorney General. Missouri was another state where independent groups without significant resources of their own suddenly were flush with money to run ads defending Ashcroft and attacking his opponent. Ashcroft, whose campaign benefited greatly from Microsoft's disclosed campaign contributions—$19,000 in reported donations—lost his election bid. He now runs the federal executive department responsible for proposing the settlement offer, and his office is now staffed with political operatives who played a role in raising the $19,000 from Microsoft, coordinating his campaign efforts with those of Microsoft in Missouri, and in one case, directing the entire Republican National Committee fundraising and political campaign operation in the 2000 election cycle.

35. Deborah Senn, the Democratic primary opponent of Washington State Senator Cantwell, received $15,000 more from Microsoft than did Cantwell who received $30,150. This total, however, dwarfs the money poured into now-former Senator Gorton's campaign—$131,160. Only Democratic Congressman Jay Inslee's total of $126,850 comes close to that of former Senator Gorton. Congressman Inslee represents Microsoft's home district, and defends the company vigorously in Washington, DC

36. In addition to those in Washington State, candidates or parties in three other states received contributions totaling six figures. California was second at $174,900 with virtually the entire amount going to Leadership PACs—Members'' PACs that contribute money to other allied candidates—and directly to Members of Congress. Texas was third at $107,250 although this amount does not include contributions to the Bush/Cheney campaign. This was an unusually large amount for the state when compared to previous giving patterns.

37. While Microsoft contributed $100,000 to the Bush/Cheney Inaugural Committee in January 2001, virtually all contributions to presidential campaigns were made prior to July 3 1st, with the exception of contributions to Libertarian Party candidate Harry Browne's campaign. (This is presumably because, to be eligible for federal matching funds for the primaries and federal funding for the general election, major party candidates receiving are not allowed to solicit or receive campaign contributions after they are nominated at their conventions.) Only four primary presidential candidates received contributions greater than $10,000: Bill Bradley, $33,400; George Bush, $57,300; A1 Gore, $28,000, John McCain $39,448.

Table 1. Candidates & Organizations Receiving $10,000 or more from Microsoft

Following is a breakdown of Microsoft's contributions of more than $10,000 to candidates and organizations during the 2000 election cycle.

Abraham for Senate $24,650.00
Kerrey for US Senate $10,000.00
Adam Smith for Congress $31,750.00
Leadership PAC 2000 (Oxley) $10,000.00
American Success PAC (Drier) $11,750.00
Majority Leader's Fund (Armey) $11,000.00
Ashcroft (combined) $19,250.00
McCain 2000 $39,448.00
Bill Bradley for President $33,400.00
Mcntosh for Governor $25,000.00
Brian Baird for Congress $38,400.00
Michigan Republican State Cite. $50,000.00
Bush for President $57,300.00
Montana Republican State Ctte. $10,000.00
Bush/Cheney Inaugural $100,000.00
NDN $38,750.00
California FriendsLatino PAC $10,000.00
New Majority Project $15,000.00
California Women Vote $10,000.00
New York Senate 2000 $40,000.00
Cantwell 2000 $30,150.00
NW Leadership PAC (Gorton) $17,000.00
Citizens for Rick Larsen $35,600.00
Republican Party $1,691,090.50
DASHPAC $10,000.00
Republican Campaign Committee of New Mexico $33,492.48
Democratic Party $1,300,892.00
Republican Majority Fund Don Nickles) $15,000.00
Democratic Party of Georgia $20,000.00
Republican Party of Virginia $12,000.00
Dooley for Congress $10,500.00
Republican Senate Council $15,000.00
EMILY's List $176,600.00
Santorum 2000 $11,000.00
Ensign for Senate $10,000.00
Senn 2000 $45,651.00
Feinstein 2000 $12,000.00
Snowe for Senate $10,000.00
Friends for Slade Gorton $131,160.00
TechNet $10,000.00
Friends of Conrad Bums $15,250.00
Utah Republican Party $29,383.00
Friends of Heidi $16,300.00
Washington State Democratic Central Committee $30,387.00
Friends of Jennifer Dunn $14,700.00
Washington State Republican Party $104,150.00
Gore for President $28,000.00
Washington Victory Committee 1999 $35,500.00
Inslee for Congress $126,850.00
Washington Victory Fund $55,000.00

[12] USA Today, 5–30–00, Ullman, Drinkard

[13] Wall Street Journal, Oct. 16, 2000, Wilke

Jim Davis for Congress $17,250.00
Washington Women Vote $11,000.00
Jon Kyl for Senate $11,000.00
Western Republican PAC $10,000.00
Kennedy for Senate $12,000.00
Women Vote 2000 $100,000.00

B. ''Strategic'' Philanthropy

38. Microsoft has also contributed money to the causes of politicians as yet another method to use donations, political in nature, to garner support and ultimately influence the outcome of the trial.

39. According to USA Today, Microsoft and the philanthropic arm of its founder and chairman, the Bill and Melinda Gates Foundation, ''donate millions of dollars to causes and projects that are dear to the hearts of government policymakers, such as a $50,000 gift to the Congressional Black Caucus Foundation.[14] Shortly after the donation to the CBC, according to Business Week, Microsoft gained an unlikely ally in the Caucus chairman, Representative James E. Clyburn (DSC), ''who represents one of the least technology-rich districts in the country.''[15] In addition, a timely $10 million gift to the U.S. Capitol Visitor's Center further endeared Microsoft to many Members of Congress.

40. Yet the strategic philanthropy began long before the 2000 election cycle. According to the Gates Foundation web site, there was a three-year hiatus in philanthropic giving between 1995 and 1998. Curiously, the last donation in 1995 occurred just prior to the signing of the 1995 consent decree and the first donation in 1998 occurred the day prior to the Department of Justice filing its antitrust suit against Microsoft.

c. Lobbying

41. In addition to the millions Microsoft spent on campaign contributions, the company spent millions more lobbying Congress, the Administration and state officials to influence the outcome of the antitrust trial. Much like its campaign contributions, the company's lobbying presence in Washington has grown significantly in the last few years, its growth accelerating rapidly at the outset of the antitrust trial. Once just Jack Krumholtz, the company's lobbying group now employs 40 people in Redmond and Washington. The company has hired a dozen lobbying firms and counts among its consultants and lobbyists some of the most prominent figures in politics. A company with 30,000 employees, Microsoft has more lobbyists on retainer than the handful of U.S. companies with more than 300,000 employees. According to USA Today, ''in 1996, the company spent $1.2 million on its Washington lobbying operations. [In 1999], that figure topped $4.6 million.'' According to Business Week in reference to the company's political spending, ''These days, Microsoft money flows like champagne at a wedding.''[16] Some of the biggest names in Washington going back 30 years represent Microsoft—many are former bosses of the people they lobby. There are more than a half-dozen former Members of Congress, four former White House Chief Counsels, countless dozens of former senior aides from the Congress, Justice Department and elsewhere throughout the highest levels of government.

i. Lobbying the Administration

42. Since the inauguration of George W. Bush in January 2001, Microsoft has made a concerted effort to strengthen its ties to the Administration. The Administration's decision to agree to a settlement widely accepted to be ineffective calls into question the nature of such ties.

43. Prior to the announcement of the settlement, for example, it has been reported there was an inappropriate, if not illegal, discussion between a senior aide to Attorney General John Ashcroft and a lobbyist for AOL-Time Warner.

44. According to the account in the New York Times, the senior aide to General Ashcroft is David Israelite. Israelite was the political director of the Republican National Committee which received more than a million dollars from Microsoft during the 2000 presidential campaign. In that role, Mr. Israelite directed fundraising operations and coordinated campaign activities between entities like Microsoft and the national party apparatus. Now General Ashcroft's deputy chief of staff in the Office of the Attorney General, Mr. Israelite recused himself from the case as a result of his ownership of 100 shares of Microsoft stock.

45. The Times wrote, ''According to the notes of a person briefed about the conversation on Oct. 9, the day it is said to have occurred, Mr. Israelite called [AOL lobbyist] Mr. [Wayne] Berman. ''Are you guys behind this business of the states hiring their own lawyers in the Microsoft case?'' Mr. Israelite asked Mr. Berman in the predawn conversation, according to the notes. 'Tell your clients we wouldn't be too happy about that.''

46. Israelite allegedly said on that call that the Supreme Court was soon to deny Microsoft's appeal, which would prompt the Department of Justice to seek a settlement. He was reported to have complained that AOL was ''radicalizing'' the states.[7] While the conversation was confirmed, the participants denied the content of the conversation. Still, it was enough to provoke angry responses from the technology industry and an accusation of ''inappropriate and possibly illegal'' conduct from a key House Democrat, Congressman John Conyers, Ranking Democratic Member of the House Judiciary Committee. In a letter to Attorney General Ashcroft, Rep. Conyers asked for more information about Israelite's alleged contacts with Berman, specifically asking for a list of contacts between Israelite and AOL officials. ''If the allegations reported by the media are true, such active involvement by a recused public official could violate federal conflict of interest laws,'' Conyers wrote.[18]

ii. Lobbying on the Campaign Trail

47. Mirroring its political giving strategy, Microsoft's lobbying strategy has focused mainly on Republicans, while hedging its bets and simultaneously courting Democrats to a slightly lesser extent.

48. During the campaign, Microsoft Chairman Bill Gates was asked if a Republican administration would be a positive development for the company. It would ''help,'' he said[19] After all, before Judge Jackson ruled against Microsoft, then Governor Bush was quoted as saying that he stood ''on the side of innovation, not litigation.''

49. In fact, according to Newsweek Magazine, Bill Gates's visit to then Governor Bush in Austin was ''part of a delicate political dance between the software giant and the Republican Party .... Dollar signs in their eyes, GOP leaders covet big political contributions from Microsoft's coffers. In turn, Microsoft executives, plagued by the Clinton Justice Department's lawsuit, hope that a Republican president and Congress might shut down the efforts to punish the company.''

50. A number of other Microsoft executives, lobbyists and other paid counsel lead back to the Bush camp. The company's Chief Operating Officer, Steve Ballmer, served then Governor Bush as a technology adviser. Tony Feather, former Bush political director, is a partner with a Republican consulting firm Microsoft hired to manage grassroots lobbying efforts. And Microsoft has paid lobbyist and former head of the Republican Party Haley Barbour hundreds of thousands of dollars to assist the company in Washington. The company has also hired Vin Weber, a former Republican Congressman, and Michael Deaver, the former White House chief of staff and trusted adviser credited with crafting President Ronald Reagan's image and campaign advertisements in the 1980s.

51. In addition, Microsoft retained the services of Ralph Reed's Century Strategies ''for the stated purpose of improving the company's public image.''[20] Reed's firm—a paid consultant to the Bush campaign—aimed itself at mobilizing Bush supporters to express to the candidate their dissatisfaction with the antitrust trial. Once it was reported in the New York Times, the firm issued an apology. The Wall Street Journal later reported more on Ralph Reed's lobbying efforts on Microsoft's behalf:

''BOUNTY PAYMENTS are offered for pro-Microsoft letters and calls.

Republican Ralph Reed's lobbying firm coordinates a network of public-relations and lobbying partners that generates grass-roots comments for cash. Payments are for letters, calls and visits to lawmakers and policy makers. An e-mail offers sample letters opposing a Microsoft breakup. A letter to a member of Congress from a mayor or local Republican Party official is worth $200, the guidelines say. A ''premier'' letter or visit by a fund-raiser known to the lawmaker or a family member can be worth up to $450 apiece. An op-ed piece in local papers fetches $500.''[21]

52. Microsoft was lobbying the Democratic side as well. Like its team of Republican all-

[14] USA Today, May 30, 2000, Drinkard, Ullman

[15] BusinessWeek, May 15, 2000, Carney, Borrus, Greene

[16] ibid.

[17] New York Times, Nov. 2, 2001

[18] The Kansas City Star, Nov. 8, 2000, Kraske

[19] Common Cause, ''The Microsoft Playbook''

[20] ibid.

[21] WSJ, Oct. 20, 2000

stars, Microsoft's team of Democrats had very close ties to its party as well. The team included ''super lobbyist'' Tommy Boggs, a top Washington insider with deep Democratic ties, Tom Downey, a former Democratic Congressman with close ties to former Vice President A1 Gore, and Craig Smith, former campaign manager for Gore and board member of the Microsoft front group, Americans for Technology Leadership. As a board member of the ATL, Smith wrote to the Democratic National Committee urging his fellow party members to abandon support for the antitrust case, citing that support ''would make us vulnerable to attack in the general election.'' [22]

53. The company also hired Ginny Terzano, former Gore press secretary, and tobacco industry ad man Carter Eskew, a former Gore adviser-cum-Microsoft image consultant who helped craft the company's 1999 advertising campaign aimed at bolstering its reputation as a ''good corporate citizen.'' Also retained by Microsoft was super-lobbyist Jack Quinn, former Chief of Staff to Vice President A1 Gore and White House Counsel.

iii. Lobbying Capitol Hill

54. But Microsoft did not focus solely on lobbying those who would soon be in control of the Department of Justice. Microsoft also waged a massive lobbying campaign aimed at Congress.

55. Alongside its Administration-oriented team, Microsoft recruited more lobbyists and consultants with ties to Members of Congress on both sides of the aisle. Republican hires included Allison McSlarrow, former deputy chief of staff to Senate Majority Leader Trent Lott, Ed Kutler, former assistant to then Speaker of the House Newt Gingrich, Mitch Bainwol, former chief of staff to the Senate Republican Caucus and the Republcian National Committee, Kerry Knott, former chief of staff to House Majority Leader Richard Armey, Ed Gillespie, former Armey and Republican National Committee communications director, and Mimi Simoneaux, former legislative director to House Commerce Committee Chairman Billy Tauzin, who was then-chairman of the House subcommittee with jurisdiction over the technology industry.

56. Among the Democrats lobbying on behalf of Microsoft were Jamie Houton, former associate director of the Senate Democratic Steering Committee, former Democratic Representative Vic Fazio, the third-highest ranking House Democrat, and his former top staffer Tom Jurkovich.

57. Despite Microsoft's assertion in its mere three-page Tunney Act disclosure filing, the company has incessantly used its tremendous resources to contact and influence Members of Congress. Over the course of a 16-month period beginning in 1999, Microsoft flew at least 130 Members of Congress or their staff to the company's headquarters in Redmond, Washington to lobby on a number of issues, including the antitrust case.

58. Perhaps the most egregious example of its heavy-handed largesse came in late 1999, when Microsoft lobbied Congress to cut $9 million from the budget for the Department of Justice's Antitrust Division, the very body that was leading the prosecution against Microsoft. Pilloried industries like the gun and tobacco had considered and rejected the strategy as overly bold.

59. According to the Washington Post, ''Nonprofit organizations that receive financial support from [Microsoft] have also urged key congressional appropriators to limit spending for the division .... The non profits made their request in a letter last month after an all-expenses-paid trip to Microsoft headquarters in Redmond, Washington, where they were entertained and briefed on an array of issues facing the company.'' Further discussion follows in the next section entitled ''Front Groups.''

60. After the previously secret letters from these non-profit groups were exposed, news of the attempts received widespread bipartisan criticism from media and politicians alike. House Judiciary Committee Chairman Henry Hyde (R–IL), called the division ''one of the best-run departments in the government.'' Senator Herb Kohl, a Democrat on the Senate Judiciary Committee's antitrust subcommittee, said ''it would set [a] terrible precedent to alter the division's budget based on one case alone.'' [23] ''It's like the Mafia trying to defund the FBI,'' said a prominent member of the Washington antitrust bar? According to Jan McDavid, a lawyer with the Washington firm of Hogan & Hartson and chairperson of the American Bar Association antitrust section, the section's policy states that it ''opposes the use of the congressional budget and appropriations process to intervene in or influence ongoing antitrust enforcement matters.'' [24]One congressional GOP staffer went as far as to say that Microsoft's lobbying had ''the odor of obstruction.'' [25]

61. Not surprisingly, Senator Slade Gorton, a Republican from Microsoft's home state of Washington, was adamantly supportive of the idea. Between 1997 and 1999, he received more than $50,000 from Microsoft and its employees. During the 2000 election cycle, Gorton's PAC received $17,000 while the Washington State Republican Party received more than $100,000. iv. Lobbying the States

62. Because 19 state attorneys general initiated the antitrust case alongside the Department of Justice, Microsoft initiated a state lobbying campaign aimed at influencing those attorneys general to back away from the case. Microsoft even hired former Iowa House Speaker Donald Avenson to lobby the state's Attorney General, who was leading the group of states prosecuting the company. While Microsoft has retained professional ''grassroots consultants'' and others in many states, according to published reports, it is their efforts in the 19 states with Attorneys General who brought suit against them where the real pressure has occurred. In those states they have retained former lawmakers, law partners of the Attorneys General, their predecessors in that same office, business associates, and their own trusted political consultants. Microsoft has also hired those on whom the AGs are often most politically dependent, such as union leaders and activists in states with Democratic Attorneys General, and fiscally conservative activists in state with Republican AGs.

63. Perhaps the company's most successful effort to influence the state attorneys general came in 1998, when, three days after a $25,000 contribution to the South Carolina Republican Party, the state's Attorney General, Charles Condon, announced that he would withdraw from the case.

64. Yet, a few of its grassroots efforts targeted at the states have done more harm than good. Because of the unprecedented size, scope and cost of Microsoft's campaign, a number of high profile gaffes have exhibited the true nature of Microsoft's ''public support'' and the depths to which the company will go to influence the outcome of the trial.

65. In August 2001, the Los Angeles Times reported that two letters received by the Utah Attorney General's office, one of the prosecuting states, were sent by dead men. The campaign was funded by Craig Smith's Americans for Technology Leadership. Despite its claims to represent ''thousands of small and mid-sized technology companies,'' news reports have repeatedly characterized ATL and its counterpart, the Association for Competitive Technology (ACT) as essentially wholly-owned subsidiaries of Microsoft Corp., whose funding launched and sustains both groups.[26] Other characteristics of the letter writing campaign to the Attorneys General included similar phrases popping up again and again, invalid return addresses, and even masses of identical letters with different signatories.

66. In one news story, Jim Prendergast, director of ATL, initially admitted only to providing letter writers with ''message points.'' ''We gave them a few bullet points, but that's about the extent of it,'' he said. When asked why identical phrases were popping up again and again, he confessed that sometimes ATL did indeed provide whole letters for the citizens to sign and send. ''We'd write the letter and then send it to them,'' he admitted.

67. According to the same article, other states, like Minnesota and Iowa, were subjected to Microsoft's full-press grassroots lobbying campaign. Both states are participants in the antitrust case. In the case of Iowa, Attorney General Tom Miller received more than 50 letters in a month's time calling on him to drop the case. While none of the letters were identical, several phrases were similar. In four of the letters, for example, the following sentence appeared: ''Strong competition and innovation have been the twin hallmarks of the technology industry.'' Three others contained this sentence: ''If the future is going to be as

[22] Common Cause, ''The Microsoft Playbook''

[23] Reuters, Oct. 17, 1999, Lawsky

[24] ibid.

[25] WSJ, Oct. 15, 1999

[26] ''Microsoft's All-Out Counterattack.'' Dan Carney, with Amy Borrus. BusinessWeek May 15, 2000; ''Microsoft's Lobbying Largess Pays Off; Back-Channel Effort Wins Support for Case.'' James V. Grimaldi. Washington Post May 17, 2000; ''Microsoft leans creatively on levers of political power as breakup decision looms, 'stealth'' lobbying efforts aim for survival.'' Jim Drinkard and Owen Ullmann. USA Today May 30, 2000

successful as the recent past, the technology sector must remain free from excess regulation.'' [27]

68. Minnesota Attorney General Michael Hatch, who received 300 identical letters, characterized the campaign as ''sleazy.'' Many of the letter writers were misled by Microsoft and one even wrote by hand to Attorney General Hatch to say so and to apologize for his previous letter. ''I sure was misled,'' he wrote. ''It's time for you to get out there and kick butt.'' [28]

vi. Tying Up the Lobbyists and Lawyers

69. A frequently employed tactic of Microsoft is to retain all major lobbying firms in key states so that its opposition cannot. Similarly, the company has hired many Washington, DC-based law firms with antitrust expertise to work on issues not related to the antitrust case. ''They've got the whole town conflicted out,'' said one attorney. ''They've sucked out all the oxygen.'' [29]

D. Front Groups

70. Supporting its political contributions and lobbying campaign, Microsoft undertook an aggressive public relations campaign aimed at ''creating the appearance of a groundswell of public support for the company.'' [30]

71. In April 1998, a reporter for the Los Angeles Times received a package of confidential materials created by Edelman Public Relations for its client, Microsoft. Among the documents was a media relations strategy for a ''multi-million dollar'' campaign aimed at stemming the rash of antitrust investigations being undertaken by a number of states in conjunction with the federal government's investigation. According to the reporters, Greg Miller and Leslie Helm, ''the elaborate plan ... hinges on a number of unusual—and some say unethical—tactics, including the planting of articles, letters to the editor and opinion pieces to be commissioned by Microsoft's top media handlers but presented by local firms as spontaneous testimonials.'' [31] While Microsoft contends that this strategy was never implemented, a number of the company's activities since the outset of the trial clearly indicate that most of the elements have been employed, at times repeatedly.

72. Throughout the antitrust trial, Microsoft relied heavily on many ''independent'' groups to support the company and to oppose the suit publicly. Some groups they created themselves out of whole cloth during the trial. Others sullied their long, distinguished backgrounds by trading hard cash for the use of their good names. Many denied any involvement with Microsoft, claiming that their passion came from concern for the economy or ''innovation''—only to later be unmasked by the news media when evidence of their financial dealings with Microsoft came to light. One account suggests Microsoft has harnessed at least 15 advocacy groups and think tanks that use Microsoft donations to spread the company's message through polls, news conferences, Web sites, letters to the editor, research papers, opinion pieces and letter-writing campaigns aimed at lawmakers. [32]

73. Groups with names like Americans for Technology Leadership and the Association for Competitive Technology had the veneer of genuine independence, but were actually founded by Microsoft, launched with Microsoft dollars, and work on few other issues than the defense of Microsoft in its antitrust trial.

74. Even well known Washington, DC organizations with strong ties to the Administration and to Congress were well funded by Microsoft—respected fiscally conservative groups like Grover Norquist's Americans for Tax Reform, former White House Counsel C. Boyden Grey's Citizens for a Sound Economy, the National Taxpayers Union and Citizens Against Government Waste. But upon closer scrutiny, the true ties of these groups to Microsoft became apparent. By paying for pro-Microsoft advertisements, by sponsoring publications, by donating money outright, Microsoft both ensured and devalued their support.

75. According to Business Week, Microsoft ''secretly funds those that do its public-relations work and pulls funding from those that dare question its positions.'' [33] On one such occasion, Microsoft pulled funding from the American Enterprise Institute once one of its fellows, Robert Bork, came out in favor of the antitrust trial even though the institute itself has no position on the trial and many of its technical and antitrust experts have expressed their opposition to the case. In another case, they quit a technology industry trade group, the Software and Information Industry Association, because a majority of its members supported the antitrust case.

i. Independent Institute

76. In one instance, Microsoft paid for the placement of newspaper advertisements by the California-based Independent Institute. Published in June 1999 in the New York Times and the Washington Post, the full-page ads featured a pro-Microsoft letter signed by 240 academics. Nothing in the ad's copy indicated to readers who—other than the Institute itself- was paying for the ads. Apparently, no one at the Independent Institute indicated to the letter's 240 signatories who was paying for the ad either. One signatory, Professor Simon Hakim of Temple University, stated that he would not have signed on to the advertisement had he known who was behind it.[34]

77. At a Washington, DC press conference unveiling the ads, Independent Institute president David Theroux answered a reporter's specific question about whether Microsoft had anything to do with the ads, including paying for them, with a resounding ''no.'' When questioned months later by the New York Times, Theroux again denied that Microsoft paid for the ads. He said, instead, that the ads ''were paid for out of our general funds.'' He also said the ''implication that Microsoft had any influence is ridiculous.'' [35] But, according to a front-page article later written in the New York Times, ''among the institute's internal documents is a bill from Mr. Theroux sent to John A. C. Kelly of Microsoft for the full costs of the ads, plus his travel expenses from San Francisco to Washington for the news conference, totaling $153,868.67. Included was a $5,966 bill for airline tickets for himself (Theroux) and a colleague. Unfortunately, he wrote Mr. Kelly, 'the airlines were heavily booked'' and 'we had to fly first class to DC and business class on the return.''' Furthermore, despite additional statements from its president that it ''adheres to the highest standards of independent scholarly inquiry,'' internal institute documents have shown that, having contributed more than $200,000, or 20% of the institute's total outside contributions, Microsoft ''secretly served as the institute's largest outside benefactor [in 1999].'' [36] It wasn't until September that the institute finally admitted the extent of Microsoft's support.

78. In these instances, as in others, Microsoft's behavior outside the courtroom had a direct impact on the proceedings inside the courtroom. According to the New York Times, the ads prompted not only more news stories but also courtroom discussion.[37] Microsoft also covered the costs of the publication of the institute's book, ''Winners, Losers and Microsoft: Competition and Antitrust in High Technology,'' which Microsoft's economic witness in the trial then used to support his own testimony.

ii. Biased Polling

79. According to Business Week, Microsoft has also commissioned polls to help foster an image of great public support for the company. At the outset of the 2000 presidential campaign, around the time of the Iowa caucus and the New Hampshire primary, Microsoft funded polls aimed at demonstrating the public's opposition to the antitrust case. Once the results were in, Microsoft distributed the results to the media in order to compel the candidates to incorporate their opposition to the case into their platform.

80. In addition, while the state Attorneys General were working through the spring on formulating a remedy, Microsoft front group Americans for Technology Leadership conducted and issued the results of a poll, which concluded that the public wanted the

[27] Los Angeles Times, August 23, 2001

[28] Los Angeles Times, August 23, 2001

[29] Business Week, May 15, 2000, Borrus, Carney, Greene

[30] ''Trust Us, We're Experts'' Sheldon Rampton and John Stauber, p. 8

[31] 31 ibid.

[32] USA TODAY, ''Microsoft leans creatively on levers of political power as breakup decision looms, 'stealth'' lobbying efforts aim for survival'' by Jim Drinkard and Owen Ullmann, May 30, 2000

[33] Business Week, May 15, 2000, Carney, Borrus, Greene

[34] I am aware there have been allegations that material relating to the Independent Institute was uncovered by Investigative Group International (IGI), allegedly retained by Oracle Corporation. My understanding of the circumstances indicates that employees of IGI's were terminated as a result of their actions. I have not reviewed those allegations specifically, since the subject of my review was defendant, Microsoft Corporation. Regardless, neither the Independent Institute nor Microsoft ever denied the validity of the claims after they were exposed.

[35] Associated Press, September 18, 1999

[36] New York Times, Sept. 19, 1999

[37] New York Times, Sept. 19, 1999

Attorneys General to focus their time and energy on other issues. In this case, Microsoft failed to disclose the nature of its relationship with ATL and the source of funding for the poll.

iii. Targeting the Antitrust Division of the Department of Justice

81. As stated above, one of Microsoft's most egregious attempts to use lobbying to influence the outcome of the antitrust trial came when the company lobbied to cut funding for the Antitrust Division of the Department of Justice. Microsoft funded a host of third parties to push forth its agenda.

82. In September 1999, the company flew representatives from about 15 major Washington, DC-based think tanks to Microsoft's Redmond, Washington headquarters ''for three days of briefings that included tickets to a Seattle Mariners game and dinner and entertainment at Seattle's Teatro ZinZani, according to an itinerary.'' [38] Among the groups were Citizens for a Sound Economy, the National Taxpayers Union and Americans for Tax Reform, whose president, Grover Norquist, received $40,000 in lobbying payments from Microsoft during the second half of 1998.

83. Two days after returning from the trip, those three groups and three others secretly sent a letter to House appropriators urging that the Antitrust Division receive the lowest amount of funding proposed. In a coordinated effort, on the same day one of Microsoft's own lobbyists, Kerry Knott, met with Rep. Dan Miller of Florida to urge him to grant the Antitrust Division the lower amount of funds. That meeting prompted Rep. Miller to write to the chairman of the House Appropriations Commerce, Justice, State and Judiciary Subcommittee that ''it would be a devastating blow to the high-tech industry and to our overall economy if the federal government succeeds in its efforts to regulate this industry through litigation.'' According to the Washington Post, ''Miller said that while he objects to the funding on fiscal grounds, he had not focused on it until Knott and Citizens for a Sound Economy spokeswoman Christin Tinsworth, a former Miller staffer, made their pitch just off the House floor.'' [39]

84. A Washington Post editorial summarized the propriety of the incident this way: ''[T]he fact that Microsoft has the right to lobby ... doesn't make the lobbying any less unseemly. If Microsoft has a gripe, it should make its complaint to the court hearing its case.'' [40]

III. CONCLUSIONS

85. The end result of Microsoft's unprecedented political campaign seems to have been rewarded by the weak settlement presented by the Department of Justice.

Respectfully Submitted,

Edward Roeder

January 28, 2002

APPENDIX A: Selected Tables

Table 1. Rapid Rises in Corporate PAC Fundraising, 1979–2002 (After Raising More than $50,000)

Microsoft Corporation Formed: 1987–88
Total Raised, 1995–96: $59,750
Total Raised, 1997–98: $599,568
Difference: $539,818 903 46% Rank: 1

American Telephone & Telegraph Co. Formed: 1983–84
Total Raised, 1983–84: $215,423
Total Raised, 1985–86: $1,820,621
Difference: $1,605,198 = 745 14% Rank: 2

Drexel Burnham Lambert Group, Inc. Formed: 1981–82
Total Raised, 1983–84: $66,844
Total Raised, 1985–86: $446,279
Difference: $379,435 = 567 64% Rank: 3

Safari Club International Formed: 1979–80
Total Raised, 1993=94: $94,149
Total Raised, 1995–96: $545,915
Difference: $451,766 = 479 84% Rank: 4

Fluor Corporation Formed: 1979–80
Total Raised, 1987–88: $87,236
Total Raised, 1989–90: $494,417
Difference: $407,181 = 466 76% Rank: 5

Dow Chemical, USA—HQ Formed: 1979–80
Total Raised, 1995–96: $60,290
Total Raised, 1997–98: $331,286
Difference: $270,996 = 449 49% Rank: 6

Lucent Technologies, Inc. Formed: 1995–96
Total Raised, 1995–96: $87,568
Total Raised, 1997–98: $464,592
Difference: $377,024 = 430 55% Rank: 7

Nat'l Star Route Mail Contractors Ass'n Formed: 1981–82
Total Raised, 1995–96: $63,512
Total Raised, 1983–84: $313,609
Difference: $250,097 = 393 78% Rank: 8

Eastern Airlines, Inc. Formed: 1979–80
Total Raised, 1985–86: $53,309
Total Raised, 1987–88: $243,529
Difference: $190,220 = 356 83% Rank: 9

Pacific Telesis Group Formed: 1979–80
Total Raised, 1981–82: $65,538
Total Raised, 1983–84: $280,183
Difference: $214,645 = 327 51% Rank: 10

Henley Group/Wheelabrator Technologies, Inc. Formed: 1979–80
Total Raised, 1985–86: $89,255
Total Raised, 1987–88: $380,102
Difference: $290,847 = 325 86% Rank: 11

Firstar (First Wisconsin) Corp. Formed: 1979–80
Total Raised, 1997–98: $113,743
Total Raised, 1999–00: $480,239
Difference: $366,496 = 322 21% Rank: 12

U.S. West, Inc. Formed: 1983–84
Total Raised, 1987–88: $123,767
Total Raised, 1989–90: $521,886
Difference: $398,119 = 321 67% Rank: 13

CSX Corp.—Jeffboat Formed: 1981–82
Total Raised, 1997–98: $74,125
Total Raised, 1999–00: $303,763
Difference: $229,638 = 309 80% Rank: 14

J. P. Morgan & Company, Inc. Formed: 1979–80
Total Raised, 1983–84: $68,569
Total Raised, 1985–86: $274,515
Difference: $205,946 = 300 35% Rank: 15

Source: Computer analysis by Sunshine Press Services of Federal Election Commission data, Jan. 1, 1979 through Dec. 31, 2000.

Table 2. Continued Rises in Corporate PAC Fundraising, 1979–2002 Following Rapid Rise of

More than 300% from a base of $50,000+(Ranked by Percentage Rise in Next Election Cycle)

Microsoft Corporation Formed: 1987–88
Total Raised, 1995–96: $59,750
Total Raised, 1997–98: $599,568
Difference: $539,818 = 903.46%
Next Cycle: 1999–88
Total Raised: $1,589,684
Difference: $990,116 = 165.14% Rank: 1

J. P. Morgan & Company, Inc. Formed: 1979–80
Total Raised, 1983–84: $68,569
Total Raised, 1985–86: $274,515
Difference: $205,946 = 300.35%
Next Cycle: 1987–88
Total Raised: $514,285
Difference: $239,770 = 87.34% Rank: 2

American Telephone & Telegraph Co. Formed: 1983–84
Total Raised, 1983–84: $215,423
Total Raised, 1985–86: $1,820,621
Difference: $1,605,198 = 745.14%
Next Cycle: 1987–88
Total Raised: $3,043,510
Difference: $1,222,889 = 67.17% Rank: 3

U.S. West, Inc. Formed: 1983–84
Total Raised, 1987–88: $123,767
Total Raised, 1989–90: $521,886
Difference: $398,119 = 321.67%
Next Cycle: 1991- 88
Total Raised: $734,130
Difference: $212,244 = 40.67% Rank: 4

Pacific Telesis Group Formed: 1979–80
Total Raised, 1981–82: $65,538
Total Raised, 1983–84: $280,183
Difference: $214,645 = 327.51%
Next Cycle: 1985–86
Total Raised: $364,113
Difference: $83,930 = 29.96% Rank: 5

Fluor Corporation Formed: 1979–80
Total Raised, 1987–88: $87,236
Total Raised, 1989–90: $494,417
Difference: $407,181 = 466.76%
Next Cycle: 1991–92
Total Raised: $610,142
Difference: $115,725 = 23.41% Rank: 6

Nat'l Star Route Mail Contractors Ass'n Formed: 1981–82
Total Raised, 1995–96: $63,512
Total Raised, 1983–84: $313,609
Difference: $250,097 = 393.78%
Next Cycle: 1985–86
Total Raised: $43,468
Difference: $2,269 = 5.51% Rank: 7

Firstar (First Wisconsin) Corp. Formed: 1979–80
Total Raised, 1997–98: $113,743
Total Raised, 1999–00: $480,239
Difference: $366,496 = 322.21%
Next Cycle: (data incomplete, cycle now in progress)

CSX Corp.—Jeffboat Formed: 1981–82
Total Raised, 1997–98: $74,125
Total Raised, 1999–00: $303,763
Difference: $229,638 = 309.80%
Next Cycle: (data incomplete, cycle now in progress)

Dow Chemical, USA—HQ Formed: 1979–80
Total Raised, 1995–96: $60,290
Total Raised, 1997–98: $331,286
Difference: $270,996 = 449.49%
Next Cycle: 1999–00
Total Raised: $279,618
Difference: $-51,668 = -15.60% Rank: 10

[38] The Washington Post, Oct. 15, 1999, Morgan, Eilperin

[39] ibid.

[40] Washington Post, Oct. 24, 1999

Lucent Technologies, Inc. Formed: 1995–96
Total Raised, 1995–96: $87,568
Total Raised, 1997–98: $464,592
Difference: $377,024 = 430.55%
Next Cycle: 1999–00
Total Raised: $343,462
Difference: $-121,130 = -26.07% Rank: 11
Drexel Burnham Lambert Group, Inc. Formed: 1981–82
Total Raised, 1983–84: $66,844
Total Raised, 1985–86: $446,279
Difference: $379,435 = 567.64%
Next Cycle: 1987–88
Total Raised: $310,188
Difference: $-136,091 = -30.49% Rank: 12
Safari Club International Formed: 1979–80
Total Raised, 1993=94: $94,149
Total Raised, 1995–96: $545,915
Difference: $451,766 = 479.84%
Next Cycle: 1997–98
Total Raised: $378,078
Difference: $-167,837 = -30.74% Rank: 13
Eastern Airlines, Inc. Formed: 1979–80
Total Raised, 1985–86: $53,309
Total Raised, 1987–88: $243,529
Difference: $190,220 = 356.83%
Next Cycle: 1989–90
Total Raised: $105,734
Difference: $-137,795 = -56.58% Rank: 14
Henley Group/Wheelabrator Technologies, Formed: 1979–80
Total Raised, 1985–86: $89,255
Total Raised, 1987–88: $380,102
Difference: $290,847 = 325.86%
Next Cycle: 1989–90
Total Raised: $141,072
Difference: $-239,030 = -62.89% Rank: 15
Source: Computer analysis by Sunshine Press Services of Federal Election Commission data, Jan. 1, 1979 through Dec. 31, 2000.

Table 3. Largest Cash Balances at end of 1999–2000 Election Cycle American Corporate PACs

Rank PAC Sponsor Cash on Hand
1 Microsoft Corporation $712,874
2 Southern Bell Telephone & Telegraph Co. $617,922
3 Crawford Group / Enterprise Leasing $611,442
4 Southwestern Bell Corporation $550,841
5 Chrysler / Gulfstream Aerospace Corp. $481,068
6 Federal Express Corporation $424,739
7 NationsBank $413,663
8 First Union Corporation $410,242
9 First Bank System, Inc. $405,187
10 Stone Container Corporation $368,973
11 General Electric Company $359,469
12 National Health Corporation $340,205
13 Exxon Corporation $328,559
14 Outback Steakhouse, Inc. $325,977
15 Columbia / HCA Healthcare $284,827
16 American Family Corporation $283,963
17 Cooper Industries, Inc. $281,054
18 Suntrust Banks, Inc. $275,779
19 Winn-Dixie Stores, Inc. $273,232
20 Jacobs Engineering Group, Inc. $272,982
21 Ford Motor Company $264,914
22 U.S. West, Inc. $261,289
23 Compass Bancshares, Inc. $253,625
Source: Computer analysis by Sunshine Press Services of Federal Election Commission data.

Table 4. Largest Percentage Increases in Receipts Over Two Election Cycles American Corporate PACs With More Than $50,000
Microsoft Corporation Formed:1987–88
Total Raised, 1995–96: $59,750
Total Raised, 1999–00: $1,589,684
Difference: $1,529,934 = 2,560 56% Rank: 1
American Telephone & Telegraph Co. Formed:1983–84
Total Raised, 1983–84: $215,423
Total Raised, 1987–88: $3,043,510
Difference: $2,828,087 = 1,312 81% Rank: 2
Firstar (First Wisconsin) Corp. Formed:1979–80
Total Raised, 1995–96: $59,437
Total Raised, 1999–00: $480,239
Difference: $420,802 = 707 98% Rank: 3
J. P. Morgan & Company, Inc. Formed:1979–80
Total Raised, 1983–84: $68,569
Total Raised, 1987–88: $514,285
Difference: $445,716 = 650 03% Rank: 4
U.S. West, Inc. Formed:1983–84
Total Raised, 1985–86: $69,588
Total Raised, 1989–90: $521,886
Difference: $452,298 = 649 97% Rank: 5
Bell Atlantic Corp. Formed:1983–84
Total Raised, 1993=94: $146,949
Total Raised, 1997–98: $1,046,617
Difference: $899,668 = 612 23% Rank: 6
Fluor Corporation Formed:1979–80
Total Raised, 1987–88: $87,236
Total Raised, 1991–92: $610,142
Difference: $522,906 = 599 42% Rank: 7
Dow Chemical, USA—HQ Formed:1979–80
Total Raised, 1993=94: $53,297
Total Raised, 1997–98: $331,286
Difference: $277,989 = 521 58% Rank: 8
GA Technologies, Inc. Formed:1987–88
Total Raised, 1987–88: $51,702
Total Raised, 1991–92: $320,081
Difference: $268,379 = 519 09% Rank: 9
U.S. West, Inc. Formed:1983–84
Total Raised, 1987–88: $123,767
Total Raised, 1991–92: $734,130
Difference: $610,363 = 493 15% Rank: 10
American Information Technologies Corp. Formed:1983–84
Total Raised, 1989–90: $233,266
Total Raised, 1993=94: $1,370,945
Difference: $1,137,679 = 487 72% Rank: 11
Allied-Signal, Inc. Formed:1979–80
Total Raised, 1981–82: $65,703
Total Raised, 1985–86: $384,530
Difference: $318,827 = 485 25% Rank: 12
Glaxo, Inc. Formed:1985–86
Total Raised, 1989–90: $106,192
Total Raised, 1993=94: $607,224
Difference: $501,032 = 471 82% Rank: 13
Nynex Corporation Formed:1983–84
Total Raised, 1991–92: $62,304
Total Raised, 1995–96: $346,809
Difference: $284,505 = 456 64% Rank: 14
Pacific Telesis Group Formed:1979–80
Total Raised, 1981–82: $65,538
Total Raised, 1985–86: $364,113
Difference: $298,575 = 455 58% Rank: 15
Philip Morris, Inc. Formed:1979–80
Total Raised, 1979–80: $93,291
Total Raised, 1983–84: $499,938
Difference: $406,647 = 435 89% Rank: 16
American Electric Power Company, Inc. Formed:1979–80
Total Raised, 1995–96: $106,155
Total Raised, 1999–00: $545,295
Difference: $439,140 = 413 68% Rank: 17
Waste Management, Inc. Formed:1979–80
Total Raised, 1981–82: $76,738
Total Raised, 1985–86: $391,637
Difference: $314,899 = 410 36% Rank: 18
Cigna Corporation Formed:1979–80
Total Raised, 1979–80: $56,174
Total Raised, 1985–86: $286,319
Difference: $230,145 = 409 70% Rank: 19
LDDS Communications, Inc. Formed:1987–88
Total Raised, 1993=94: $63,542
Total Raised, 1997–98: $323,680
Difference: $260,138 = 409 40% Rank: 20
Safari Club International Formed:1979–80
Total Raised, 1991–92: $107,314
Total Raised, 1995–96: $545,915
Difference: $438,601 = 408 71% Rank: 21
Michigan Bell Telephone Company Formed:1979–80
Total Raised, 1983–84: $53,326
Total Raised, 1987–88: $266,944
Difference: $213,618 = 400 59% Rank: 22
E1 Paso Company Formed:1979–80
Total Raised, 1995–96: $75,920
Total Raised, 1999–00: $379,370
Difference: $303,450 = 399 70% Rank: 23
Merrill Lynch & Company, Inc. Formed:1979–80
Total Raised, 1979–80: $56,895
Total Raised, 1983–84: $282,297
Difference: $225,402 = 396 17% Rank: 24
Federal Express Corporation Formed:1983–84
Total Raised, 1983–84: $230,478
Total Raised, 1987–88: $1,139,978
Difference: $909,500 = 394 61% Rank: 25
MBNA Corporation Formed:1991–92
Total Raised, 1991–92: $184,764
Total Raised, 1995–96: $903,599
Difference: $718,835 = 389 06% Rank: 26
MCI Telecommunications Corporation Formed:1983–84
Total Raised, 1993=94: $104,688
Total Raised, 1997–98: $510,195
Difference: $405,507 = 387 35% Rank: 27
Smith Barney & Company Formed:1979–80
Total Raised, 1995–96: $128,843
Total Raised, 1999–00: $627,332
Difference: $498,489 = 386 90% Rank: 28
Chrysler / Gulfstream Aerospace Corp. Formed:1979–80
Total Raised, 1981–82: $77,152
Total Raised, 1985–86: $373,792
Difference: $296,640 = 384 49% Rank: 29
American Information Technologies Corp. Formed:1983–84
Total Raised, 1987–88: $105,465
Total Raised, 1991–92: $501,210
Difference: $395,745 = 375 24% Rank: 30
Waste Management, Inc. Formed:1979–80
Total Raised, 1983–84: $138,076
Total Raised, 1987–88: $653,361
Difference: $515,285 = 373 19% Rank: 31
Texas Air Corp. Formed:1979–80
Total Raised, 1981–82: $53,560
Total Raised, 1985–86: $252,847
Difference: $199,287 = 372 08% Rank: 32
Federal Express Corporation Formed:1983–84
Total Raised, 1985–86: $334,334
Total Raised, 1989–90: $1,561,744
Difference: $1,227,410 = 367 12% Rank: 33
Drexel Burnham Lambert Group, Inc. Formed:1981–82

Total Raised, 1983–84: $66,844
Total Raised, 1987–88: $310,188
Difference: $243,344 = 364 05% Rank: 34
Dow Chemical, USA—HQ Formed:1979–80
Total Raised, 1995–96: $60,290
Total Raised, 1999–00: $279,618
Difference: $219,328 = 363 79% Rank: 35
General Telephone & Electronics Corp. Formed:1979–80
Total Raised, 1987–88: $169,871
Total Raised, 1991–92: $779,782
Difference: $609,911 = 359 04% Rank: 36
NationsBank Formed:1979–80
Total Raised, 1987–88: $238,405
Total Raised, 1991–92: $1,094,012
Difference: $855,607 = 358 89% Rank: 37
CSX Corp.—Jeffboat Formed:1981–82
Total Raised, 1995–96: $66,789
Total Raised, 1999–00: $303,763
Difference: $236,974 = 354 81% Rank: 38
Sears Roebuck & Co. (Allstate) Formed:1979–80
Total Raised, 1981–82: $50,277
Total Raised, 1985–86: $223,313
Difference: $173,036 = 344 17% Rank: 39
First Union Corporation Formed:1983–84
Total Raised, 1995–96: $119,980
Total Raised, 1999–00: $525,262
Difference: $405,282 = 337 79% Rank: 40
Brown & Williamson Tobacco Corp. Formed:1979–80
Total Raised, 1991–92: $117,271
Total Raised, 1995–96: $512,562
Difference: $395,291 = 337 07% Rank: 41
Coca-Cola Enterprises, Inc. Formed:1991–92
Total Raised, 1993=94: $54,312
Total Raised, 1997–98: $232,861
Difference: $178,549 = 328 75% Rank: 42
Mutual of Omaha Insurance Company Formed:1979–80
Total Raised, 1989–90: $74,612
Total Raised, 1993=94: $319,846
Difference: $245,234 = 328 68% Rank: 43
Chase Manhattan Bank Formed:1979–80
Total Raised, 1983–84: $64,813
Total Raised, 1987–88: $274,828
Difference: $210,015 = 324 03% Rank: 44
Raytheon Company Formed:1979–80
Total Raised, 1979–80: $54,158
Total Raised, 1983–84: $228,899
Difference: $174,741 = 322 65% Rank: 45
Manufacturers Hanover Corporation Formed:1979–80
Total Raised, 1979–80: $69,178
Total Raised, 1983–84: $291,068
Difference: $221,890 = 320 75% Rank: 46
Tenneco, Inc. Formed:1979–80
Total Raised, 1991–92: $208,019
Total Raised, 1995–96: $866,590
Difference: $658,571 = 316 59% Rank: 47
Loral Systems Group Formed:1985–86
Total Raised, 1989–90: $86,215
Total Raised, 1993=94: $358,895
Difference: $272,680 = 316 28% Rank: 48
Koch Industries, Inc. Formed:1989–90
Total Raised, 1993=94: $202,392
Total Raised, 1997–98: $831,184
Difference: $628,792 = 310 68% Rank: 49
Koch Industries, Inc. Formed:1989–90
Total Raised, 1991–92: $104,401
Total Raised, 1995–96: $428,074
Difference: $323,673 = 310 03% Rank: 50
Bellsouth Corporation Formed:1983–84
Total Raised, 1985–86: $70,383
Total Raised, 1989–90: $287,836
Difference: $217,453 = 308 96% Rank: 51
Rockwell International Corporation Formed:1979–80
Total Raised, 1979–80: $123,700
Total Raised, 1983–84: $497,473
Difference: $373,773 = 302 16% Rank: 52
Safari Club International Formed:1979–80
Total Raised, 1993=94: $94,149
Total Raised, 1997–98: $378,078
Difference: $283,929 = 301 57% Rank: 53
RJR Nabisco, Inc. Formed:1979–80
Total Raised, 1981–82: $64,199
Total Raised, 1985–86: $256,498
Difference: $192,299 = 299 54% Rank: 54
American Information Technologies Corp. Formed:1983–84
Total Raised, 1985–86: $58,487
Total Raised, 1989–90: $233,266
Difference: $174,779 = 298 83% Rank: 55
Southern Company Formed:1981–82
Total Raised, 1995–96: $125,656
Total Raised, 1999–00: $497,118
Difference: $371,462 = 295 62% Rank: 56
Lucent Technologies, Inc. Formed:1995–96
Total Raised, 1995–96: $87,568
Total Raised, 1999–00: $343,462
Difference: $255,894 = 292 22% Rank: 57
Fluor Corporation Formed:1979–80
Total Raised, 1985–86: $126,081
Total Raised, 1989–90: $494,417
Difference: $368,336 = 292 14% Rank: 58
Central & South West Services, Inc. Formed:1979–80
Total Raised, 1993=94: $57,841
Total Raised, 1997–98: $226,201
Difference: $168,360 = 291 07% Rank: 59
HSBC Americas / Marine Midland Banks Formed:1981–82
Total Raised, 1983–84: $52,071
Total Raised, 1987–88: $200,106
Difference: $148,035 = 284 29% Rank: 60
Jacobs Engineering Group, Inc. Formed:1981–82
Total Raised, 1995–96: $127,472
Total Raised, 1999–00: $488,875
Difference: $361,403 = 283 52% Rank: 6!
Banc One Corporation Formed:1979–80
Total Raised, 1989–90: $270,704
Total Raised, 1993=94: $1,037,361
Difference: $766,657 = 283 21% Rank: 62
Archer-Daniels-Midland Company Formed:1979–80
Total Raised, 1979–80: $50,369
Total Raised, 1983–84: $192,426
Difference: $142,057 = 282 03% Rank: 63
Aetna Life and Casualty Company Formed:1983–84
Total Raised, 1983–84: $88,329
Total Raised, 1987–88: $333,008
Difference: $244,679 = 277 01% Rank: 64
Outback Steakhouse, Inc. Formed:1991–92
Total Raised, 1993=94: $230,022
Total Raised, 1997–98: $865,042
Difference: $635,020 = 276 07% Rank: 65
Lockheed Corporation Formed:1979–80
Total Raised, 1979–80: $136,127
Total Raised, 1983–84: $511,131
Difference: $375,004 = 275 48% Rank: 66
Duke Power Company Formed:1979–80
Total Raised, 1995–96: $69,970
Total Raised, 1999–00: $261,562
Difference: $191,592 = 273 82% Rank: 67
TRW, Inc. Formed:1979–80
Total Raised, 1979–80: $69,121
Total Raised, 1983–84: $256,296
Difference: $187,175 = 270 79% Rank: 68
United Telecommunications, Inc. Formed:1979–80
Total Raised, 1983–84: $66,922
Total Raised, 1987–88: $247,495
Difference: $180,573 = 269 83% Rank: 69
Loral Systems Group Formed:1985–86
Total Raised, 1987–88: $55,311
Total Raised, 1991–92: $202,887
Difference: $147,576 = 266 81% Rank: 70
American General Corporation Formed:1979–80
Total Raised, 1995–96: $182,254
Total Raised, 1999–00: $668,062
Difference: $485,808 = 266 56% Rank: 71
Phillips Petroleum Company Formed:1979–80
Total Raised, 1983–84: $99,365
Total Raised, 1987–88: $364,141
Difference: $264,776 = 266 47% Rank: 72
Entergy Operations, Inc. Formed:1989–90
Total Raised, 1993=94: $64,650
Total Raised, 1997–98: $236,109
Difference: $171,459 = 265 21% Rank: 73
American Information Technologies Corporation Formed:1979–80
Total Raised, 1983–84: $68,916
Total Raised, 1987–88: $249,574
Difference: $180,658 = 262 14% Rank: 74
Sea-Land Corporation Formed:1979–80
Total Raised, 1987–88: $52,291
Total Raised, 1991–92: $189,284
Difference: $136,993 = 261 98% Rank: 75
First City Bancorporation of Texas, Inc. Formed:1979–80
Total Raised, 1979–80: $85,372
Total Raised, 1983–84: $307,649
Difference: $222,277 = 260 36% Rank: 76
Banc One Corporation Formed:1979–80
Total Raised, 1987–88: $173,949
Total Raised, 1991–92: $622,458
Difference: $448,509 = 257 84% Rank: 77
E1 Paso Company Formed:1979–80
Total Raised, 1993=94: $74,169
Total Raised, 1997–98: $264,338
Difference: $190,169 = 256 40% Rank: 78
Dow Chemical, USA Formed:1979–80
Total Raised, 1985–86: $77,017
Total Raised, 1989–90: $274,424
Difference: $197,407 = 256 32% Rank: 79
Timken Company Formed:1995–96
Total Raised, 1995–96: $79,717
Total Raised, 1999–00: $277,044
Difference: $197,327 = 247 53% Rank: 80
Southern Bell Telephone & Telegraph Co. Formed:1979–80
Total Raised, 1981–82: $54,650
Total Raised, 1985–86: $189,822
Difference: $135,172 = 247 34% Rank: 81
National City Corporation Formed:1981–82
Total Raised, 1983–84: $59,921
Total Raised, 1987–88: $207,361
Difference: $147,440 = 246 06% Rank: 82
Wal-Mart Stores, Inc. Formed:1979–80
Total Raised, 1989–90: $56,535
Total Raised, 1993=94: $195,579
Difference: $139,044 = 245 94% Rank: 83
Eastern Airlines, Inc. Formed:1979–80
Total Raised, 1983–84: $70,676
Total Raised, 1987–88: $243,529
Difference: $172,853 = 244 57% Rank: 84
Heublein, Inc. Formed:1979–80
Total Raised, 1985–86: $52,292
Total Raised, 1989–90: $178,944
Difference: $126,652 = 242 20% Rank: 85
Salomon Brothers, Inc. Formed:1981–82
Total Raised, 1981–82: $106,250

Total Raised, 1985–86: $363,500
Difference: $257,250 = 242 12% Rank: 86
First Bank System, Inc. Formed:1979–80
Total Raised, 1995–96: $85,349
Total Raised, 1999–00: $290,311
Difference: $204,962 = 240 15% Rank: 87
Goodyear Tire & Rubber Company Formed:1979–80
Total Raised, 1993=94: $54,504
Total Raised, 1997–98: $185,093
Difference: $130,589 = 239 60% Rank: 88
North Carolina National Bank Corp. Formed:1979–80
Total Raised, 1979–80: $79,627
Total Raised, 1983–84: $269,718
Difference: $190,091 = 238 73% Rank: 89
Caterpillar Tractor Company Formed:1981–82
Total Raised, 1985–86: $65,232
Total Raised, 1989–90: $219,844
Difference: $154,612 = 237 02% Rank: 90
Lehman Brothers Kuhn Loec, Inc. Formed:1979–80
Total Raised, 1979–80: $51,400
Total Raised, 1983–84: $171,973
Difference: $120,573 = 234 58% Rank: 91
Northrop Corporation Formed:1979–80
Total Raised, 1979–80: $86,250
Total Raised, 1983–84: $288,361
Difference: $202,111 = 234 33% Rank: 92
GMC Electronic Data Systems Corporation Formed:1979–80
Total Raised, 1987–88: $116,315
Total Raised, 1991–92: $388,257
Difference: $271,942 = 233 80% Rank: 93
Textron, Inc. Eormed:1979–80
Total Raised, 1981–82: $116,552
Total Raised, 1985–86: $388,852
Difference: $272,300 = 233 63% Rank: 94
Southern Bell Telephone & Telegraph Co. Formed:1979–80
Total Raised, 1987–88: $203,554
Total Raised, 1991–92: $678,024
Difference: $474,470 = 233 09% Rank: 95
United Parcel Service of America, Inc. Formed:1979–80
Total Raised, 1983–84: $272,659
Total Raised, 1987–88: $905,482
Difference: $632,823 = 232 09% Rank: 96
Gun Owners of America (gun control foes) Formed:1991–92
Total Raised, 1995–96: $93,086
Total Raised, 1999–00: $309,050
Difference: $215,964 = 232 00% Rank: 97
Dun & Bradstreet Corporation Formed:1979–80
Total Raised, 1981–82: $51,577
Total Raised, 1985–86: $169,954
Difference: $118,377 = 229.52% Rank: 98
J. C. Penney Company, Inc. Formed:1979–80
Total Raised, 1981–82: $91,484
Total Raised, 1985–86: $301,185
Difference: $209,701 = 229.22% Rank: 99
United Parcel Service of America, Inc. Formed:1979–80
Total Raised, 1985–86: $567,328
Total Raised, 1989–90: $1,865,785
Difference: $1,298,457 = 228.87% Rank: 100

Source: Computer analysis by Sunshine Press Services of Federal Election Commission data, Jan. 1, 1979 through Dec. 31, 2000.

Table 5. Rapid Rises in Corporate PAC Spending, 1979–2002 (After Spending More than $250,000) Microsoft Corporation Formed: 1987–88
Total Spent, 1997–98: $267,500
Total Spent, 1999–00: $1,221,730
Difference: $954,230 = 356 72% Rank: 1
Federal Express Corporation Formed: 1983–84
Total Spent, 1985–86: $392,441
Total Spent, 1987–88: $1,093,998
Difference: $701,557 = 178 77% Rank: 2
Compass Bancshares, Inc. Formed: 1983–84
Total Spent, 1991–92: $363,617
Total Spent, 1993=94: $974,893
Difference: $611,276 = 168 11% Rank: 3
Metropolitan Life Insurance Company Formed: 1979–80
Total Spent, 1997–98: $310,633
Total Spent, 1999–00: $815,624
Difference: $504,991 = 162 57% Rank: 4
Bell Atlantic Corp. Formed: 1983–84
Total Spent, 1995–96: $388,073
Total Spent, 1997–98: $1,006,783
Difference: $618,710 = 159 43% Rank: 5
Planned Parenthood Action Fund, Inc. Formed: 1995–96
Total Spent, 1997–98: $359,408
Total Spent, 1999–00: $914,501
Difference: $555,093 = 154 45% Rank: 6
RJR Nabisco, Inc. Formed: 1979–80
Total Spent, 1987–88: $348,897
Total Spent, 1989–90: $872,626
Difference: $523,729 = 150 11% Rank: 7
Southern Bell Telephone & Telegraph Co. Formed: 1979–80
Total Spent, 1989–90: $265,096
Total Spent, 1991–92: $650,905
Difference: $385,809 = 145 54% Rank: 8
American Information Technologies Corp. Formed: 1983–84
Total Spent, 1991–92: $518,442
Total Spent, 1993=94: $1,207,881
Difference: $689,439 = 132 98% Rank: 9
Tenneco, Inc. Formed: 1979–80
Total Spent, 1993=94: $380,688
Total Spent, 1995–96: $860,515
Difference: $479,827 = 126 04% Rank: 10
Banc One Corporation Formed: 1979–80
Total Spent, 1991–92: $421,467
Total Spent, 1993=94: $934,434
Difference: $512,967 = 121 71% Rank: 11
American General Corporation Formed: 1979–80
Total Spent, 1997–98: $291,488
Total Spent, 1999–00: $634,510
Difference: $343,022 = 117 68% Rank: 12
Boeing Company Formed: 1981–82
Total Spent, 1995–96: $370,105
Total Spent, 1997–98: $759,495
Difference: $389,390 = 105 21% Rank: 13
MBNA Corporation Formed: 1991–92
Total Spent, 1993=94: $403,796
Total Spent, 1995–96: $825,974
Difference: $422,178 = 104 55% Rank: 14
Compass Bancshares, Inc. Formed: 1983–84
Total Spent, 1995–96: $729,612
Total Spent, 1997–98: $1,468,094
Difference: $738,482 = 101 22% Rank: 15
Southtrust Corporation Formed: 1979–80
Total Spent, 1995–96: $266,593
Total Spent, 1997–98: $530,794
Difference: $264,201 = 99 10% Rank: 16
FirstEnergy Corp. (Ohio Edison) Formed: 1981–82
Total Spent, 1997–98: $253,675
Total Spent, 1999–00: $502,890
Difference: $249,215 = 98 24% Rank: 17
Koch Industries, Inc. Formed: 1989–90
Total Spent, 1995–96: $428,664
Total Spent, 1997–98: $807,318
Difference: $378,654 = 88 33% Rank: 18
Northrop Corporation Formed: 1979–80
Total Spent, 1993=94: $422,969
Total Spent, 1995–9G: $794,880
Difference: $371,911 = 87 93% Rank: 19
J. P. Morgan & Company, Inc. Formed: 1979–80
Total Spent, 1985–86: $262,250
Total Spent, 1987–88: $492,681
Difference: $230,431 = 87 87% Rank: 20
Philip Morris, Inc. Formed: 1979–80
Total Spent, 1983–84: $403,699
Total Spent, 1985–86: $754,949
Difference: $351,250 = 87 01% Rank: 21
Eli Lilly & Company Formed: 1979–80
Total Spent, 1995–96: $375,583
Total Spent, 1997–98: $700,580
Difference: $324,997 = 86 53% Rank: 22
Southwestern Bell Corporation Formed: 1979–80
Total Spent, 1993=94: $365,700
Total Spent, 1995–96: $674,857
Difference: $309,157 = 84 54% Rank: 23
Rockwell International Corporation Formed: 1979–80
Total Spent, 1981–82: $266,688
Total Spent, 1983–84: $490,541
Difference: $223,853 = 83 94% Rank: 24
United Parcel Service of America, Inc. Formed: 1979–80
Total Spent, 1991–92: $1,835,231
Total Spent, 1993=94: $3,350,884
Difference: $1,515,653 = 82 59% Rank: 25
General Telephone & Electronics Corp. Formed: 1979–80
Total Spent, 1989–90: $420,131
Total Spent, 1991–92: $765,805
Difference: $345,674 = 82 28% Rank: 26
United Parcel Service of America, Inc. Formed: 1979–80
Total Spent, 1985–86: $522,514
Total Spent, 1987–88: $943,815
Difference: $421,301 = 80 63% Rank: 27
Waste Management, Inc. Formed: 1979–80
Total Spent, 1985–86: $341,975
Total Spent, 1987–88: $615,059
Difference: $273,084 = 79 85% Rank: 28
Houston Industries, Inc. Formed: 1979–80
Total Spent, 1983–84: $256,353
Total Spent, 1985–86: $460,684
Difference: $204,331 = 79 71% Rank: 29
Cigna Corporation Formed: 1979–80
Total Spent, 1997–98: $352,512
Total Spent, 1999–00: $624,736
Difference: $272,224 = 77 22% Rank: 30
United Parcel Service of America, Inc. Formed: 1979–80
Total Spent, 1987–88: $943,815
Total Spent, 1989–90: $1,658,366
Difference: $714,551 = 75 71% Rank: 31
Black America's PAC Formed: 1995–96
Total Spent, 1995–96: $1,899,486
Total Spent, 1997–98: $3,337,602
Difference: $1,438,116 = 75 71% Rank: 32
Chase Manhattan Corporation Formed: 1979–80
Total Spent, 1989–90: $274,760
Total Spent, 1991–92: $481,894
Difference: $207,134 = 75 39% Rank: 33
Barnett Banks of Florida, Inc. Formed: 1979–80

Total Spent, 1985–86: $304,230
Total Spent, 1987–88: $532,509
Difference: $228,279 = 75 04% Rank: 34
Bankamerica Corporation Formed: 1981–82
Total Spent, 1993=94: $311,633
Total Spent, 1995–96: $535,516
Difference: $223,883 = 71 84% Rank: 35
NationsBank Formed: 1979–80
Total Spent, 1997–98: $607,578
Total Spent, 1999–00: $1,041,837
Difference: $434,259 = 71 47% Rank: 36
United Technologies Corporation Formed: 1979–80
Total Spent, 1993=94: $263,300
Total Spent, 1995–96: $450,078
Difference: $186,778 = 70 94% Rank: 37
Southwestern Bell Corporation Formed: 1979–80
Total Spent, 1997–98: $961,990
Total Spent, 1999–00: $1,642,657
Difference: $680,667 = 70 76% Rank: 38
Lockheed Corporation Formed: 1979–80
Total Spent, 1991–92: $422,512
Total Spent, 1993=94: $708,346
Difference: $285,834 = 67 65% Rank: 39
Union Pacific Corporation Formed: 1979–80
Total Spent, 1985–86: $296,938
Total Spent, 1987–88: $495,482
Difference: $198,544 = 66 86% Rank: 40
Household Finance Corporation Formed: 1979–80
Total Spent, 1989–90: $270,795
Total Spent, 1991–92: $444,889
Difference: $174,094 = 64 29% Rank: 41
Sierra Club (environmentalist) Formed: 1979–80
Total Spent, 1997–98: $441,208
Total Spent, 1999–00: $721,429
Difference: $280,221 = 63 51% Rank: 42
Westinghouse Electric Corp. Formed: 1979–80
Total Spent, 1987–88: $264,890
Total Spent, 1989–90: $431,697
Difference: $166,807 = 62 97% Rank: 43
American Telephone & Telegraph Co. Formed: 1983–84
Total Spent, 1985–86: $1,744,301
Total Spent, 1987–88: $2,841,464
Difference: $1,097,163 = 62 90% Rank: 44
General Motors Corporation Formed: 1979–80
Total Spent, 1993=94: $477,782
Total Spent, 1995–96: $777,521
Difference: $299,739 = 62 74% Rank: 45
Keycorp Formed: 1979–80
Total Spent, 1995–96: $376,200
Total Spent, 1997–98: $611,975
Difference: $235,775 = 62 67% Rank: 46
Union Pacific Corporation Formed: 1979–80
Total Spent, 1989–90: $731,974
Total Spent, 1991–92: $1,188,407
Difference: $456,433 = 62 36% Rank: 47
Sierra Club (environmentalist) Formed: 1979–80
Total Spent, 1987–88: $299,891
Total Spent, 1989–90: $486,795
Difference: $186,904 = 62 32% Rank: 48
Chrysler / Gulfstream Aerospace Corp. Formed: 1979–80
Total Spent, 1993=94: $417,015
Total Spent, 1995–96: $659,369
Difference: $242,354 = 58 12% Rank: 49
Pfizer, Inc. Formed: 1979–80
Total Spent, 1997–98: $536,471
Total Spent, 1999–00: $844,132
Difference: $307,661 = 57 35% Rank: 50
Chase Manhattan Bank Formed: 1979–80
Total Spent, 1989–90: $269,299
Total Spent, 1991–92: $423,632
Difference: $154,333 = 57 31% Rank: 51
Sierra Club (environmentalist) Formed: 1979–80
Total Spent, 1993=94: $431,725
Total Spent, 1995–96: $677,883
Difference: $246,158 = 57 02% Rank: 52
Banc One Corporation Formed: 1979–80
Total Spent, 1989–90: $269,833
Total Spent, 1991–92: $421,467
Difference: $151,634 = 56 20% Rank: 53
Raytheon Company Formed: 1979–80
Total Spent, 1995–96: $385,863
Total Spent, 1997–98: $601,994
Difference: $216,131 = 56 01% Rank: 54
Eli Lilly & Company Formed: 1979–80
Total Spent, 1997–98: $700,580
Total Spent, 1999–00: $1,089,599
Difference: $389,019 = 55 53% Rank: 55
Chrysler / Gulfstream Aerospace Corp. Formed: 1979–80
Total Spent, 1995–96: $659,369
Total Spent, 1997–98: $1,021,714
Difference: $362,345 = 54 95% Rank: 56
Amsouth Bancorporation Formed: 1983–84
Total Spent, 1997–98: $304,524
Total Spent, 1999–00: $470,782
Difference: $166,258 = 54 60% Rank: 57
Glaxo, Inc. Formed: 1985–86
Total Spent, 1997–98: $716,634
Total Spent, 1999–00: $1,104,801
Difference: $388,167 = 54 17% Rank: 58
Crawford Group / Enterprise Leasing Formed: 1987–88
Total Spent, 1993=94: $253,769
Total Spent, 1995–96: $391,094
Difference: $137,325 = 54 11% Rank: 59
Associates Corp. (Ford Motor Co.) Formed: 1989–90
Total Spent, 1995–96: $342,269
Total Spent, 1997–98: $526,937
Difference: $184,668 = 53 95% Rank: 60
Morgan Stanley & Company, Inc. Formed: 1979–80
Total Spent, 1985–86: $303,919
Total Spent, 1987–88: $465,992
Difference: $162,073 = 53 33% Rank: 61
Houston Industries, Inc. Formed: 1979–80
Total Spent, 1995–96: $470,646
Total Spent, 1997–98: $720,544
Difference: $249,898 = 53 10% Rank: 62
Outback Steakhouse, Inc. Formed: 1991–92
Total Spent, 1997–98: $636,741
Total Spent, 1999–00: $974,275
Difference: $337,534 = 53 01% Rank: 63
Household Finance Corporation Formed: 1979–80
Total Spent, 1997–98: $512,016
Total Spent, 1999–00: $782,819
Difference: $270,803 = 52 89% Rank: 64
General Motors Corp. / Hughes Aircraft Formed: 1979–80
Total Spent, 1985–86: $271,290
Total Spent, 1987–88: $412,181
Difference: $140,891 = 51 93% Rank: 65
American Airlines Formed: 1979–80
Total Spent, 1991–92: $282,647
Total Spent, 1993=94: $426,852
Difference: $144,205 = 51 02% Rank: 66
Cooper Industries, Inc. Formed: 1979–80
Total Spent, 1989–90: $264,213
Total Spent, 1991–92: $397,960
Difference: $133,747 = 50 62% Rank: 67
Flowers Industries, Inc. Formed: 1979–80
Total Spent, 1993=94: $254,819
Total Spent, 1995–96: $383,269
Difference: $128,450 = 50 41% Rank: 68
Source: Computer analysis by Sunshine Press Services of Federal Election Commission data,
Jan. l, 1979through Dec. 31, 2000.

APPENDIX B: Publication List

The news organizations listed below have published news reports or commentary by Edward Roeder

Daily Newspapers
Albuquerque Journal
Arizona Republic
Arkansas Gazette-Democrat
Atlanta Constitution *
Austin American-Statesman
Baltimore Sun *
Boston Globe *
Chicago Sun-Times *
Chicago Tribune *
Cleveland Plain Dealer
Dallas Morning News
Denver Post
Deseret News
Detroit Free Press*
Detroit News *
Florida Today
Fort Lauderdale News & Sun-Sentinel
Greensboro News & Record *
Kansas City Star
Los Angeles Times
Louisville Courier-Journal *
Miami Herald *
Nashville Tennessean
New Orleans Times-Picayune
New York Daily News
New York Newsday
New York Times *
Orlando Sentinel *
Philadelphia Inquirer *
Portland Oregonian
Providence Journal
Richmond Times-Dispatch
Sacramento Bee *
San Jose Mercury News
Seattle Post-Intelligencer
Seattle Times *
St. Louis Post-Dispatch *
St. Petersburg Times *
Tampa Tribune
USA Today
Washington Post *
Washington Times

Articles ran on page 1 or led Sunday section

Periodicals
American Banker *
Capital Style
Conservative Digest *
Free Inquiry *
Monthly Business Review *
Ms. *
New Republic *
New Times *
Newsweek
Playboy *
Politics Today *
Rolling Stone *
Saturday Review *
Sierra *
Space Business international *
The Nation *
Time

Village Voice *
Washington Monthly *
Washingtonian *
Bylined feature magazine articles
Broadcast
ABC News (TV) *
CBS News (TV) *
CNN *
Canadian Broadcast'g Co. (Radio) *
KABC–TV (Hollywood, CA) *
National Public Radio *
Nightline (ABC News-TV) *
NBC News (TV & Radio)
20–20 (ABC News—TV)
WBAL–TV (Baltimore, MD)
WDIV–TV (Detroit, Mich.) *
WJLA–TV (Washington, DC) *
WJXT–TV (Jacksonville, Fla.) *
WJZ–TV (Baltimore, MD)
WPLG–TV (Miami, Fla.) *
WRC–TV (Washington, DC)
WTVT–TV (Tampa, Fla.) *
WUSA–TV (Washington, DC) *
Paid on-air appearanc(s)

MTC–00030612

BEFORE THE UNITED STATES DEPARTMENT OF JUSTICE

UNITED STATES OF AMERICA, Plaintiff, V. Civil Action No. 98–1232 (CKK) MICROSOFT CORPORATION, Defendant.

STATE OF NEW YORK ex rel.

Attorney General Eliot Spitzer, et al., Plaintiffs, V. Civil Action No. 98–1233 (CKK) MICROSOFT CORPORATION, Defendant.

DECLARATION OF JOSEPH E. STIGLITZ AND JASON FURMAN

TABLE OF CONTENTS

I. QUALIFICATIONS

Our names are Joseph Stiglitz and Jason Furman. Dr. Stiglitz is a Professor at Columbia Business School, Columbia's Graduate School of Arts and Sciences (in the Department of Economics), and Columbia's School of International and Public Affairs. In 2001, Dr. Stiglitz was awarded the Nobel Prize in Economic Sciences. In addition, Dr. Stiglitz serves as a Senior Director and Chairman of the Advisory Committee at Sebago Associates, Inc., an economic and public policy consulting firm.

Dr. Stiglitz previously served as the World Bank's Chief Economist and Senior Vice President for Development Economics. Before joining the Bank, he was the Chairman of the President's Council of Economic Advisers. Dr. Stiglitz has also served as a professor of economics at Stanford, Princeton, Yale, and All Souls College, Oxford.

As an academic, Dr. Stiglitz helped create a new branch of economics—''The Economics of Information''—which has received widespread application throughout economics. In the late 1970s and early 1980s, Dr. Stiglitz helped revive interest in the economics of technical change and other factors that contribute to long-run increases in productivity and living standards. Dr. Stiglitz is also a leading scholar of competition policy.

In 1979, the American Economic Association awarded Dr. Stiglitz its biennial John Bates Clark Award, given to the economist under 40 who has made the most significant contributions to economics. His work has also been recognized through his election as a fellow to the National Academy of Sciences, the American Academy of Arts and Sciences, and the American Philosophical Society, as well as his election as a corresponding fellow of the British Academy. He has also been awarded several honorary doctorates.

Jason Furman is a Lecturer in economics at Yale University. In addition, Mr. Furman is a Director at Sebago Associates. Mr. Furman previously served as Special Assistant to the President for Economic Policy at the White House, where his responsibilities included tax policy, the Federal budget, Social Security, anti-poverty programs, and other economic policy issues.

II. PURPOSE

This Declaration was commissioned by the Computer & Communications Industry Association (CCIA) as an independent analysis of the competitive effects of the Proposed Final Judgment. The views and opinions expressed in this Declaration are solely those of the authors based on their own detailed study of the relevant economic theory and court documents; they do not necessarily reflect the views and opinions of CCIA. In addition, the views and opinion expressed in this Declaration should not be attributed to any of the organizations with which the authors are or have previously been associated.

III. INTRODUCTION

Competition is the defining characteristic of a market economy. It provides the incentive to produce new products that consumers want, to improve efficiency and lower the costs of production, and to pass on these innovations in the form of lower prices for consumers. In a competitive market, a firm that does not act in the best interests of consumers will be punished and, ultimately, will fail. But when competition is imperfect—or when it is nonexistent as in the limiting case of monopoly—the incentives to undertake these beneficial actions may be attenuated. In fact, a firm may even face incentives to behave in ways which do not serve the interests of consumers or the economy more generally. Monopoly power may lead a firm to underinvest in innovation, misdirect its investments, or undertake other activities in order to stifle competition rather than to improve products. Costs of production may be excessive because the monopolist has insufficient incentives for efficiency, has incentives to undertake costly measures to deter competition, or undertakes measures to raise rivals'' costs. And consumers will face higher prices and fewer choices in the short run; in the long run, the losses to consumers may be even more severe.

In a unanimous decision, the full Court of Appeals for the DC Circuit upheld the District Court finding that Microsoft was guilty of violating § 2 of the Sherman Act through its illegal maintenance of a monopoly in the market for Intel-compatible personal computer (PC) operating systems.[1] The Court of Appeals also affirmed numerous findings of fact concerning the consequences of this illegal monopolization for misdirecting innovation, raising rivals'' costs, and limiting consumer choice.

The desire to maintain this monopoly, even against potentially superior products, creates a powerful incentive for Microsoft to eliminate or weaken competition that could erode or even eliminate its monopoly. In the mid-1990s, the principal threat to Microsoft's Windows operating system came from the development of the Netscape browser and Java technologies,[2] which allowed

[1] United States v. Microsoft Corp., 253 F.3d 34 (DC Cir. 2001).

[2] ''The Java technologies include: (1) a programming language; (2) a set of programs written

programmers to write applications to Netscape and Java, meaning that such programs would then work on any operating system that would run Netscape or Java. By reducing or even eliminating the cost of producing applications for different operating systems, these technological rivals reduced the barriers to entry for a new operating system and threatened, over the longer run, to erode Microsoft's monopoly in Intel-compatible PC operating systems by allowing competitors to provide superior products at a lower cost.

Microsoft's conduct has effectively eliminated the threat posed by Netscape and Java. Given ongoing rapid technological progress, it is impossible to predict with certainty where the next challenge to Microsoft Windows will come from. The experience in this area, however, suggests that it is likely to come from rivalry at the borders of operating systems, in particular from ''middleware'' that makes it possible for programmers to write to the ''middleware'' rather than to the underlying operating system. One such example comes from the increasingly important area of multimedia: streaming media players. Whether the next challenge to Microsoft's operating systems monopoly comes from a multimedia package or another technology, Microsoft will continue to have the same incentives and ability to stifle competition as it displayed against Netscape and Java in the mid-1990s.

The principal goal of any remedy for Microsoft's illegal behavior in this case should be to foster competition and expand choices for consumers. The key to achieving this goal is changing Microsoft's incentives and taking steps to increase competition. A structural remedy, such as splitting up the company, would most directly alter incentives. Where such structural changes are not possible, the remedy should prohibit and regulate the conduct that Microsoft has used in the past and will have an incentive to use in the future to eliminate threats from ''middleware'' products that threaten to limit its monopoly power by usurping some, and perhaps eventually all, of the important functions of the Windows operating system.

The Revised Proposed Final Judgment (PFJ) of November 6, 2001 does not change Microsoft's incentives to undertake anticompetitive acts to stifle consumer choice by thwarting potentially superior products.[3] Furthermore, the PFJ provides few effective prohibitions against future anticompetitive conduct: It alternatively ratifies Microsoft's existing conduct, contains sufficient loopholes to allow Microsoft to circumvent the legislation, and suffers from toothless enforcement procedures that would allow Microsoft to reap the fruits of its monopoly for a significant, and potentially even indefinite, period. In our view, the PFJ would leave intact Microsoft's ability to maintain, and benefit from, its Windows operating system monopoly, while allowing it to continue to limit choices for consumers and stifle innovation.

The PFJ does not even accomplish the limited remedial goals articulated in the U.S. Department of Justice's Competitive Impact Statement (CIS).[4] Specifically, in addition to its loopholes and its inadequate enforcement mechanism, the PFJ is entirely silent on several key findings of the Court of Appeals, including the commingling of applications and operating systems code, the pollution of Java, and the applications barrier to entry more broadly.

The PFJ should be rejected and replaced with a remedy that changes Microsoft's incentives to unfetter the market for competition. At a minimum, a remedy in this case needs to restrain Microsoft's conduct, by restricting the means through which Microsoft can illegally maintain and benefit from its monopoly.

The goal of this Declaration is to analyze the PFJ. It does not propose a detailed alternative remedy. It is important to note, however, that the proposal by the litigating States, while imperfect, is clearly superior to the PFJ in all of these regards. We do not address more aggressive remedies—such as structural changes to break up Microsoft or impose more extensive limitations on its intellectual property rights—but we note that such broader measures may well be necessary and desirable in order to alter Microsoft's incentives for anti-competitive behavior.[5] We are convinced, however, that the PFJ fails to meet the minimum requirement of an acceptable remedy—that is, it is unlikely to substantially increase competition in the relevant market.

The remainder of this Declaration contains five sections. First, it presents a brief discussion of the modem theory of competition, focusing on its relation to innovation. Second, it summarizes the relevant facts and legal conclusions relating to Microsoft. Third, it outlines what an effective remedy in this case should entail. Fourth, it examines the PFJ and highlights its deficiencies in comparison to this effective remedy. Finally, the paper concludes with a brief discussion of practical measures that could provide a more effective remedy.

IV. THE MODERN ECONOMIC THEORY OF COMPETITION AND MONOPOLY

This section presents a brief overview of the modem economic theory of competition and monopoly. The theory of competition has evolved rapidly in the last few decades, due in part to the natural evolution of economic thought and in part to the issues raised by the ''new economy'' (such as the importance of network effects and rapid innovation). Given the vast literature on the topic, this discussion is necessarily selective and focuses on the most relevant issues for Microsoft's monopoly of the market for operating systems for Intel-compatible PCs. This theoretical background motivates the conclusions about the PFJ.

A. Acquisition of a monopoly

The traditional view of monopoly is that in specific industries, like public utilities, increasing returns to scale create a situation in which luck or initial success will eventually lead to one firm that can maintain its monopoly by controlling an entire market and thus benefiting from the lower average costs of production that result from the larger scale of production. This aspect of the traditional view is still salient in the software market. Producing a software program has high fixed costs in the form of investments in research and development but, once this investment has been made, virtually no marginal cost from producing additional units. As a result, the larger the scale of production, the lower the average cost. By itself, these increasing returns to scale will provide a powerful force for consolidation.

The modem view of monopoly has added an additional effect that can strengthen the advantages enjoyed by the lucky or initially successful firm: network effects.[6] Network effects arise when the desirability of a product depends not just on the characteristics of the product itself but also on how many other people are using it.

Network externalities may be direct: as a user of Microsoft Word, I benefit when many other people also use the program because it is easier to share Word files. Network externalities may also be indirect: I am more likely to purchase a computer and operating system if I know that more software choices are currently available (and will be available in the future) for this system. An operating system with a larger set of existing (and expected) compatible applications will be more desirable. This indirect network effect has been called the ''applications barrier to entry.''[7] The main reason that consumers demand a particular operating system is its ability to run the applications that they want. In developing applications, Independent Software Vendors (ISVs) incur substantial sunk costs and thus face increasing returns to scale. This motivates ISVs to first write to the operating system with the largest installed base. Because ''porting'' an application to a different operating system will result in substantial additional fixed costs, a firm will have less incentive to produce the application for operating systems with a smaller installed base, and may do so with a delay or forgo porting completely.

The applications barrier to entry can skew competition for an extended period of time and ensure that any monopoly power, once established, will tend to persist. In choosing

in that language, called the 'Java class libraries,'' which expose APIs; (3) a compiler, which translates code written by a developer into 'bytecode'; and (4) a Java Virtual Machine ('JVM'), which translates bytecode into instructions to the operating system.'' See 253 F.3d at 74, citing Findings of Fact ¶73, United States v. Microsoft Corp., 84 F. Supp. 2d 9, 29 (D.DC 1999).

[3] United States v. Microsoft Corp., Revised Proposed Final Judgment, in the U.S. District Court for D.C, November 6, 2001.

[4] U.S. Department of Justice (November 15, 2001), Competitive Impact Statement in United States vs. Microsoft Corp.

[5] Restrictions on intellectual property rights have been used as a remedy in past antitrust cases, for example IBM's 1956 tabulating machines case, in a manner that is both effective and largely without adverse effects.

[6] For an overall survey, see Michael Katz and Carl Shapiro (1994), ''Systems Competition and Network Effects.'' Journal of Economic Perspectives, 8:2, 93–115. For a specific application to Microsoft, see Timothy Bresnahan (2001), ''The Economics of the Microsoft Case.'' Mimeo available at http://www.stanford.edu/tbres/Microsoft/The Economics of The Microsoft Case.pdf.

[7] Franklin Fisher, ''Direct Testimony of Franklin Fisher'' in United States v. Microsoft Corp.

a PC and an operating system, consumers make a large fixed investment. In addition, because a considerable amount of learning is associated with the use of operating systems and associated applications, and because files created under one applications software program may not be easily or perfectly transferable to others, there are large costs associated with switching. As a result, consumers will evaluate, among other factors, the current existence of compatible applications and the likely number of future compatible applications.[8] The current number of compatible applications is likely to depend directly on the past and current market share of the operating system. A consumer's reasonable evaluation of the prospects for the continued support of his or her favorite applications and the development of new applications is also likely to be based on current market share. As a result, increased market share indirectly increases the desirability of an operating system.

Empirically, this applications barrier to entry is dramatic. At its peak in the mid-1990s, IBM's operating system, OS/2 Warp, had 10 percent of the market for operating systems for Intel-compatible PCs and ran approximately 2,500 applications. In contrast, Windows supported over 70,000 applications.[9] Establishing a new operating system that effectively competes head-to-head with Windows would require the hugely expensive task of attracting ISVs to port thousands or even tens of thousands of programs to the new operating system, a process with a substantial fixed cost and, in the absence of a large guaranteed market, little scope to benefit from economies of scale. Particularly important to the applications barrier to entry is the availability of applications providing key functionalities, such as office productivity. Microsoft's dominance in this area, and its choice about whether or not to port its Microsoft Office program to alternative operating systems, can add a new and even higher level to the applications barrier to entry.

With this barrier to entry, a monopoly once established may be hard to dislodge. Anticompetitive practices early in the competitive struggle can lead to a market dominance that can persist, even if the anticompetitive practices which gave rise to the monopoly position are subsequently prohibited. These hysteresis effects are reinforced by switching costs. Learning a language or a program interface may involve significant costs. Users must therefore be convinced that an alternative program is substantially superior if they are to be induced to incur the learning and other costs associated with switching to an alternative product. These ''lock in'' effects make it more difficult to dislodge a firm that has established a dominant position, even when it is technically inferior to rivals.

This perspective has two important policy implications. First, it is imperative to address anticompetitive practices as quickly as possible. Delay is not only costly, but it impedes the restoration of competition even in the longer run. Second, prohibiting the practices that gave rise to the monopoly may not suffice to restore competition. Stronger conduct, and possibly structural, remedies may be required.

B. Potential for competition

In the most simplistic view, a monopoly once attained is permanent. Increasing returns to scale and network externalities make the monopolist impregnable—any new entrant can be priced out of business by the monopolist—which can then go back to charging the monopoly price for the product.

In contrast to this simplistic static view, the economist Joseph Schumpeter presented a dynamic vision of technological change giving rise to a series of temporary monopolies. In his vision, the most successful firm in a winner-take-all contest would become a temporary monopolist, benefiting from the rents that this monopoly confers—a process necessary to justify incurring the sunk costs in research and development required to obtain the monopoly in the first place. But, in the Schumpeterian vision, this monopoly would eventually be toppled by entry as a newly innovative entrant displaced the monopolist with a superior product, thus reaping the benefits of increasing returns to scale and network externalities.[10]

The real world likely lies somewhere between these two views. A monopoly is not a fixed part of the economic landscape. But the downfall of a monopoly is not inevitable. In fact, more recent economic research strongly indicates that Schumpeter's conclusion was wrong; when restraints on anticompetitive conduct are absent, a monopoly can take steps to ensure that it is likely to be perpetuated.[11] These steps can suppress the overall level of innovation and have other high social costs.[12] Significant network effects combined with switching costs, as discussed above, represent one way in which a firm can perpetuate its market power.

Understanding this point is central to understanding what motivated the actions of Microsoft in promoting Internet Explorer and restraining Netscape and Java, and also to understanding the motivations of a conduct remedy to improve competition. Network externalities are not a ''fixed factor'' in the economic landscape. They depend, at least in part, on decisions by the monopolist. A monopolist has substantial resources at its disposal to strengthen barriers to entry and thus to maintain and strengthen its monopoly power. Exclusionary conduct by the monopoly can be used to prevent a reduction in the barriers to entry or even affirmatively to raise them even higher. Java and Netscape would have reduced the monopoly power of Windows by allowing a greater variety of programs to function on a greater variety of operating systems. The social benefits from such innovation were likely significant, but Microsoft would have experienced significant losses from the innovation through the erosion of its monopoly power.

Similarly, this same point can provide the rationale for structural or conduct remedies that can potentially reduce barriers to entry and thus increase competition in part, or all, of the market. The fundamental idea is that Microsoft acted as it did because it was afraid that Netscape and Java would reduce the applications barrier to entry and thus undermine its operating systems monopoly. By preventing this anticompetitive behavior, and indeed promoting competition, a conduct remedy could have precisely the opposite effect, creating the conditions for the dynamic, innovative Schumpeterian competition that would otherwise be absent in this market. In understanding the monopoly in the operating systems market, and how it fits into the overall PC platform, it is useful to introduce some issues specific to this area. Timothy Bresnahan, a Professor of Economics at Stanford University and a former Deputy Assistant Attorney General and Chief Economist at the U.S. Department of Justice Antitrust Division, formulated the concept of ''Divided Technical Leadership.''[13] The concept is that although each aspect of the platform is dominated by a single company, different companies dominate different ''layers'' of the platform: ''At one stage, all of IBM and Compaq (computer), Microsoft (OS), Intel (CPU), Netware (networking OS), WordPerfect and Lotus (near-universal applications) participated in technological leadership of the PC platform.''[14] In a situation of divided technical leadership, according to Bresnahan, competition comes from two sources: ''(1) firms in one layer encouraging entry and epochal change in another layer and (2) rivalry at layer boundaries.''[15] To the degree that divided technical leadership is absent, because for example Microsoft controls many of the layers (operating system, office applications, networking, browsers, etc.), competition will be restricted. Any measures to facilitate divided technical leadership, even if they leave the monopoly at any given layer intact, will facilitate competition and thereby benefit consumers in the form of greater innovation, more choices, and lower prices.

C. Consequences of monopoly

Traditional economic theory suggests that the principal consequence of a monopoly is to raise prices and restrict production. This combination has two consequences. First, higher prices allow the monopolist to capture some of the surplus previously enjoyed by

[8] Nicholas Economides (1996), ''The Economics of Networks.'' International Journal of Industrial Organization, 14:2.

[9] Findings of Fact, ¶40 and ¶46, 84 F. Supp. 2d at 20, 22.

[10] Joseph Schumpeter (1942 / 1984), Capitalism, Socialism and Democracy. Harper Collins, New York.

[11] See, among other references, Richard Gilbert and David Newbery (1980), ''Preemptive Patenting and the Persistence of Monopoly.'' American Economic Review 72(3), pp. 514–526 and Partha Dasgupta and Joseph Stiglitz (1980), ''Uncertainty, Market Structure and the Speed of R&D,'' Bell Journal of Economics, 11 (1), pp. 1–28.

[12] Joseph Stiglitz (1987). ''Technological Change, Sunk Costs, and Competition.'' Brookings Papers on Economic Activity, 3, pp. 883–937.

[13] Timothy Bresnahan and Shane Greenstein (1999), ''Technological Competition and the Structure of the Computer Industry.'' Journal of Industrial Economics, 47(1): pp. 1–40 and Bresnahan (2001).

[14] Bresnahan (2001), p. 5.

[15] Bresnahan (2001), p. 6.

consumers. Second, restricted production results in a deadweight loss for society, the so-called ''Harberger triangle,'' to the extent that the value placed on the forgone consumption by consumers exceeds its cost to producers.[16]

Over the last few decades, economists have substantially enhanced this traditional theory and explored other ways in which market power imposes social costs. The modem view is that when competition is imperfect, firms try to maintain and extend their market power by taking actions to restrict competition. In the world of perfect competition, the source of success for firms is producing innovations that benefit consumers and reduce prices. In the world of imperfect competition, an additional—and perhaps paramount—source of success is the effort to reap monopoly profits, capture rents, deter entry into the market, restrict competition, and raise rivals'' costs.[17]

Under the new view, the social costs of monopolies go well beyond the ''Harberger triangles'' that result from higher prices and restricted output. In fact, even if the monopolist is not currently restricting output, the steps taken to maintain the monopoly will result in substantial economic inefficiencies and costs to society. These costs may be far larger than the monopoly profits and far larger than the Harberger triangles. These social losses reflect higher costs of production (both for the firm and its rival), limited or distorted investment in innovation, a restricted set of potentially inferior choices for consumers, and, in the long run, higher prices.

D. Monopolies and innovation

The information technology industry is characterized by a rapid rate of technological change. As the modem theory of competition and monopoly underscores, it is important to focus not just on the static issues that affect consumers today, but also on how the mixture of monopoly, competition, and the intellectual property regime affects the pace and direction of innovation. Schumpeter emphasized that monopolies would provide both the incentives and the means for innovation. According to Schumpeter, the fear of losing monopoly rents would drive a monopolist to continue innovating and these monopoly rents—or the promise of further monopoly rents in the future—would provide the financing for these innovations. Schumpeter's vision contains elements of truth: the threat of competition may induce monopolists to invest more in innovation than it otherwise might. But the pace of innovation may be even higher if the incumbent's monopoly power were curtailed. Monopoly power could lower the pace of innovation for four reasons.

First, previous innovations are inputs into any subsequent innovation. Monopoly power can be thought of as increasing the cost of one of the central inputs into follow-on innovations. Standard economic theory predicts that as the cost of inputs into any activity increases, the level of that activity falls.

Second, with more substantial barriers to entry, the threat of Schumpeterian competition and therefore the incentives to innovate are diminished. In the extreme case, if a monopoly could ensure that there were no threat of competition, it would no longer have to innovate. A monopolist's anticompetitive actions to raise barriers to entry will reduce its future incentives to innovate; similarly measures that increase competition will increase the Schumpeterian incentive.

Third, innovation itself may be misdirected in order to secure a monopoly by deterring entry and raising rivals'' costs. In operating systems, for example, the development of alternative proprietary standards and the construction of non-interoperable middleware are examples of innovations that could potentially strengthen monopoly power.

Fourth, the incentives of a monopoly to innovate are limited.[18] Since a monopolist produces less than the socially optimal output, the savings from a reduction in the cost of production are less than in a competitive market. Also, a monopolist's incentives to undertake research will not lead it to the socially efficient level. Rather, its concern is only how fast it must innovate in order to stave off the competition—a level of innovation that may be markedly lower than socially optimal. Consider, for example, a simple patent race in which a monopoly incumbent can observe the position (at least partially) of potential rivals. The monopolist's incentive is to move out in front of the potential rivals by just enough to convince them that they cannot beat the monopolist. Given those beliefs, the rivals do not engage in research, and the monopolist can then slow down its research to a lower level (since it no longer faces a viable threat).

In short, monopolization not only harms consumers by raising prices and reducing output in the short run, but may reduce innovation in the long run. These long-run harms, which are especially important in innovative industries, may substantially exceed the short-run costs to consumers.

V. FACTS AND LEGAL CONCLUSIONS RELATING TO MICROSOFT

In its decision, the Court of Appeals affirmed the District Court's overall judgment, albeit on a narrowed factual and legal basis. The Court of Appeals concluded that ''Microsoft violated § 2 of the Sherman Act by employing anticompetitive means to maintain a monopoly in the operating system market.'' [19] In addition, the Court of Appeals overturned the lower court's judgment that Microsoft violated § 2 of the Sherman Act by attempting to monopolize the web browser market. The Court of Appeals remanded the decision on whether the tying of Internet Explorer to Windows violated § 1 of the Sherman Act and indicated that tying should be evaluated under the rule of reason, rather than under a per se rule; the U.S. Department of Justice chose not pursue this issue further. The Court of Appeals also vacated the District Court's Final Judgment, in part because of the narrowed scope of the judgment on the conclusions of law.

The current task in this case is to develop a remedy that addresses the central finding of the Court of Appeals: the monopolization of the operating systems market. This judgment was based on findings of fact and conclusions of law in three areas: Microsoft has monopoly power in the relevant market, Microsoft behaved anticompetitively, and Microsoft's anticompetitive behavior contributed to the maintenance of its monopoly. These are briefly discussed in turn.

A. Monopoly power

Monopoly power is the power to set prices without regard to competition. It can be inferred by the combination of market share in the relevant market and significant barriers to entry. The District Court found that Microsoft's share of the worldwide market for Intel-compatible PC operating systems exceeded 90 percent in every year of the 1990s and has risen to more than 95 percent in recent years. Microsoft did not dispute these facts, but instead argued that the relevant market was broader and should include all platform software (e.g., servers, handheld devices, Macintosh computers, etc.). The Court of Appeals, however, rejected Microsoft's attempt to broaden the definition of the market, agreeing with the District Court that these other platforms were not ''reasonably interchangeable by consumers for the same purposes.'' [20]

In addition, the Court of Appeals affirmed the finding that Microsoft's dominant market share was likely to persist. This conclusion was based on the substantial barriers to entry, including increasing returns to scale and the applications barrier to entry discussed above. As a result, according to the Court of Appeals, ''Because the applications barrier to entry protects a dominant operating system irrespective of quality, it gives Microsoft the power to stave off even superior new rivals. The barrier is thus a characteristic of the operating systems market, not of Microsoft's popularity.'' [21]

B. Anticompetitive behavior

The Court of Appeals found numerous instances where Microsoft behaved anticompetitively through exclusionary conduct that harmed consumers, had an anticompetitive effect, and had either no ''procompetitive justification'' or an insufficient ''procompetitive justification'' to outweigh the harm. These actions, according to the Court of Appeals, had the intention and effect of preserving or increasing the applications barrier to entry. The Court of Appeals upheld most of the general categories of anticompetitive behavior originally found by the District Court, but overturned some of the District Court's

[16] Arnold Harberger (1954), ''Monopoly and Resource Allocation,'' AEA Papers and Proceedings, 44: 77–87.

[17] Partha Dasgupta and Joseph Stiglitz (1998), ''Potential Competition, Actual Competition and Economic Welfare.'' European Economic Review, 32: 569–577. For an extended discussion and additional references see Joseph Stiglitz (1994), Whither Socialism, MIT Press, Cambridge.

[18] Kenneth Arrow (1962), ''Economic Welfare and the Allocation of Resources for Invention.'' In The Rate and Direction of Inventive Activity, Princeton University Press, Princeton: pp. 609–625.

[19] 253 F.3d at 46

[20] 253 F.3d at 52, quoting United States v. E.I. du Pont de Nemours & Co., 351 U.S. 377, 395 (1956).

[21] 253 F.3d at 56.

specific findings in these areas. The key instances of this anticompetitive behavior found by the Court of Appeals include:

. Restrictive Licenses to Original Equipment Manufacturers (OEMs).[22] Microsoft's Windows license placed restrictions on OEMs that limited their ability to change the look of the Windows desktop, the placement or removal of icons for browsers, or the initial boot sequence. The result was to increase the user share of Internet Explorer, not because of its merits, but because Microsoft limited the crucial OEM channel of distribution for Explorer's chief rival, Netscape.

. Integration of Internet Explorer into Windows.[23] Microsoft discouraged OEMs from installing other browsers and deterred consumers from using them by not including Internet Explorer in the Add/Remove programs list for Windows 98 and commingling the operating system and browser code.

. Agreements with Internet Access Providers (IAPs).[24] Microsoft engaged in exclusionary conduct to restrict the second main distribution channel for Netscape by offering IAPs, including America Online, the opportunity to be prominently featured in Windows in exchange for using the Internet Explorer browser exclusively.

. Dealings with ISVs and Apple.[25] Microsoft further restricted additional outlets for Netscape by providing ISVs with preferential access to information about forthcoming releases of Windows 98 in exchange for their writing to Internet Explorer rather than Netscape. In addition, Microsoft negotiated with Apple to restrict the ability of Macintosh consumers to use Netscape in exchange for continuing to develop and support Microsoft Office for the Macintosh operating system.

. Polluting Java. The Court of Appeals also found that much of Microsoft's behavior visa-vis Java was an attempt to limit a threat to its operating system monopoly rather than benefit consumers. These illegal actions included entering into contracts requiring ISVs to write exclusively to Microsoft's Java Virtual Machine, misleading ISVs into thinking that Microsoft's Java tools were cross-platform compatible, and forcing Intel to terminate its work with Sun Microsystems on Java.[26]

C. Effectiveness of anticompetitive behavior in maintaining the monopoly

Finally, the Court of Appeals found that Microsoft's anticompetitive efforts to increase usage of Internet Explorer and Microsoft's Java Virtual Machine at the expense of Netscape and Sun's Java had the effect of increasing the applications barrier to entry and thus helping to maintain Microsoft's monopoly of the market for operating systems for Intel-compatible PCs. This finding is the crucial link to the economics of the case; a monopoly is neither automatically permanent nor automatically transient. Rather, its persistence depends, in part, on the barriers to entry which, in turn, depend on the actions of the monopolist and the regulation of the government. This finding is also crucial to the development of proposed remedies.

Specifically, the Court of Appeals found that although neither Netscape nor Java posed an imminent threat of completely replacing all the functions of the operating system (and thus should be excluded from the definition of the relevant market for the test of monopoly power), they did pose a nascent threat to Microsoft's future dominance of the operating system market. Though not part of the ''operating systems market,'' they clearly affected the nature of competition in this market. Both Netscape and Java established Applications Programming Interfaces (APIs) that allowed developers to write some programs to Netscape and Java. These programs would then be able to run on any operating system that runs Netscape or Java. The result would be, at least in one segment of applications, a dramatic reduction in the applications barrier to entry. No longer would software developers have to incur additional costs to run on additional operating systems. As a result, Netscape and Java had the potential to act as a crucial level of ''middleware'' between the operating system and the programs, and eventually could ''commoditize the underlying operating system,'' to use the memorable words of then-Microsoft Chairman and CEO Bill Gates in an internal memo.[27]

The Court of Appeals wrote:

We may infer causation when exclusionary conduct is aimed at producers of nascent competitive technologies as well as when it is aimed at producers of established substitutes... the question in this case is not whether Java or Navigator would actually have developed into viable platform substitutes, but (1) whether as a general matter the exclusion of nascent threats is the type of conduct that is reasonably capable of contributing significantly to a defendant's continued monopoly power and (2) whether Java and Navigator reasonably constituted nascent threats at the time Microsoft engaged in the anticompetitive conduct at issue.'' [28]

The court answered in the affirmative on both issues.

VI. OUTLINE OF AN EFFECTIVE CONDUCT REMEDY

The Court of Appeals was clear that the District Court has ''broad discretion'' to fashion a remedy that is ''tailored to fit the wrong creating the occasion for the remedy.'' [29] In the CIS, the Department of Justice appears to take a minimal view of the goals of a remedy, writing that it should ''eliminate Microsoft's illegal practices, prevent recurrence of the same or similar practices, and restore the competitive threat that middleware products posed prior to Microsoft's unlawful undertakings.'' [30] We believe that the PFJ fails even within the narrow terms that the Department of Justice set for itself.

The Court of Appeals appears to provide guidance for a broader remedy, quoting the Supreme Court in saying that the role of a remedies decree in an antitrust case is to ''unfetter a market from anticompetitive conduct'' and ''terminate the illegal monopoly, deny the defendant the fruits of its statutory violation, and ensure that there remain no practices likely to result in monopolization in the future.'' [31]

One type of potential remedy, imposed by the District Court but vacated by the Court of Appeals, is structural. Such a structural remedy would involve breaking Microsoft into two or more companies with the goal of establishing a new set of incentives that foster competition. Although potentially disruptive in the short run, the goal of a structural remedy is to terminate the monopoly and create the structural conditions to prevent it from re-emerging, without requiring ongoing regulation or supervision by the court or the government. Such structural remedies are particularly suitable when there have been a wide variety of anticompetitive practices in the past and when changing market conditions (such as innovation) provide opportunities for new types of anticompetitive conduct in the future. Structural remedies have the further advantage of fundamentally altering incentives.

A second type of potential remedy relates to conduct or licensing, seeking to prevent anticompetitive conduct and foster competition. A conduct remedy has the advantage of avoiding the dramatic and potentially deleterious changes associated with a structural remedy, but suffers from the defect that it is necessarily complicated and requires at least some involvement of the court and the government in regulating private enterprise. Ideally, a conduct remedy would also be structured to affect incentives: in particular, such a remedy should raise the costs of acting in an exclusionary manner.

The remainder of this section discusses an outline of the elements of an effective conduct remedy that seeks to achieve three goals: creating more choices for consumers, reducing the applications barrier to entry, and preventing Microsoft from strengthening

[22] The Court of Appeals narrowed the scope of this anticompetitive behavior slightly, rejecting the District Court's finding that Microsoft's restrictions on alternative interfaces was anticompetitive, arguing that the ''marginal anticompetitive effect'' of Microsoft's license restrictions was outweighed by the alternative, the ''drastic alteration of Microsoft's copyrighted work.'' See 253 F.3d at 63.

[23] The Court of Appeals, however, overruled the District Court in one instance, finding a sufficient justification for the fact that in certain situations Internet Explorer will override user defaults and launch, for example when alternative browsers do not provide the functionality required by Windows Update. See 253 F.3d at 67.

[24] The Court of Appeals found that several inducements offered by Microsoft to encourage IAPs to use Internet Explorer were not anticompetitive. See 253 F.3d at 68.

[25] The Court of Appeals overturned the finding that Microsoft's deals with Internet Content Providers were anticompetitive. See 253 F.3d at 71.

[26] See 253 F.3d at 74–78. The Court of Appeals, however, found a sufficient procompetitive justification for Microsoft's development of its own version of a Java virtual machine. See id. at 74–75.

[27] United States v. Microsoft Corp., Government Exhibit 20.

[28] 253 F.3d at 79.

[29] 253 F.3d at 105, 107.

[30] CIS, p. 3.

[31] 253 F.3d at 103, quoting Ford Motor Co. v. United States, 405 U.S.562, 577 (1972).

its operating systems monopoly by bringing new products within its scope.

A. Creating more choices for consumers

A conduct remedy should empower rival computer companies to modify their own versions of the computer experience to appeal to consumers. Not only will consumers benefit from the greater product choice, but entry and competition may be enhanced as consumers learn how to interact with a variety of interfaces. At a minimum, empowering OEMs and possibly ISVs to create more choices for consumers would involve: (1) the right to modify the desktop, the start menu, or other fundamental aspects of the computer experience so that OEMs can market PCs with alternative overall ''looks'', different software packages (including supplementing, replacing, or removing Microsoft middleware), and to offer lower-priced options with reduced features; (2) adequate information and technical access to develop applications for, and even modifications to, functionalities included with Windows, which would allow ISVs to develop their own bundle of the Windows operating system plus applications (and/or minus Microsoft middleware) that could be marketed either to OEMs or directly to end users; (3) protection from retaliation by Microsoft for engaging in this conduct; and (4) financial incentives to make changes that benefit consumers.

B. Reducing the applications barrier to entry

The central goal of Microsoft's illegal conduct was to preserve and strengthen the applications barrier to entry so that the Windows operating system continued to be essential to desktop computing. An effective conduct remedy in this case should take steps to reduce the applications barrier to entry, by creating conditions conducive to more competition and by requiring Microsoft to undertake actions that would lower that barrier. Reducing the applications barrier to entry is consistent with the findings of the Court of Appeals and is central to an effective remedy in this case. Although the Court of Appeals rejected or remanded the District Court's findings of liability for tying and for monopolization of the browser market, both of these actions were central to the Court's finding of liability on the § 2 Sherman Act violation for monopolizing the market for operating systems. The Court found that Microsoft used commingling of code and other exclusionary measures to increase the market share for Internet Explorer and reduce the distribution of Netscape and Java in order to strengthen the Windows monopoly.

There are two specific aspects to reducing the applications barrier to entry: (1) encouraging competition in middleware in a manner that makes it easier for developers to write programs that run on a variety of operating systems, and (2) requiring Microsoft to port its dominant applications to alternative operating systems.

C. Preventing Microsoft from strengthening its operating system monopoly by bringing new products within its scope

Microsoft's ability to leverage its Windows monopoly to control other aspects of computing that then reinforce the Windows monopoly is a key part of its strategy of anticompetitive conduct that formed the foundation for the Court of Appeals ruling. To deal with the anticompetitive practices that are ''likely to result in monopolization in the future'' requires a remedy that addresses not just areas of past misconduct, but emerging areas as well.

The next section compares the actual agreement to these elements.

VII. ANALYSIS OF THE PROPOSED FINAL JUDGMENT

The PFJ fails to fulfill even the minimal goals set by the CIS. It does not address many of the proven illegal practices, including commingling, polluting Java, and strengthening the applications barrier to entry more broadly. Furthermore, in our judgment the PFJ would not ''restore the competitive threat that middleware products posed prior to Microsoft's unlawful undertakings.'' [32] Nothing in the PFJ would be likely to resuscitate the conditions of greater ''divided technical leadership'' that prevailed in the mid-1990s when Netscape and Java both presented a serious threat to Microsoft, which Microsoft suppressed through anticompetitive actions.

The PFJ also falls dramatically short of all three elements of the guidelines that appear to have been endorsed by the Court of Appeals for the DC Circuit: it allows Microsoft's illegal monopoly in operating systems to continue and perhaps even be strengthened, it allows Microsoft to keep the fruits of its statutory violation, and it leaves intact all of the incentives and many of the means—for Microsoft to maintain and extend its monopoly in the future, especially in the important emerging areas of web services, multimedia, and hand-held computing.

The main impact of the PFJ is to codify much of Microsoft's existing conduct. Where the agreement limits Microsoft's conduct, there are often sufficient exceptions, loopholes, or alternative actions that Microsoft could undertake to make the initial conduct limits meaningless.

Even where the limits are binding, Microsoft could still flout the conduct restrictions without fear of a timely enforcement mechanism. Because the Technical Committee [33] is essentially advisory and only has expertise in software design, not law and marketing, the only enforcement of the PFJ is through a full legal proceeding—which would provide enough time for Microsoft to inflict irreversible harm on competition. The time issues are especially important because in a market characterized by increasing returns to scale and network externalities, once a dominant position is established it will be hard to reverse, even if the original abusive practices are subsequently circumscribed.

The fundamental problem with the agreement is that it does not change the incentives that Microsoft faces. All of the illegal anticompetitive actions identified by the District Court and affirmed by the Court of Appeals were the result of rational decisions by Microsoft about how best to enhance its value by maintaining and expanding its monopoly. These same incentives will persist under the PFJ; given these incentives, it impossible to foresee—let alone effectively prohibit—the wide variety of potentially anticompetitive conduct that may result. Indeed, the reason that many economists have argued for the more drastic structural settlement (such splitting up Microsoft) is that such structural changes would alter incentives.[34] Though the Court of Appeals has determined that such a remedy might be too drastic, the imperative in evaluating any remedy is to ascertain its impact on incentives.

The following analyzes the details of the PFJ by comparing it to the principles outlined in the previous section. Our discussion does not aim to be comprehensive, but instead to focus on areas that illustrate or represent important economic aspects of the PFJ. Although the enforcement aspects of the PFJ, in particular the powers of the Technical Committee, are essential to understanding the limitations of the agreement, we only briefly discuss these issues.

A. Creating more choices for consumers

In developing a remedy, the court is well aware of its technical shortcomings in deciding exactly what should or should not be included as part of an operating system today—or in the future. Neither should these determinations be made solely by a monopolist. These choices should be made by consumers through the choices they have between different OEMs and ISVs. Stanford Law Professor Lawrence Lessig described this strategy as follows: ''To use the market to police Microsoft's monopoly... by assuring that computer manufacturers and software vendors remain free to bundle and support non-Microsoft software without fear of punishment by Microsoft.'' [35] We agree with Professor Lessig that this should be among the goals of a final judgment and that the current agreement is woefully inadequate in meeting this objective. In our view, this is in fact a minimal objective that mitigates some of the harms to consumers from Microsoft's monopoly position but, by itself, would do little to reduce the applications barrier to entry or facilitate competition in the operating systems market itself.

As noted above, a remedy that turns this overall strategy into a reality requires four

[32] CIS, p. 3.

[33] The Technical Committee consists of three experts in ''software design and programming''—one appointed by Microsoft, one by the plaintiffs, and the third by these previous two. The Committee would have broad access to internal Microsoft documents, source code, etc. It would be responsible for reporting any violations of the PFJ to the plaintiffs. They would not, however, be able to rely on the work of the Technical Committee in Court proceedings. See PFJ, Section IV.B.

[34] See, for example, Robert Litan, Roger Noll, and William Nordhaus (2002), ''Comment of Robert E. Litan, Roger D. Noll, and William D. Nordhaus on the Revised Proposed Final Judgment.'' United States v. Microsoft Corp., Before the Department of Justice. The point is simple: now strategy with respect both to applications and the operating system is designed to maximize total profits, including the monopoly profits. With structural separation, applications would be designed and marketed to maximize their own profits, with no regard to how this might affect the profitability of the operating system.

[35] Lawrence Lessig (December 12,2001). ''Testimony before the Senate Committee on the Judiciary.''

different elements: (1) ensuring that OEMs and potentially ISVs have the right to modify the desktop, the start menu, or other fundamental aspects of the computer experience in any way they choose; (2) ensuring that OEMs and ISVs have adequate information and technical access to develop applications for, and even modifications to, Windows; (3) ensuring that they are protected from retaliation by Microsoft for providing alternatives to consumers; and (4) ensuring that they have financial incentives to make changes that benefit consumers. The PFJ is deficient in all four.

1. Ensuring that OEMs and potentially ISVs have the right to modify fundamental aspects of the computer experience in any way they choose

The PFJ codifies several new rights for OEMs to modify the desktop or the computer experience, some of which were already voluntarily announced by Microsoft on July 11, 2001 and implemented with the release of Windows XP on October 25, 2001. Specifically, Section III.C of the PFJ prohibits Microsoft from restricting OEMs from ''Installing or displaying icons, shortcuts, or menu entries for, any Non-Microsoft Middleware... distributing or promoting NonMicrosoft Middleware by installing and displaying on the desktop shortcuts of any size or shape...'' among other actions.

This new required latitude, however, is unduly limited in several respects:

—New flexibility is quite narrow. OEMs can only modify the initial boot screen to market IAPs to users, but cannot modify it to uninstall Microsoft middleware or to market middleware that competes with Microsoft middleware (Section III.C.5). Nothing in the PFJ would allow ISVs to acquire licenses to create their own bundles of Windows plus applications to market to consumers or OEMs, a measure that could enhance competition by bringing additional participants with substantial experience in software development into the market. While the benefits to consumers and competition of allowing ISVs to acquire such licenses are evident, Microsoft would only be harmed to the extent that it reduces its monopoly power. There is no other convincing explanation for these restrictive trade practices.

—It contains several limitations that limit the overall look of Non-Microsoft Middleware and pace of innovation. For example, the PFJ requires that the user interface on automatically launched Non-Microsoft Middleware [36] must be ''of similar size and shape to the user interface displayed by the corresponding Microsoft Middleware Product'', can only be launched when a similar Microsoft product would have been launched, and Microsoft can impose non-discriminatory bans on icons (Section III.C.3). In addition to the fact that these limitation are frivolous, asymmetric, and would seem to serve no purpose other than restricting competitive threats—no such limitations apply to Microsoft—they could also have a severe impact in limiting competition. Specifically, it allows Microsoft to control the pace of innovation in the computer experience, letting Microsoft delay the effective launch of a new type of product until it is ready to compete in that area. Thus both competition and innovation may be impeded.

It is unnecessarily delayed. Specifically, Section III.H gives Microsoft up to 12 months or the release of Service Pack 1 for Windows XP, whichever is sooner, to provide end users and OEMs a straightforward mechanism to remove icons, shortcuts, or menu entries for Microsoft Middleware Products or to allow OEMs or end users to designate alternative Non-Microsoft Middleware Products [37] to be invoked by the Windows operating system in place of Microsoft Middleware Products.[38] There is certainly no economic or legal justification for this delay and our understanding is that it is technically feasible to carry out these changes in a few weeks time, as demonstrated by Microsoft's July 11, 2001 voluntary agreement to implement elements of this provision. As we have emphasized, there can be significant long-run consequences for competition from even short delays.

Microsoft could encourage users to undo changes after 14 days. The value of the new contractual freedoms is limited by Microsoft's ability to encourage the user to undo all OEM changes after 14 days by allowing a user-initiated ''alteration of the OEM's configuration... 14 days after the initial boot up of a new Personal Computer.'' (Section III.H.3) This provision, in effect, would allow Microsoft to present a message to end users (e.g., ''Press 'yes'' to optimize your computer for multimedia'') that could bias choices toward Microsoft products, regardless of what the OEM had chosen. This provision could therefore greatly reduce the scope and value of the changes that OEMs make.[39]

2. Ensuring that OEMs and ISVs have adequate information and technical access to develop applications for, or even modifications to, Windows

The right to make modifications to Windows will only work effectively if OEMs and ISVs have the knowledge to exercise this right. Microsoft currently releases an enormous quantity of information on the Windows operating system and its APIs, through the Microsoft Developer Network (MSDN) and other means. Indeed, the indirect network externalities supporting the Windows monopoly provide a strong incentive for Microsoft to ensure that as many applications as possible run well on its system. But Microsoft also has an incentive to bolster its operating system monopoly by selectively withholding timely information to impede or delay the development of products that threaten to reduce the applications barrier to entry.[40] In addition, Microsoft has also required anticompetitive actions in exchange for information, as in the ''first wave'' agreements found illegal by the Court of Appeals.[41]

The PFJ requires disclosure of ''the APIs and related Documentation that are used by Microsoft Middleware to interoperate with a Windows Operating System Product'' (Section III.D) and specified Communications Protocols (Section III.E).

These requirements, however, are deficient in several ways:

Windows APIs are not covered. In particular, the PFJ does not require the disclosure of the APIs used by Windows. Although Microsoft already has an incentive to disclose Windows APIs, there are circumstances where delay could be more profitable. The consequences of this omission are aggravated by the definition in Section VI.U: ''the software code that comprises a Windows Operating System Product shall be determined by Microsoft in its sole discretion.'' Thus, as middleware gets blended in the operating system, the scope of disclosures could be narrowed.

Internet Explorer and other middleware APIs are not covered. Furthermore, the agreement does not require the disclosure of the APIs used by Internet Explorer. Although the government did not prove that Microsoft was guilty of monopolizing the browser market, dominating this market played a key role in shoring up its monopoly in the operating systems market. As a result, requiring disclosure of the APIs for Internet Explorer and other middleware could play a role both in denying the fruits of that monopoly and reducing this barrier to entry in its operating systems market.

Definitions could limit disclosure even further. The scope of APIs required to be disclosed under the agreement could be potentially limited even further by the control Microsoft has over what is ''Microsoft Middleware'' and what is the ''Windows Operating System Product.''

Additional loopholes further limit disclosure and ability of non-Microsoft middleware to fully interoperate with Windows. Section III.J. 1 provides a substantial loophole that exempts from the disclosure requirements anything that ''would compromise the security of a particular installation,... digital rights management, encryption or authorization systems...'' These are all very important technologies for Windows Media Player, Passport, the Internet Explorer browser, and any of the many programs that rely increasingly on security and encryption. In addition to giving Microsoft substantial discretion and blurring the disclosure

[36] As defined in Section VI.M.

[37] As defined in Section VI.N.

[38] As defined in Section VI.K.

[39] This provision would allow Microsoft to run the ''Desktop Cleanup Wizard'' that removes unused shortcuts from the desktop in a non-discriminatory manner. Nothing in our reading of the language of Section III.H.3, however, would limit the power of Microsoft to remove all user access to non-Microsoft middleware or restore access to Microsoft middleware.

[40] For example, the District Court found that Microsoft withheld the ''Remote Network Access'' API from Netscape for more than three crucial months in mid-1995. Findings of Fact, § 90–91, 84 F. Supp. 2d at 33.

[41] These agreements, which were entered into between the Fall of 1997 and Spring of 1998 between Microsoft and several ISVs, provided preferential early access to Windows 98 and Windows NT betas and other technical information in exchange for using Internet Explorer as the default browser. See See 253 F.3d at 71–72.

requirements further, these exceptions would make it impossible for competitors to design middleware that fully interoperated with the Windows operating system, leaving certain features only accessible to Microsoft middleware.

Disclosures are not timely. The disclosures are not very timely, allowing Microsoft enough time to ensure that its products—and products by favored OEMs and ISVs enjoy a substantial ''first to market'' benefit in taking advantage of the functionality of the operating system. Microsoft has up to 9–12 months to disclose the APIs and communications protocols. In the case of a new version of the Windows Operating System Product, the PFJ bases the timing of the disclosure on the number of beta testers, effectively giving Microsoft substantial discretion over the timing of the required disclosures through its definition of the term ''beta tester'' and its control over their number. (Sections III.D and VI.R)

Microsoft could cripple rival products. The PFJ does nothing to prevent Microsoft from deliberately making changes in Windows with the sole or primary purpose of disabling or crippling competitors'' software products.

3. Ensuring that OEMs and ISVs are protected from retaliation by Microsoft for providing alternatives to consumers

The right to make alterations to the Windows desktop will only be effective if companies are protected from retaliation for exercising it. The PFJ provides some protection against retaliation (Section III.A) and requirements for uniform licensing and pricing for Microsoft Windows (Section III.B). The protections, however, are only partial, in that they omit several important behaviors, still leave substantial scope for Microsoft to retaliate, and contain a very large loophole.

First, the prevention against retaliation only applies to a very specific set of actions that are specified in the PFJ, such as altering the icons on the desktop or promoting an IAP in the initial boot sequence. This rule does not apply to other actions by OEMs, such as the inclusion of third party software that does not fall under the definition of Non-Microsoft Middleware.

Second, there may still be some scope for discrimination and retaliation. Section III.B.3 of the PFJ explicitly gives Microsoft the right to use ''market development allowances,'' for example to provide a pre-license rebate to selected OEMs on the basis of potentially ambiguous joint ventures. Although these incentives would have to be offered uniformly, there still could be some scope for defining them in an exclusionary manner. Furthermore, the relationships between Microsoft and computer companies are very complex and multifaceted, leaving substantial scope for retaliation in aspects not covered by the PFJ, including potentially the pricing of Microsoft Office and the server business.

Finally, Section III.A allows Microsoft to terminate the relationship with an OEM without cause and within a brief span of time simply by delivering two notices of termination. With no ready substitutes for Windows available, this power would give Microsoft substantial leverage in its relationships with OEMs. Although the OEM would have the option of litigating Microsoft's denial of a Windows license, the text of Section III.A and the lack of ''bright line'' rules in the PFJ would make this litigation costly and uncertain—and thus an imperfect means of protection against this threat.

4. Ensuring that OEMs have financial incentives to make changes that benefit consumers Even if the three previous conditions were met, they would be economically irrelevant if OEMs did not have financial incentives to take advantage of the new licensing freedoms. The production of PCs is a highly competitive industry with very low profit margins.[42] PCs are virtually a commodity that can be priced based on a limited set of characteristics like processor speed and hard drive size. All of the steps allowed by the PFJ—including installing nonMicrosoft middleware or removing user access to Microsoft middleware—entail higher costs for the OEMs both in the costs associated with the initial configuration of the system and in the added costs of end user support.[43] In addition, OEMs may perceive that Microsoft would take additional steps to raise their costs through forms of retaliation either permitted by the PFJ or imperfectly banned. These costs may explain why, to our knowledge, no major computer manufacturer has yet taken Microsoft up on its July 11, 2001 offer to remove access to Microsoft middleware and replace it with non-Microsoft middleware.[44]

As a result, the key source of greater competition and consumer choice in the computer experience—OEMs—would have limited economic basis for promoting such choice. In part this is because the value of some of the new freedoms obtained by the OEMs in the PFJ are limited by loopholes. For example, by allowing Microsoft to bar OEMs from marketing non-Microsoft middleware in the initial boot sequence, the PFJ removes one source of revenue and choice. In addition, allowing Microsoft to encourage users to ''voluntarily'' revert to the Microsoft-preferred configuration of icons, the Desktop, and the Start Menu after 14 days may reduce substantially the value of this screen ''real estate.'' As a result, the PFJ precludes some of the principal means by which OEMs could be remunerated for providing additional or alternative functionality desirable to consumers.

The more fundamental problem is that OEMs continue to be required to license a version of Windows that includes middleware like Internet Explorer, Windows Media Player, and Windows Messenger. By not requiring Microsoft to sell a cheaper, stripped-down version of the operating system—excluding many of these added features—the PFJ in effect would require OEMs to pay twice—once for Microsoft's version of the product (as bundled into the price of Windows) and once for the alternative. Such bundling is a particularly invidious way of undermining competition. In effect, it implies that the marginal cost of any item in the bundle is zero, making competitive entry, even for a superior product, impossible. The fact that such entry has occurred is testimony to the superiority of the rival products—consumers are willing to pay substantial amounts for the alternatives. In addition, forced bundling can have adverse effects on consumers, because it uses up memory and storage space, and there is always the possibility that the commingled code will interfere with the performance of other applications.

In summary, under the PFJ, OEMs are not provided the rights, means, protections, or incentives to create alternative choices for consumers. As a result, the lynchpin of the PFJ's strategy for promoting competition would be greatly attenuated.

B. Reducing the applications barrier to entry

The applications barrier to entry was central to the Court of Appeals'' understanding of this case. It is the principal barrier to entry that protects Microsoft's overwhelming dominance of the market for operating systems for Intel-compatible PCs. Furthermore, the court found that Microsoft engaged in illegal acts to increase the applications barrier to entry, principally by suppressing Netscape and Java at the expense of Internet Explorer and Microsoft's version of Java. Thus, any remedy that is ''tailored to fit the wrong creating the occasion for the remedy'' must necessarily take affirmative steps to reduce the applications barrier to entry and also prevent Microsoft from engaging in anticompetitive actions to increase this barrier. Unfortunately, the PFJ barely addresses this central issue.

The following discusses two key aspects of the applications barrier to entry: the use of anticompetitive means to reduce the market share of rival middleware (and thus its potential to reduce the cost of porting applications to different operating systems) and the use of decisions about Microsoft Office to influence the prospects of rival operating systems.

1. Middleware and the applications barrier to entry

The CIS states that under the PFJ, ''OEMs have the contractual and economic freedom to make decisions about distributing and supporting non-Microsoft software products that have the potential to weaken Microsoft's personal computer operating system monopoly without fear of coercion or retaliation by Microsoft.''[45] Even if the PFJ did give OEMs this contractual and economic freedom without fear of retaliation, and the previous subsection expressed severe doubts on this point, it still would do little if anything to weaken Microsoft's operating system monopoly.

Enhancing competition by allowing OEMs and ISVs to provide consumers with a greater

[42] For example, the Washington Post recently noted that profit margins are in ''single digits.'' See Rob Pegoraro and Dina El Boghdady (January 20, 2002), ''Building Creativity Into the Box'' Washington Post.

[43] In the Microsoft trial numerous industry witnesses testified to the user confusion and added support costs associated with having alternative browsers pre-installed on a computer. See 253 F.3d at 71–72.

[44] Microsoft Press Release (July 11, 2001), ''Microsoft Announces Greater OEM Flexibility for Windows.''

[45] CIS, p. 25.

variety of choices, the subject of the previous subsection, is in some sense literally superficial. It involves the ability of firms in the computer industry to change the outer appearance of a computer and the way it is perceived and used by users, including the ability and ease of accessing programs that are included with the Windows operating system or added by the OEM or end user. The issues raised by the applications barrier to entry go deeper, to the underlying code in Windows. In particular, although the PFJ allows end users or OEMs to remove user access to Microsoft Middleware, it also allows Microsoft to leave in place all of the programming underlying this middleware. This code could still be accessed by other programs that write to the APIs exposed by the middleware.

The Court of Appeals explicitly rejected Microsoft's explanation for commmingling the code of Windows 98 and Internet Explorer, concluding that it deterred users from installing Netscape, had no substantive purpose, and thus that ''such commingling has an anticompetitive effect.'' [46] Despite this strong finding, no provision in the PFJ addresses this issue.[47]

Netscape and Java represented a very rare challenge to Windows—they offered the opportunity to develop middleware that would allow a wide range of applications to be costlessly transferred between different systems. It is difficult to imagine when, if ever, there will be a challenge of this magnitude again. Nonetheless, some existing middleware—and future middleware that we may not even be able to forecast today—will continue to present challenges to Windows. For example, there is still substantial competition in the market today for multimedia players, with Windows Media Player, RealNetworks RealOne player, and Apple's QuickTime, among others, all offering different versions of similar functionality.

The treatment of middleware is crucial because the market for middleware, like the market for operating systems, is subject to substantial network externalities. These externalities mean that the desirability of a middleware package increases as the installed user base increases. As with operating systems, such externalities arise for direct reasons (e.g., users can share files in a particular media format) and indirect reasons (writing a program to different middleware, so the dominant middleware will have the most programs associated with it). With regard to indirect network effects, the key point is that the installed base is not the number of computers with shortcuts to the given middleware, but the number of computers with the underlying code permitting the middleware to be invoked by a call from another program. A programmer that wanted to develop, for example, an interactive TV program could still use Windows Media Player regardless of whether or not an OEM or end user had removed the icons or shortcuts that allow easy user access to this program.

By providing no means for OEMs or end users to undo the commingling of code that ties Microsoft middleware to the operating system, the PFJ ensures that Microsoft middleware will have an installed base, in the relevant sense, of nearly the entire PC market. As a result, programmers will find it cheaper to write to Microsoft middleware rather than to rival programs. In this case, ubiquity could trump quality—because the size of a middleware's installed base could be more important than the quality of the middleware program. Microsoft middleware thus increases the applications barrier to entry in the same manner that promoting Internet Explorer and restricting the distribution of Netscape do. By allowing Microsoft to continue to commingle the code for middleware and its operating system, and preventing OEMs or end users from making real choices, the PFJ contributes to Microsoft's ability to restrict the market share of its rivals in neighboring ''layers'' to the operating system, reducing the main form of potential future competition at ''layer boundaries.''

2. Microsoft Office and the applications barrier to entry

As noted above, in the mid-1990s, Microsoft Windows was compatible with more than twenty times as many programs as IBM's OS/2 Warp. This offers a dramatic example of the applications barrier to entry. One crucial feature of Microsoft is that in addition to producing the Windows operating system, it is also a leader in many other applications. Network externalities work here to help create and maintain market dominance. Thus, for a rival operating system to succeed it would need not only to persuade ''neutral'' software companies to write to it, but also persuade Microsoft itself to port some of its leading applications to the operating system. To the degree that Microsoft produces leading or essential applications, they can use their refusal to port these applications to reinforce their Windows monopoly.

One application, in particular, is especially important to users: Microsoft Office and its associated programs, including Word (for word processing), Outlook (for e-mail and scheduling), Excel (for spreadsheets), and PowerPoint (for presentations). Indeed, Microsoft Office has about 95 percent of the market for business productivity suites.[48]

The Court of Appeals affirmed the District Court's finding that the desire by Apple to ensure that Microsoft continued to maintain and update Mac Office was central to its motivation to enter into an illegal, anticompetitive deal with Microsoft to suppress Netscape and promote Internet Explorer. In addition, Microsoft does not currently have a version of Office that operates on Linux, the primary alternative to Windows in the PC operating system market. Withholding or simply threatening to withhold Microsoft Office from other operating systems is a powerful way in which Microsoft can use anticompetitive means to reduce the desirability of rivals while also extracting concessions or exchanges that help support the Windows monopoly of PC operating systems.

The PFJ, however, does not address any issues relating to the pricing, distribution, or porting of Microsoft Office. This considerable loophole has been used by Microsoft in the past. In the future, Microsoft will have the same incentives to use this loophole again. In addition, it may be necessary to examine additional Microsoft applications that can be used to reinforce the Windows monopoly. Given the difficulty of undoing a monopoly of this sort, once established, it is particularly appropriate to reach beyond remedies that are narrowly circumscribed.

C. Preventing Microsoft from strengthening its operating system monopoly by extending it to encompass additional products

The Court is charged with fashioning a remedy that ''ensure[s] that there remain no practices likely to result in monopolization in the future.'' Some of the most important newly emerging areas are multimedia, networking, web services, and hand-held computing. Microsoft is already making substantial investments in these areas with its .NET strategy, Microsoft Passport, MSN, Windows Messenger, Windows Media Player, and the Pocket PC operating system. The recently released Windows XP is characterized by substantial integration between all of these features; indeed the seamless integration is one of Microsoft's chief selling points for Windows XP. Microsoft has marketed Windows XP (standing for ''experience'') on the basis of its seamless integration between the Internet, multimedia, and the computer. For example, on the day it was released, a Microsoft press release announced, ''Windows XP Home Edition is designed for individuals or families and includes experiences for digital photos, music and video, home networking, and communications.'' [49]

Like Internet Explorer, these new areas present new opportunities for Microsoft to leverage its monopoly in the operating system to dominate other markets. In addition, Microsoft could use its strong or dominant position in these new markets to erect new barriers to entry that prevent potential competitors from offering products and services with part or all of the functionality provided by Windows. For example, if Passport is successful then a rival operating system would not just need to persuade other developers to write for it, but would also need to develop its own version of Passport and convince numerous e-commerce sites to use it. If the rival operating system failed in any of these steps, its attempts to establish itself could be seriously curtailed. The PFJ, however, does not address any aspects of these important emerging barriers to entry.

VIII. STEPS TO IMPROVE THE PROPOSED FINAL JUDGMENT: THE LITIGATING STATES'' ALTERNATIVE

The goal of this Declaration is to explain why we believe that the PFJ is deficient and why the Court should exercise its discretion to fashion a remedy in this case that would promote competition and benefit consumers.

[46] See 253 F.3d at 66.

[47] The Court of Appeals rejected, per curiam, Microsoft's petition for a rehearing on this point. Order (DC Cir. Aug. 2,2001).

[48] Richard Poynder (October 1, 2001). ''The Open Source Movement.'' Information Today, 9:18.

[49] Microsoft Press Release, ''Windows XP is Here!'' 10/15/01.

We do not propose an alternative remedy or provide an exhaustive analysis of any other proposals. Our analysis of the shortcomings of the PFJ, however, can be illustrated and strengthened by a selective comparison of some of the provisions in the PFJ with the proposal transmitted to the court by the nine litigating States and the District of Columbia on December 7, 2001.[50]

Many of the issues in the ''Plaintiff Litigating States'' Remedial Proposals'' are technical and involve loopholes, some of which were discussed above including stronger anti-retaliation provisions and a broader definition of middleware that could not be manipulated by Microsoft. In addition, this proposed remedy makes an important change in enforcement: it proposes a Special Master, rather than requiring new legal proceedings to enforce the judgment. None of these important issues are discussed here. Instead, we focus on selected areas in which the litigating States'' proposal illustrates some of the principal economic points identified in the preceding analysis.

A. Fostering competition through OEMs and reducing the applications barrier to entry The litigating States proposal would require Microsoft to license a cheaper version of Windows that does not include commingled code from added middleware.[51] In addition, the proposal would require Microsoft to continue to license older versions of its operating system without raising its prices. This would have two effects. First, it would more effectively promote competition and consumer choice by allowing OEMs to ship computers with a wide range of alternative middleware, thereby allowing consumers to choose between different versions or different price-feature combinations. The lack of financial incentives for OEMs to take advantage of the more liberalized licensing rules is one of the principal deficiencies in the PFJ.

Moreover, such a provision would provide Microsoft with better incentives; only if it produced an operating system which performed substantially better would it be able to sell its new releases. It would at least attenuate its ability to use new releases as a way of extending its market power. Some have advocated even stronger measures to ensure Microsoft faces proconsumer, pro-competition incentives, including requiring Microsoft to release all of its Windows source code and requiring the free distribution of its operating system after 3 to 5 years. Second, this provision would directly address the Court of Appeals finding that Microsoft's commingling of code was anticompetitive. By disentangling the middleware from the operating system, this proposal would allow greater competition in middleware—and thus ultimately in operating systems—by reducing the network externalities that benefit Microsoft middleware at the expense of potentially superior products.

B. Internet Explorer browser open source and Java distribution

Two of the fruits of Microsoft's monopolization of the operating systems market are the dominance of the Internet Explorer browser and the destruction of Java as a viable competitor. The anticompetitive measures that helped achieve these goals protected a crucial ''chink in the armor'' of the Windows operating system. The PFJ does nothing to ''deny the defendant the fruits of its statutory violation.''[52] Furthermore, it does not enhance the ability of competitors to interoperate with Internet Explorer because it includes no disclosure requirement for the Internet Explorer APIs.

The litigating States propose to remedy these deficiencies by requiring Microsoft to publish the source code and APIs for Internet Explorer and freely license them to competitors. In addition, their proposal would require Microsoft to distribute a Sun-compatible version of Java Virtual Machine with all future operating systems. The result would be to decrease the applications barrier to entry and promote competition.

C. Cross-platform porting of Office

As discussed in the previous section, Microsoft Office is one of the most crucial applications for many users. The existence of this application for a particular operating system is one key factor in the demand for the operating system. The litigating States'' proposal would remove the ability of Microsoft to either threaten to withhold Office or actually withhold Office by requiring Microsoft to continue to port Office to Macintosh. In addition, the proposal would require Microsoft to auction off licenses to ISVs that would provide them with the entire source code and documentation for Office in order for them to port the product to alternative operating systems. Although we draw no conclusions about the particular rules proposed by the litigating States, this proposal would clearly reduce Microsoft's ability to deliberately raise the applications barrier to entry.

D. Mandatory disclosure to ensure interoperability

The PFJ requires some disclosure to ensure that Microsoft is not able to withhold certain information to illegally benefit Microsoft Middleware at the expense of Non-Microsoft Middleware. The disclosures are limited in scope and timing. The litigating States'' proposal is substantially broader.

Of particular importance, the litigating States'' proposal recognizes that ''nascent threats to Microsoft's monopoly operating system currently exist beyond the middleware platform resident on the same computer'' and thus the States'' proposal requires timely disclosure of technical information to facilitate ''interoperability with respect to other technologies that could provide a significant competitive platform, including network servers, web servers, and handheld devices.''[53] In doing this, the proposal would reduce the ability of Microsoft to use its dominant position in operating systems to eliminate emerging threats at the boundary of this ''layer'' of computing.

IX. Conclusion

The Revised Proposed Final Judgment agreed to by the U.S. Department of Justice, the Attorneys General of nine States, and Microsoft Corporation is critically deficient. The overall aims of the PFJ are laudable—to increase competition and reduce Microsoft's ability to maintain its monopoly at the expense of consumers. But the PFJ will not succeed in achieving these goals. It does not change any of the incentives faced by Microsoft to undertake anticompetitive actions. It restrains these anticompetitive actions only with highly specific and exception-ridden conduct requirements. And it has an insufficient enforcement mechanism.

The interest of consumers in a greater range of choices, lower prices, and greater innovation would be served by rejecting the PFJ and replacing it with a more effective conduct remedy. A remedy for this case should recognize that the monopoly power created by Microsoft's past anticompetitive, illegal practices is likely to persist, and that it will therefore be likely to continue to enjoy the fruits of its illegal behavior, unless there are far stronger remedies than those in the PFJ. The new remedy should change Microsoft's incentives. It should restrict Microsoft's ability to repeat its past, or develop new, anticompetitive practices. It should provide OEMs and ISVs with the means and incentives to stimulate genuine competition in the provision of platforms. And it should take whatever steps are possible to reduce the applications barrier to entry so that there is greater scope for genuine competition in the market for PC operating systems.

I, Joseph E. Stiglitz, declare under penalty of perjury that the foregoing declaration is true and correct. Executed on January 28, 2002.

Joseph E. Stiglitz

I, Jason Furman, declare under penalty of perjury that the foregoing declaration is true and correct. Executed on January 28, 2002.

Jason Furman
Joseph E. Stiglitz
Columbia University
Uris Hall Room 814
New York, NY 10027
212–854–0671
jes322@columbia.edu
Jason Furman
Yale University
28 Hillhouse Ave. Rm 311
New Haven, CT 06511
203–432–3054
jason, furman@yale.edu

[50] United States v. Microsoft Corp., ''Plaintiff Litigating States'' Remedial Proposals,'' in the U.S. District Court for D.C, December 7, 2001.

[51] The Court of Appeals overturned the District Court, finding that Microsoft could not be held liable for the fact that in certain situations, like updating Windows or accessing help files, Internet Explorer overrides the user's default browser settings and opens automatically. This implies that the complete removal of HTML-reading software is impossible. But Windows could be shipped with, for example, a stripped-down browser that performs essential system functions. Most of the functionality of Internet Explorer, however, is not necessary for the examples Microsoft invoked. This is analogous to the way in which Windows is shipped with a stripped-down text editor, Notepad, but not with a full-fledged word processor.

[52] 253 F.3d at 103, quoting United States v. United Shoe Mach. Corp., 391 U.S. 244, 250 (1968).

[53] Litigating States, pp. 10–11.

MTC–00030613

Comments To The Revised Proposed Final Judgment In United States v. Microsoft Corporation, No. 98–1232

State of New York, et al. v. Microsoft Corporation, No. 98–1233

Submitted By Palm, Inc.

Pursuant To The Tunney Act, 15 U.S.C. § 16

January 28, 2002

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I.SUMMARY OF OBJECTIONS

Pursuant to the Antitrust Procedures and Penalties Act, 15 U.S.C. ° 16(b)–(h), Palm, Inc. (''Palm'') hereby submits its comments and objections to the Revised Proposed Final Judgment (''RPFJ'') filed by Plaintiffs United States of America (''DOJ'') and the States of New York, Ohio, Illinois, Kentucky, Louisiana, Maryland, Michigan, North Carolina and Wisconsin, and Defendant Microsoft Corporation (''Microsoft'') on November 6, 2001.

Palm, a leader in mobile computing,[1] respectfully submits that the RPFJ will not ensure vigorous competition in this important industry. Microsoft is already engaging in actions designed to unfairly extend its personal computing operating system (''PC OS'') monopoly into the mobile computing market by eliminating competition and preventing free customer choice.[2] The RPFJ fails to address Microsoft's current actions, and will not constrain it from repeating in the mobile computing market the same tactics it used against Netscape and Java.

Mobile computing is an emerging threat to Microsoft's PC OS business. Handhelds are already displacing some notebook and desktop PCs for storing, accessing and managing information, including Interact information.[3] That competition will increase over time. If an open competitive environment exists, the convenience and simplicity of handheld devices will increasingly cause an evolution away from desktop and laptop PCs to handheld computers for accessing and managing information. The growth of handheld devices not based on Microsoft technology is a threat to Microsoft's PC OS monopoly, as were the competitive inroads being made by non-Microsoft Internet browsers.

Microsoft has the ability and incentive to take additional actions to forestall competition in the handheld industry. Palm's products—both the software products it manufactures as an independent software vendor (''ISV'') and the hardware products it manufactures as an independent hardware vendor (''IHV'')—must be compatible with PCs and the software that runs on them. Microsoft has a unique position as the PC OS monopolist and also the dominant vendor of related software products such as the Internet Explorer browser, the Office productivity suite, the Outlook e-mail and calendaring program, the Exchange server software and the Visual Studio developer tools. Palm's ability to offer innovative handheld solutions to consumers is, in significant part, reliant on full and timely interoperability with Microsoft's software products. Absent compatibility, consumers will be unable to obtain a fully functional handheld running anything other than Microsoft software.

As noted above, Microsoft is already taking actions to forestall competition in the mobile computing industry. In particular:

1. Microsoft has refused Palm access to information and software interfaces necessary to enable Palm to make its products interoperable with certain Microsoft products and technologies, including some elements of Microsoft's .NET software;

2. Microsoft has prevented Palm from working with Microsoft's software development tools (Microsoft Visual Studio);

3. Microsoft has refused to make Microsoft Internet Explorer operate on Palm OS handhelds; and

4. In exchange for addressing some of these issues, Microsoft has attempted to coerce Palm into deploying Microsoft .NET software on Palm handhelds under terms that would put the Palm OS business at a prohibitive disadvantage.

Microsoft has also already exhibited its intent to foreclose companies such as Palm by breaking interoperability with its products. Bill Gates himself directed his staff to alter Microsoft products to ensure that Microsoft's ''PDA will connect to Office in a better way than other PDAs even if that means changing how we do flexible schema in Outlook and how we tie some of our audio and video advanced work to only run on our PDAs.'' (Remedy Exhibit GX1 attached to this submission). As the DOJ argued previously:

... on July 11, 1999, less than thirty days after the conclusion of the trial in this action, Bill Gates wrote an e-mail directing that Microsoft redesign its software in order to harm competitors. This time, the products in question were the Personal Digital Appliances that Microsoft heralded at trial as one of the products that might someday undo its monopoly.

Plaintiffs' Memorandum In Support Of Proposed Final Judgment, filed April 28, 2000 (corrected as of May 2, 2000) (citing Remedy Exhibit GX1). Microsoft's anticompetitive incentive is obvious. Its anticompetitive conduct will enable it to monopolize the emerging handheld industry and, at the same time, eliminate the threat handhelds pose to its PC OS monopoly.

As delineated more fully below, it is Palm's belief that the RPFJ, if adopted, would fail to protect competition in the handheld industry for at least the following reasons:

1. It does not appear even to attempt to address handheld industry competition; 2. It enables Microsoft to withhold interface information that is critical to the competitiveness of Microsoft's rivals such as Palm;[4]

3. It enables Microsoft to continue to disadvantage ISVs and IHVs that work with companies other than Microsoft, especially given the network effects that pervade this industry;

4. It fails to ensure that Microsoft will not use distributed Internet-based (.NET) applications to eradicate the competitive threat of non-Microsoft platforms;

5. It either does not define or improperly defines key terms of the RPFJ, thereby enabling Microsoft to circumvent the RPFJ's intended boundaries;

6. It enables Microsoft to commingle or technologically bundle its OS with other dominant Microsoft software;

7. It enables Microsoft to use anticompetitive pricing tactics such as bundled pricing;

8. It fails to provide OEMs with the freedom to promote software products competing with Microsoft's products;

9. The enforcement mechanisms of the RPFJ are too weak to ensure Microsoft's compliance; and

10. It contains other deficiencies described below.

If the above RPFJ shortcomings are not addressed, Microsoft will be able to dictate customer decisions regarding computing models and standard technologies for the indefinite future, rather than having those decisions made by consumers on the competitive merits. Competition, and the

[1] Mobile computers are small computers designed to be carried by the user in a pocket or purse. They perform a wide variety of tasks. Mobile computers include handheld computers and the new, emerging category of smart phones (cell phones that have handheld computing functionality built into them). Mobile computers are also sometimes referred to as Personal Digital Assistants (''PDAs'').

[2] Microsoft, of course, also manufactures the Pocket PC operating system (''Pocket PC OS'') a rival OS to the Palm operating system (''Palm OS'').

[3] As Microsoft admitted in its filings before the Court: ''...[A] range of devices other than personal computers such as handheld computers, television set-top boxes and game machines are becoming increasingly capable, providing functionality that consumers used to obtain exclusively from personal computers.'' (Defendant Microsoft Corporation's Revised Proposed Findings of Fact, at 5 (submitted Sept. 10, 1999) (emphasis supplied)). See also id. at 227, 230 and 235.

[4] As discussed below, this ''information'' could come in the form of APIs, data formats, commands and protocols.

innovative solutions that emerge from that competition, will suffer. Any settlement with Microsoft must address these issues now, because, as the industry has learned from the Internet browser war, competition can be lost in the blink of an eye.

II. BACKGROUND ON PALM AND ITS INTEREST IN THIS MATTER

Palm develops and markets, among other products, a line of handheld computers that operates proprietary and non-proprietary applications using its Palm OS. Based on the Palm OS platform, Palm's handheld solutions allow consumers to store and access their most critical information and communications, including from the Internet. Palm handhelds address the needs of individuals, enterprises and educational institutions through thousands of application solutions that ISVs create. The Palm OS platform is also the foundation for products from Palm's licensees and strategic partners (also known as the Palm Economy), such as Acer, AlphaSmart, Franklin Covey, HandEra (formerly TRG), Garmin, Handspring, IBM, Kyocera, Samsung, Sony and Symbol Technologies, as well as a multitude of ISVs and IHVs.

Palm competes with numerous companies in its software and hardware businesses. Microsoft's Pocket PC OS is one of Palm's most direct competitors in operating systems designed for handheld devices. Microsoft licenses the Pocket PC OS to OEMs, including Compaq and Hewlett Packard, that install the OS in their handheld products. It markets these products as ''Windows Powered''—suggesting deceptively, Palm believes, that the Pocket PC product is a direct extension of its monopoly Windows PC OS product, and thereby leveraging the Windows monopoly to extend its market control into handhelds.

Plaintiff States that have opted not to join in the Microsoft settlement (''the Litigating States'') approached Palm in an effort to remedy through their own proposed relief Microsoft's potential anticompetitive conduct that, under the RPFJ, could eliminate the threat posed by the handheld industry. Palm has agreed to testify in Track 2 in support of the Litigating States'' proposed relief (''the Litigation States'' Remedies''). Palm respectfully submits that the Litigating States'' Remedies, unlike the RPFJ, protect competition in mobile computing industry as well as the competition that industry will provide to the PC OS monopoly.

III. THE RPFJ'S DEFICIENCIES

The RPFJ fails to create the market conditions necessary for competition to thrive. The structure and terms of the RPFJ are rooted in the computing industry as it existed in the mid-1990s, when the Internet was only beginning to gain widespread consumer use and software development was still focused on the PC.

To be effective, the remedy must take into account the industry as it exists today, and the new emerging threats against which Microsoft could (and, if left unchecked, will) repeat its pattern of anticompetitive behavior. The focus of competition in computing has shifted from the PC to the Internet, the server and to new devices such as handhelds. Microsoft's .NET initiative is an acknowledgement of this change, and the fact that it is being driven into virtually every Microsoft product highlights its significance. The RPFJ completely ignores this, and other, crucial dynamics.

A. Under The RPFJ, Microsoft Will Obstruct The Critical Interoperability Between Microsoft's Software Products And Non-Microsoft Products.

As products that manage users'' information, handhelds must interface with the OS and applications on a customer's PC. When that PC is part of a larger network (as it is in nearly every corporate or ''enterprise'' scenario), handhelds must also interface with the software on the network, typically resident on a server,[5]

In order to interoperate effectively with Microsoft products, handhelds must, at the very least, be able to:

(1) read and write data to and from the consumer's PC and/or server;

(2) interpret and format the data so it can be properly stored in the handheld, PC or server;

(3) run communication software, called conduits, that facilitate such interfaces with the PC and server; [6] and

(4) install the software drivers necessary to attach the cradle or other communication mechanism to the PC through which the handheld communicates with the PC and server.

In short, Palm and other handheld manufacturers must know the ''commands'' (to access the data) and the ''data formats'' (to understand the data) with respect to the target PC or server in order to develop the necessary conduits to interoperate with the target. In most cases (and nearly all business situations), in addition to interacting with the PC OS, the handheld device interoperates with Outlook or Exchange information (such as e-mails, contact information, and calendars), Word and Excel documents on the PC or other databases on the server. The RPFJ fails to ensure that anyone other than Microsoft will be able to interface with Outlook, Exchange, software on corporate servers, other PC applications such as Office, middleware for distributed or web-based applications or even the PC OS itself. Specifically, Sections III.D and III.E of the RPFJ do not address the potential threat (as articulated by Mr. Gates in his e-mail cited supra) that Microsoft can constrain or eliminate competition in and from the handheld industry by regulating the access to technical information necessary for interoperability.[7] In general, the RPFJ does not require any disclosure of technical information regarding the interface between Microsoft's PC or server products and handheld products. For example, the section neither requires disclosure of server APIs, nor information regarding the interfaces between PC OS or middleware and server applications.

Moreover, the RPFJ also permits Microsoft to foreclose access to critical interfaces that it migrates from the PC OS to the applications or ''distributed'' environment on a network (and in the case of .NET services, to the Internet) by limiting the disclosure requirements to the APIs between the PC OS and middleware, and the communication protocols between the PC OS and the server OS.[8] The RPFJ does not require disclosure of the commands and data formats necessary to interface with the critical applications on the PC, such as Outlook, Office or Internet Explorer. In addition, Microsoft can create proprietary .NET APIs that work only with the Pocket PC OS, bundle them with Microsoft's Visual Studio software development environment, discussed infra, and encourage the development of web services and applications that can be accessed only through Microsoft's OS products.[9]

At the core of .NET stands the .NET Framework (for PCs) and .NET Compact Framework (for handhelds). The Framework is Microsoft's answer to the Java runtime environment, with a key difference: It lacks the freedom from reliance on Microsoft's APIs. .NET is important because it extends Microsoft's program interface (that is, Microsoft's APIs) to provide the underpinnings necessary for web-based services and distributed applications that do not reside on the PC and/or handheld.

Finally, the RPFJ is silent regarding the interfaces between handhelds and software that resides on the servers. In a networked environment, such as corporate networks, handhelds need to exchange data particularly with software on servers.[10] For example, without access to data on Microsoft Exchange (the server application product that

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[5] As we discuss more fully below, this is particularly true where the software that has traditionally resided on the PC is increasingly being distributed, by design, to various locations over the networked environment.

[6] A conduit is a piece of software that interoperates with the handheld and the target PC or server, managing the communication between them.

[7] We note that the RPFJ requires even less disclosure than the parallel provision in the Interim Order, which was intended to serve as a remedial bridge pending the previously ordered divestiture. United States v. Microsoft. Final Judgment (D.DC 2000) (''Interim Order''). For instance, Section III(b)(iii) of the Court's Interim Order required Microsoft to disclose all APIs, Communications Interfaces and Technical Information (i.e., any and all possible technical dependencies) between (a) software installed on any device (including servers and handhelds) and (b) any Microsoft Operating System or Middleware installed on a PC.

[8] Microsoft defines .NET as its ''platform for XML web services.'' .NET Defined, available at http://www. Microsoft.corn/net/whatis.asp. The services that .NET offers are a combination of pre-designed applications, some of which come under the rubric .NET My Services or ''Hailstorm,'' and a set of tools designed to allow developers to create web applications which rely on the all-important APIs exposed by Microsoft programs (see discussion of ''VSIP'' infra).

[9] It is Palm's understanding that, absent being forced to by the Court, Microsoft will not make certain of these APIs available at all. Others will be available on terms that essentially force Palm to exit the OS business, thereby reducing it to a device manufacturer implementing Microsoft software.

[10] The interface between the handheld and server products can be designed to be ''through'' the cradle and the PC via the network connection between the PC and the server, or a wireless link directly with the server as in the case of Microsoft's Mobile Information Server (''MIS'') technology, to which Palm lacks unhindered access.

complements the client e-mail and calendar application Microsoft Outlook), non-Microsoft handhelds cannot offer features offered by Pocket PC products.

B. The RPFJ's Toothless Definitions Will Enable Microsoft To Break Interoperability Without Recourse.

The Definitions of ''Operating System,'' ''Windows Operating System Product'' And ''Personal Computer'' Are Fatally Flawed. The definition of ''operating system'' specifies code that executes on a PC. Microsoft can evade this definition simply by moving code off of the PC and onto a server or other device. Microsoft's .NET architecture even facilitates this scheme.

The definition of ''Windows Operating System Product'' determines the scope of Microsoft's disclosure obligation. The definition itself, however, leaves Microsoft free to determine in its sole discretion what software code comprises a ''Windows Operating System Product.'' In other words, Microsoft's disclosure obligation is subject entirely to its own discretion.

The RPFJ is also undermined by the interaction between the definitions of PC and OS. The definition of PC explicitly excludes almost every new category of device that may compete with PCs in the future, including set top boxes, handhelds, and servers. Because an OS is defined as software running on a PC, competing operating systems running on anything other than a PC appear to be excluded from the RPFJ's coverage.

The Definitions Of ''Non-Microsoft Middleware'' And ''Microsoft Middleware'' Are Too Narrow. To qualify as competing middleware protected by the RPFJ, software in question must run on the Windows PC OS and must be distributed in at least one million copies per year. The requirement that covered middleware run on the Windows PC OS leaves Microsoft free to retaliate against middleware software that runs on other devices, such as servers and handhelds. The million unit restriction allows Microsoft to target newly-developed middleware that does not yet sell a million units per year. In fact, Microsoft has an incentive to target such middleware before it can grow to a million units and enjoy the protections of the RPFJ. This restriction will stifle innovation by focusing Microsoft's competitive activity against smaller, younger companies—the companies least able to protect themselves against Microsoft's tactics. Furthermore, as more and more software becomes network-based, the whole concept of ''distributing copies of software'' becomes irrelevant. It is now possible for very popular software to exist only in a single copy.

For example, the Yahoo web service is intensely popular even though it is not copied onto any user's computer. As Microsoft's .NET initiative indicates, the industry is moving towards a web-based services model where consumers access software applications on the Internet. The RPFJ ignores this crucial change in the marketplace.

Moreover, to qualify as a middleware product, software must either provide the functionality contained in a short list of products (Explorer, Java, Media Player, Messenger, Outlook Express), or must first be sold separately, have a trademarked name and compete with qualifying non-Microsoft middleware. Missing from the list are a large number of Microsoft monopoly products which have already become ''platforms'' with which Microsoft competitors have to interoperate. These products include Microsoft Office, full Microsoft Outlook (as opposed to just the Express version), Microsoft Exchange, Microsoft Visual Studio, and Microsoft .NET.

Because the RPFJ excludes these products from the middleware definition, Microsoft is left free to manipulate its interfaces and APIs to exclude competitors. This gap alone is enough to render the RPFJ almost completely ineffective.

Under the RPFJ, Microsoft can avoid the provision regarding middleware simply by not trademarking the product name. According to this definition, many Microsoft products currently in the market would fail to qualify as middleware. Furthermore, to qualify as middleware software must include user interface code; Microsoft can avoid this by simply distributing the user interface code separately. Version numbers are also used to determine which software updates are covered; if the whole number or first decimal of the version number does not change, the software does not qualify. It appears that Microsoft could evade the middleware definition simply by changing its software numbering scheme (for example, moving to letters—version a, version b, etc.).

The RPFJ's Failure To Define ''Interoperate'' Creates A Significant Loophole. Neither Section III.E nor any other provision of the proposal defines ''interoperate.'' This omission invites Microsoft to enable non-Microsoft products to continue to function but in a much less robust way than Microsoft's handheld products, to the detriment of consumers.

The Definition Of ISV Is Too Narrow. The definition of ISV covers only companies creating software that runs on the Windows PC OS. Many current and future Microsoft competitors create software that needs to access information on PCs but does not run on the PC itself. As more and more software development becomes web-based, it will be the norm for competing software not to run on the PC. The RPFJ does not protect these emerging competitors.

The Definition Of APIs Is Too Narrow. Under Section III.D of the RPFJ, the disclosure is narrowly limited to ''APIs and related Documentation.'' Microsoft can circumvent this provision by hard-wiring links to its applications and through other anticompetitive coding schemes.

C. The RPFJ Does Not Stop Microsoft From Using Its Control Over Development Tools To Protect The Applications Barrier To Entry.

The RPFJ ignores Microsoft's control over application development tools, and how Microsoft can use that control to foreclose competition from third parties. The applications barrier to entry was the linchpin of this case and the RPFJ ignores how Microsoft can use development tools to perpetuate it.

For example, Microsoft's Visual Studio product has, as a result of Microsoft's PC OS monopoly, become the software development tools standard for most corporate and commercial application programmers, including prospective developers of software for mobile devices. As handheld technology increasingly displaces PC functionality, more and more PC OS developers have been seeking to create mobile software. Nevertheless, Microsoft has, up to this point, denied Palm access to the Visual Studio Integration Program,[11] despite Palm's significant position in the handheld space.[12]

Microsoft's exclusion of third parties such as Palm from Visual Studio has the following adverse effects. Exclusion makes it impossible for Visual Studio users (the vast majority of PC ISVs) to create Palm OS applications without changing the programming tools they use—an unlikely proposition. This, in turn, makes it more difficult for Palm to recruit software developers.

Exclusion also makes it very difficult to sell Palm OS handhelds to corporations, because Visual Studio is very often the standard for their in-house developers. Lastly, exclusion allows Microsoft to claim that Palm OS handhelds are incompatible with corporate standards. The net effect of these restrictions discourages PC ISVs from supporting non-Microsoft operating systems, and reduces the selection of software available to users of non-Microsoft OS handhelds.

Reduced to its essence, Microsoft's predatory developer tool strategy: (1) leverages its PC OS monopoly to create a software ''standard''; (2) prevents competitors from accessing that standard; (3) ''informs'' customers that the competitive products are incompatible with the very same products that Microsoft used to create the incompatibility; and thereby most importantly, (4) limits consumer choice and experience by foreclosing non-Microsoft products as competitive alternatives.

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[11] The Visual Studio Integration Program (''VSIP'') is a Microsoft licensing program which enables companies outside of Microsoft to ''host'' their software development within the Visual Studio tool. Many companies other than Palm have been given entry to the VSIP. If Palm is denied entry to the VSIP, Visual Studio users will find it much more difficult to create software for Palm OS handhelds.

[12] Microsoft first engaged in stall tactics by simply not responding to Palm's request for participation in the VSIP. Then, Microsoft told Palm that the Visual Studio team lacked the resources for Palm to participate (even as it added other companies to VSIP, Palm believes). Next, Microsoft told Palm that it could participate in the VSIP under the condition that Palm adopt Microsoft's proprietary .NET APIs under unacceptable terms that would have ''commoditized'' Palm's products. This would have extended the applications barrier to entry to the handheld industry by ensuring that applications developers designed their products not for the Palm platform but for Microsoft's. Ultimately, Microsoft's conduct would have eliminated Palm as a competitive platform. Only recently has Palm received an ''offer'' to join the Visual Studio without adopting .NET, which Palm believes is due to Microsoft teaming that Palm is testifying in the Track 2 proceedings, i.e., only when Microsoft concluded that its behavior would be subject to judicial scrutiny (and after 18 months of delay). Palm is currently evaluating the terms offered by Microsoft.

D. The RPFJ Does Not Prohibit Microsoft From Unlawfully Bundling Its Products Or Using Anticompetitive Pricing Schemes.

The RPFJ is notably deficient in its failure to address the potential for Microsoft to bundle or commingle its products with other dominant Microsoft software. The RPFJ also fails to prevent Microsoft from engaging in anticompetitive pricing to the ultimate detriment of the consumer (e.g., charging less for its Pocket PC OS only when it is licensed as part of a larger bundle). The royalty schedule restrictions in particular appear to be a major threat to legitimate competition.

For example, under the RPFJ Microsoft will be able to offer discounts on Windows to a PC OEM that also agrees to sell Pocket PC handhelds, so long as Microsoft offers this same subsidy to all OEMs. This gives Microsoft enormous coercive power to prevent any PC OEM from selling non-Microsoft based devices.

E. The RPFJ Does Not Remedy Microsoft's Ability To Use The Installation Of Drivers For Peripheral Hardware As A Chokehold.

The RPFJ does not address Microsoft's ability to obstruct the interoperability of a nonMicrosoft handheld by limiting the consumer's or OEM's ability to install drivers that must sit on top of the OS so that the handheld can communicate with the PC.

F. The RPFJ Does Not Remedy Microsoft's Ability To Use Internet Explorer As A Chokehold. Website developers specifically develop their products to be compatible with Internet Explorer because of Microsoft's monopolization of the browser market. Thus, Internet Explorer itself has become the ultimate test of Web compatibility for all computing devices, including handhelds. The RPFJ does not remedy Microsoft's ability to use this interoperability with Internet Explorer as a weapon. Microsoft has refused to even consider porting Internet Explorer to Palm OS, despite requests from Palm. Microsoft has, though, ported Internet Explorer to Pocket PC in the form of Pocket Internet Explorer.

G. The RPFJ's Disclosure Delays Render It Ineffective.

The disclosure requirements under the RPFJ do not become operative for up to twelve months in the case of interfaces relating to middleware and operating systems, and nine months in the case of interfaces between the PC OS and the server OS. In light of the speed with which the industry moves, these delays will continually undermine the competitive vitality of Microsoft's competitors, which will of course only result in further consumer harm.

The timing of the disclosure requirements under the RPFJ is also deficient. When Microsoft releases an OS, the disclosure requirements do not become effective until Microsoft releases a beta test version to 150,000 or more beta testers. Under this standard, Microsoft will not have to disclose the relevant technical information until very close to the public release date of the product, whereas Microsoft's in-house developers working on peripheral software (such as the Pocket PC OS) will have immediate access to the relevant information. Software development can take a year or longer, whereas the last beta cycle may be only a few weeks or months before release. If disclosure does not happen until the last beta cycle, non-Microsoft products will be at a substantial disadvantage relative to Microsoft products. Also, the definition of ''timely manner'' specifies a beta cycle of at least 150,000 people. Microsoft apparently could evade all OS pre-disclosure requirements by limiting its beta programs to 149,999 participants.

H. The RPFJ Does Not Restrict Knowing Interference With Performance.

The RPFJ contains no prohibition against Microsoft's intentional interference with the performance of non-Microsoft products by manipulating the interfaces with non-Microsoft products.

Without such a restriction, Microsoft can eliminate the effectiveness of the disclosure requirements by altering the interfaces or other information on which non-Microsoft products rely.

I. The RPFJ Fails To Provide OEMs And Consumers The Flexibility Necessary To Facilitate Competition.

Microsoft Retains Control of Desktop Innovation. Because of the RPFJ's restrictive definitions of middleware, Microsoft retains control of desktop innovation by being able to prohibit OEMs from installing or displaying icons or other shortcuts to non-Microsoft software, products and/or services, if Microsoft does not provide the same software, products and/or services. This undermines the OEMs'' ability to differentiate their products, and stifles the emergence of new competitors to Microsoft.

The RPFJ's Non-Retaliation Restrictions Are Ineffective. Section III.F attempts to prohibit retaliation against companies working with competing products, but the narrow definitions of ''operating system'' and ''personal computer'' make it unclear whether Microsoft is prohibited from retaliating against companies that work with competing handhelds, set-top boxes, servers or Internet software infrastructure. This ambiguity, plus Microsoft's ability to threaten retaliation even when it is prohibited from carrying out the threats, will make it extremely uncomfortable for any PC OEM to contemplate working with any non-Microsoft product.

Under Section III.A, Microsoft is free to ''threaten'' to retaliate in any form. Further, Microsoft is constrained only from the specified forms of actual retaliation, a remedy further weakened by the fact that the protected OEM activities are narrowly and specifically defined. Retaliation against an OEM for installing a non-Microsoft application that does not meet the middleware definition is not prohibited; nor is retaliation against an OEM for removing a Microsoft application that does not meet the middleware definition. As noted above, the definitions are so narrowly drawn that the protection of the RPFJ will not apply in most competitive situations Microsoft is likely to encounter in the future. Microsoft could, for example, retaliate against a PC OEM for selling handhelds based on the Palm OS.

Add/Remove Provisions Relate Only To Icons. Not The Middleware Itself. The add/remove provisions in the RPFJ only allow for removal of end user access to Microsoft middleware, not the middleware itself. If Microsoft's middleware remains on PCs, then applications developers will continue to write applications that run on that middleware, reinforcing the applications barrier to entry that is at the heart of this litigation.

Non-Microsoft Icons Should Not Be Subject To Add/Remove. The RPFJ allows Microsoft to demand inclusion of non-Microsoft icons in the add/remove utility, which does not make sense in the absence of any finding that the permanence of non-Microsoft middleware icons on the desktop is anticompetitive. Microsoft's competitors should not be treated as if they are equally guilty of Microsoft's anticompetitive behavior.

Desktop Most Favored Nation Requirements. Nothing in the RPFJ forbids Microsoft from requiring, especially where the product fails to meet the definition of middleware, most favored nation agreements from the OEMs. These agreements tax OEM efforts to promote Microsoft rivals by requiring that equal promotion or placement be given to Microsoft products, often without compensation.

Notification To Developers Only When They Ask. Microsoft can disable competing middleware that fails to meet its requirements without any notice to the middleware developer. The developer is expected to discover the disablement and then request an explanation. Microsoft should be required to disclose in advance any conditions that would cause a competing product to be disabled.

J. The RPFJ's Enforcement Provisions Are Insufficient.

Technical Committee And Compliance Officer. As stated above, a Technical Committee of three experts, one of whom will be selected by Microsoft, will monitor Microsoft's compliance with the RPFJ. The RPFJ also obligates Microsoft to have an internal Compliance Officer. However, the RPFJ fails to provide this Committee and the Compliance Officer with effective oversight power. For example, Microsoft employees do not have a confidential mechanism to report violations to the Committee, the Compliance Officer, the Court or the Plaintiffs. Nor does the RPFJ require Microsoft to retain documents regarding topics relating to the business issues in this case.

Sanctions. In light of Microsoft's violations so far and the potential for continued serious harm to competition, the RPFJ is deficient in not including a ''crown jewel'' provision requiring Microsoft to incur substantial liability or divestiture of certain assets in the event of future violations of the RPFJ.

IV. CONCLUSION

For the reasons articulated above, Palm submits that the Court should reject the RPFJ as insufficient to remedy Microsoft's past unlawful conduct and to ensure vigorous competition in the future. In the alternative, this Court should defer ruling on the RPFJ until after the Track 2 proceedings conclude.

ATTACHMENT

From: Bill Gates;
Sent: Sunday. July 11, 1999 5:46 PM
To: Harel Kodesh
CC: Bob Mugia (Exchange); Jim Allchin

(Exchange): Mats Wennberg; Thomas Koll; Greg
Faust;
Jonathan Kobetrs; Bill Mitchell
Subject: Nokia
While I was at the Allen and CO conference I met with Jurma Oillie CEO of Nokia.

I was totally confused by them licensing their WAP browser to Spyglass. It's a disaster for us to have an effort that is duplicative that we give away while the leaders in the industry move in their own direction.

I think the PDA group needs some better strategic think in this whole cheap browse area. How come we don't merge our effort with Nokia? Why do we let Spyglass undermine us IN so many areas? Who keeps paying money Spyglass?

I am also completely confused about why we aren't doing more due diligence on GPRS with Nokia and others. Jurma seemed very surprised when I told him our goal was to fund someone to roll out a nationwide wireless network using HDR or GPRS as quickly as possible to create something a based on Windows CE. He said his people need to explain to use how GPRS is a much better choice. They would love to help get involved in rolling this out with some partners. He rays HDR or another fraud from Qualcomm where exaggeration sways people who don't hear both sides of the story.

Jurma was asking about our strategy for voice recognition servers to make PDAs work a lot better. He sees all networked PDAs as needing. a voice recognition, server infrastructure (like phones) and that this changes the UI quite a bit I said I agreed with his view and that we had not factored that into our plans right now. We talked about how voice and screens will come together. l said there were a lot of key scenarios that we our PDA group was parenting around (I wish our activity level here was really as high as I suggested to him7.

Jurma also wanted to know what sort of strategy we had to bring Hotmail Contact lists/Schedules together with Exchange. They use Exchange internally but a lot of their people use Hotmail and don't understand what we are doing.,

Jurma told me their Fenix project is delayed because of a key chip so it won't ship until March 2000 so they don't want to announce at Telcom where I am going. He talked about how much money people spend on their booths at Telcom.

I am a bit confused about what we should be doing on witless data/pbx with various vendors. Why wouldn't we want to have a Windows PDA to work with each of their wirless PBX solutions?

Jurma talked about how he is thinking perhaps Cisco or Lucent may buy Ericsson if it doesn't get straightened out fairly soon. He also thinks someone will buy 3Corn. We talked about how we view Palm as a competitor. I was amazed at the number of Palm Pilots I saw at this conference. We really need to follow up with them on GPRS rapidly and get their best thinking given our goals.

We really need to demonstrate to people like Nokia why our PDA will connect to Office in a better way than other PDAs even if that means changing how we do flexible schema in Outlook and how we tie some of our audio and video advanced work to only run on our PDAs.
GOVERNMENT EXHIBIT
Remedy 1
MSCE 0097924 CONFIDENTIAL
From: Harel Kodesh
Sent: Sunday, July 11.1999 10:25 PM
To: Bill Gates
CC: Bob Muglia (Exchange); Jim Allchin (Exchange); Mats Wennberg; Thomas Koll; Greg
Faust;
Jonathan Roberts; Bill Mitchell
Subject: RE; Nokia

There is a lot of stuff here. I will try to answer line by line.

1. Our microbrowser needs a WAP stack. There are 3 Possible places we can like it from: Nokia is willing to SELL it to us, Ericsson is willing to give it to me wee, and MotoroLa is still undecided what they want to do. So right now we are working with Ericsson on getting the browser. It is a better deal than the Nokia one. We told Nokia that We do not need more than one stack, and the stack that Ericsson gives us is good. This is for V2 of the microbrowser and we do not plan to give that away. Our browser will be better in XML than the Nokia one.

2. HDR vs GPRS—we are going through the analysis now. I don't understand where the fraud is. As we and Sprint talk more about R we will do me analysis, Ericsson and Nokia in me past claimed that CDMA is a loser, but at the end 3G is CDMA based. I am not saying that the HDR is the winner and we will do more to understand GPRS—I will take the action item there.

3. the server based scenarios look very compelling, but we are missing some work items to make it really cool. Palm is the clearest threat right now and this is where we spent most of the efforts. I think the effors is bearing fruits: finally We got the sync technology to the point where it is much better man palm. Casio demonstrated the Video and Audio are huge sellers. (and with MSAudio we do have the tie back to our technology). Unfortunately we do not have enough inventory to reach parity and that will be the case until early 2000).

4. There are hotmail/exchange convergence issues here. as well as connectivity back to office. I think we are doing a good job in rapier time frame, but we will have problems with hardware availability and this is what we are trying to fix now. I will work with bobmu on these issues.
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From:. Harel Kodesh
Sent: Sunday. July 11, 1999 10:45 PM
To: Harel Kodesh; Bill Gates
CC: Bob Muglia (Exchange); Jim Allchin (Exchange); Mats Wennberg; Thomas Koll; Grog
Faust; Jonathan Roberts; Bill Mitchell
Subject: RE: Nokia

Forgot one thing: We absolutely need to go after other PBX manufacturers and develop

the market independently of what Nokia can or cannot do. I really would like to see us announcing an effort to provide, campus communication (ideally .with Nokia and others) even though they may fall behind in terms of schedule. The whole offering is not a consumer offering and we will need some lead time to sell it to the enterprise.
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Cc: Bob Muglia (Exchange); Jim Allchin (Exchange; Mats Wennberg; Thomas Koll; Grog
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MSCE 0097927
CONFIDENTIAL

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MSCE 0097928
CONFIDENTIAL

MTC–00030614

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

UN??) STATES OF AMERICA, Plaintiff,
Civil Action No. 98–121 CKK, ??FT CORPORATION, Defendant

STATE?? NEW YORK: et al., Plaintiffs,
Civil Action No. 98–123 ??KK, MICRDN??FT CORPORATION, Defendant

COMMENTS OF SOFTWARE & INFORMATION INDUSTRY ASSOCI?? ION ON PROPOSED FINAL JUDGMENT

Ken Wasch, President (Bar No. 93,4984) I
Software and Information
Industry Associa?? 1090
Vermont Avenue, N W
6th Floor
Washington, DC 20005
(202) 289–7442
Douglas L. Hilleboe (Bar No. 386091)
Steptoe & Johnson LLP
1330 Connecticut Avenue, NW
Washington, DC 20036
(202) 429–3000

Dated: January 28, 2002

COMMENTS OF SOFTWARE & INFORMATION INDUSTRY ASSO?? ON PROPOSED FINAL JUDGMENT

Pursuant to Section 2(b) of the Antitrust Procedures and Penalties Act (the ''??nney Act'') 15 U.S.C. § 16(b)-(h) (2000), the Software & Information Industry Associati?? (''SIIA'') submits those comments on the Proposed Finn Judgmenet (''PFJ'') filed by the Unite ?? Department of Justice (''DOJ'') on November 6, 2001.

SHA is the principal trade association of the software code and information?? tent corp?? SHA provides global services in government relations, business development corporate education and intellectual property protection to more than 800 leading s ??are and ?? company. Our member develop and market software and electronic ??tent for business education, consumers, and the Internet. SIIA's membership is compiled ??arge and small ?? companies, e-business and information companies, as well as many traditional and electronic commerce complies of varying sizes.

Among SIIA's key public policy issues is the promotion of competition in th??ftware industry. SIIA has promoted these principles of competition in a variety of fora, inc??g the federal courts.

The PFJ proffered by DOJ represents a remarkable change of heart- or, per?? more accurately, a loss of heart. For whatever reason, DOJ proposes to end one of its m?? important and successful monopolization case a with a settlement that reflects neither its litiga?? ??position nor the decisions it won at trial and on appeal. A settlement as weak as this would ?? been disapp??, but perhaps understandable, at it had been reached before trail. In ?? is uncertain, and sometimes DOJ must take a bird in the hand. But in this ?? of the ??giation is past, and the new Administration arrivals are dot free to decide ?? the?? to this case. The law of this case is settled. The trial and appeals ?? have alre?? finding of fact and conclusions of law. These findings and conclusi?? proceeding whose raison ?? is protecting against an improperly ?? or expedient compromise of the public's interest in enforcement of the antitrust laws.

Appropriate relief in an antitrust case should end the unlawful conduct, ?? competition, avoid a recurrence of the violation and others like it, and ?? anticompetitive consequences. Unfortunately, SIIA submits that the PFI does

not a?? these ?? and ignores significant parts of the Court of Appeals's decision regarding ?? an?? and their consequences. Ever where it seems to address the ?? identified by the Court, the PFJ is so porous that it provides little or no protection a ?? a repetition of Microsoft's past anticompetitive acts.

Flaws in the PFJ's Remedies. The two most salient remedies imposed?? Microsoft under?? PFJ concern flexibility for OEMs to install competing middleware and A?? DOJ's Competitive Impact Statement (''CIS'') stresses the importance of preventing future??ses in these ?? The theme of the CIS and PFJ is that competition was injured in this?? prin?? because Microsoft's illegal conduct maintained the applications barrier?? personal computer operating system market by thwarting the success of middleware ?? would have ?? competing operating systems gain access to applications and other need?? complements. The PFJ is intended to restore competition. In fact, however, the PF?? so loosely written it is likely to have only the most modest effect on Microsoft's actions- ?? all on its ability to monopolize new sectors of the information technology market.

a. Middleware. Middleware was at the heart of the case. Impelled by enth??asm for the Intr??, PC users embraced Netscape's browser, and Netscape (particularly in c?? ??ination with JAVA) was able to provide developers with a new, non-Microsoft?? h to the des?? This is not simply an academic observation on the part of S??A and its ?? For ?? every one of our members, the rise of independent middleware opened ?? that were the objects of intense strategic focus. The reason for this ?? was that our ?? programs suddenly could use Netscape and JAVA as mediators to ?? launch and ?? the desktop. For the first time in year it seemed possible that independs?? software venders (ISVs) would have a way to reach the great majority of computer users ind??dent of Microsoft. Indeed, because they could run on other operating systems. JAVA and?? cape's browser suddenly offered these ISVs an even broader market than they could obtain developing for the Microsoft operating system.

The CIS describes how this competitive threat struck at the heart of Microso?? monopoly, and Microsoft's counterattack used every possible weapon, including?? ??lawful tactical?? ''leveraging'' its operating system monopoly. The PFJ seeks to prevent Mi?? soft from repeating these tactics by ensuring that future middleware vendors are not denied ac??to the desktop. But the measures chosen are unlikely to have that effect. As a matter of ?? they are family weak. Microsoft itself is expressly granted nearly complete control over ?? meaning of ''middleware'' under the PFJ.

Equally important, these measures are written for a world that no longer exis?? The market ?? has moved on. The PFJ grants to hardware makers the right to add middle wa??cons to their ?? but these companies simply lack the financial strength and the motivation??levelop new software that might threaten Microsoft. To take one example, OEMs have been ??ured by Microsoft for several monks that they may customize their desktops by uninstalling?? ??soft's Internet Explorer; not one has actually done so. Meanwhile, the PFJ does not give i?? endent software vendors who might challenge Microsoft the one thing that would tempt then?? a channel to users that is not subject to exclusionary practices by Microsoft. On the ?? trary, the PFJ pro??ects middleware only after Microsoft has launched a similar product, by w??time it is too late. Developers of applications will always develop first and most enthusiastical?? or the most w??dely deployed platform, because that platform offers them the largest marke ?? the most users Users, in turn, will typically choose the most widely deployed platform beca?? it offers ?? threatened Microsoft in 1995–98 because it could offer developers an even bigger m ''Microsoft plus'' market.

??u Microsoft cannot be seriously challenged in that way again because no n??enact to the middleware market can hope to equal the ubiquity of Microsoft in that market, l??:one achieve the ''Microsoft plus'' market that Netscape and JAVA offered in 1995–98.

b. APIs. The PFJ also requires that Microsoft disclose the APIs used by Mi?? soft middleware to interoperate with the Microsoft operating system. Here, too, the PFJ?? ??ers both from porous drafting, and #ore a curious blankness regarding the sources of Micros?? dom?? of the market.. The provision is replete with terms that are not defined (?????? is rimed or distributed (''Microsoft Middleware'') or, most remarkably. are left to be defined ?? Microsoft's ''sole discretion'' (''Windows Operating system Product'').

In any event, the PFJ does little more than throw Microsoft into a briar patch?? as long ??called to?? Microsoft's ?? application developers writing for its users. To write programs for Microsoft users, ?? developers must have access to Microsoft's APIs. The APIs are their air supply, an ?? who are too independent or too successful, it has every incentive to provide extensi?? inf?? about its APIs. And the PFJ leaves the valve firmly in Microsoft's?? allowing 'Microsoft to impose royalties and other restrictions on developers who on, access to the APIs. The PFJ thus requires little or nothing more than Microsoft would provid?? its own. Unless developers can be guaranteed an air supply that does not depend on Microso?? hey wi11 not ?? the company that can unilaterally cut them off.

2. Backward-Looking Remedies. In short, when all is said and done, this?? wagers everything on a series of measures that might have prevented Microsoft from unlaws?? y destroying Netscape in the browser wars. Even this is open to question, but the real ?? lem with the PFJ lies deeper, for there is not the slightest chance that these measures will ??ow a new competitor on the order of Netscape to emerge. The market has moved on. Focusin?? ??y on prever??ing a repetition of the unlawful actions Microsoft took in 1995–98 is like neg?? ling an end to World War II by letting the Germans keep Paris as long as they promise to rel?? d the Mag??st Line. Such a limited focus is not just improvident, it ignores the instructions of the ??art of ??? ''fruits'' of its unlawful conduct. This cannot be accomplished by relying on the emer??ce of some yet to-be-identified middleware challenger. To the contrary, Microsoft has alre?? solid find its unlawful victory into a browser monopoly, and it now bids fair to make?? entire Interne?? into a proprietary Microsoft environment. Any remedy that seeks to deny M??soft the fruits of its unlawful conduct must at a minimum prevent Microsoft from using the?? conduct to extend its control or services that rely on Internet Explorer.

For that reason, SIIA urges that the PFJ be expanded to address present and?? conditions, and not just the dead past. The PFJ must take steps to reduce the massiv?? tructural advantage that Microsoft has achieved by unlawfully leveraging is opiating systen?? into Internet-access These steps include opening the code of Inwrn?? restricting exclusionary uses of Windows XP and the tools that make up Mic?? .NET in tiative, preventing Microsoft from ''polluting'' standards by adding?? extensions, and inclusion of Microsoft's productivity applications in any relief.

3. Missing Principle. One further gap in the PFJ deserves mention. If the?? changes required by the PFJ are of very dubious force, the only provisions likely to ?? continuing value are those that spell out broad principles of conduct. Here too thee?? room for disappointment. The PFJ does not prohibit Microsoft from intentionally di??,ling or adver?? affecting the operation of competing products. No explanation is offered ??

4. Procedure. Finally, SIA wishes to address one procedural point. At the?? this proceeding are the decisions of the Court of Appeals and the District Court.?? about Microsoft's conduct and about the appropriate remedies are an essential?? interest analysis. But they are also at the heart of the case between the remaining liti?? and Microsoft. It may be difficult to reach a conclusion about this PFJ without Pref?? decision on the yew issues that the parties intend to litigate before the Court in the ?? To do so on the basis of a few Tunney Act filings rather than a full record might do a?? to the parties to that litigation. SIIA therefore respectfully requests that this Court ?? the PFJ and in terms under advisement until the conclusion of the litigation. In sum, the PFJ, as written, represents a failure of will and technological wis??m that canh?? approved by this court consistent with the unanimous liability decision o??3 Court of Appeals, traditional standards of antitrust remedy law, or the Tunney Act.

II. ARGUMENT

A. Standard of Review

Under the Tunney Act, this Court is required to review a proposed settlemen?? Deter??e whether it serves the ''public interest.'' In most instances Tunney Act pr?? occur prior or to trial and without any judicial findings of liability. The Act was pass?? stage if the proceedings to the sunlight of public scrutiny. In the unique?? this case, however, where the Court of Appeals issued an opinion on the merits prio?? inition?? ?? consistent with the Court of Appeals opinion. The Court of Appeals ruled, ''[t]he Su?? has expl??red that a remedies decree in an antitrust case must seek to ''unfetter a ??

conduct,'' Ford Motor Co., 405 U.S. at 577, to terminate the?? deny in the defendant the fruits of its statutory violation, and ensure that there remain?? practices likely to result in monopolization in the future. Thus, this Court must ??ider each of these factors in its public interest analysis.

Ordinarily, the Department of Justice is given prosecutorial discretion in de??ng whether to bring a civil antitrust action. As a result, courts generally require that a ??posed settlement only be ''within the reaches of the public interest','' which approval ''even if it falls short of the remedy the court would impose on its own.'' Thus, in?? Tunney Act cases, courts have permitted entry of consent decrees which were mere?? with the government's general theory of liability as manifested in its complaint'' ?? ''gran??] relief to which the government might not be strictly entitled'' under the ?? Ben??. 648 F.2d at 660.

In this case, after trial and with the benefit of an extensive factual record, the?? App?? held specifically that relief must seek to ''terminate'' Microsoft's operating. tem?? monopo?? ''unfetter'' barriers to competition to the OS market, and ''deny'' Microsc?? he ''fruit'' of its statutory violations. DOJ itself has emphasized to this Court that ''b?? the applical?? remedial legal standard and the liability determination of the Court of A??als are clear ?? Here, there is no question that the Court of Appeals is binding on this Co?? as well as the ??itigins. Consequently, the Court of Appeals'' mandate is the ''public interest as?? pressed in the ?? laws.'' ''[A] remedies decree in an antitrust case must seek to ''unfetter a market ?? antico?? e??itive conduct,'' to ''terminate the illegal monopoly, deny to the defendant t?? fruits of its sta??tory violation, and ensure that there remain no practices likely to result in me?? ??olization in the ??lure.'' Microsoft III, 253 F.3d at 103 (quoting Ford Motor Co. v. United S?? 405 U.S. 5??2 577 (1972), and citing United States v. United Shoe Mach. Corp., 391 U.S. ?? 4,250 (1968) (internal citations omitted)). No new legal standard for monopolization relief ?? is put forwar?? by the DC Circuit. On the contrary, the Court adopted the traditional test ??d on by the Supreme Court. Joint Status Report, United States v. Microsoft Corp., at 2g (D.DC filed S?? .20, 2001).

The CIS, however, articulates a different and considerably less rigorous stan??d for a reme??y in an antitrust case. According to the CIS, ''[a]ppropriate injunctive relief. ??hould: (1) end the ??lawful conduct; (2) 'avoid a recurrence of the violation'' and others like it??d (3) undo is anticompetitive consequences.'' Significantly, the formulation advocated DOJ does not re??re the remedy to 'terminate'' the illegal monopoly, or to 'deny the defendan??e fruits'' of its ?? awful conduct. Regardless of whether the DOJ formulation may have been ??propriate in pas??es, it is simply the wrong standard of review for the remedy in this case, where the Dist?? Court and Court of Appeals have clearly outlined how Microsoft violated th?? Her??an Act. The PFJ is deficient under either formulation. There are substantial disparities ??tween the CIS and the PFJ. And the DOJ has not even attempted to defend the PFJ under the ?? string??, and binding, Ford/United Shoe/Grinnell standard that this Court must see?? enforce. CIS at 2.4 (citations omitted).

?? SIIA's Remedy Proposals are Reasonable and Proportional to Microsoft's Unlawful Conduct ??UA's proposed modifications to the PFJ, described in detail below, are both ??umerous and substantial. Regrettably for consumers, Microsoft's already proven monopolist ??cts have so destroyed competition in the operating systems market that adoption of these pro??als is critical if the PFJ is to ''unfetter'' the market from Microsoft's anticompetitive cond?? ''terminate'' Microsoft's illegal monopoly, deny Microsoft the ''''fruits'' of its Sherma??ct violations, and prevent future monopolistic acts, in accordance with the Ford/United Shoe/Grinnell standard for remedies.

There are similarities between this case and the AT&T divestiture, the last ??ge mo??ization settlement under the Tunney Act. SIIA submits that in This case the PFJ is simila??y completely inadequate to remedy the serious antitrust violations in this ma??. In the former matter Judge Greene reviewed the evidence on all issues except remedy. Af?? evidentiary hearings, third-party submissions, and lengthy oral argument, Judge Gre?? declined to approve the consent decree as proposed because he concluded that it was inadequ?? in certain areas and precluded the Court from effective oversight and enforcement. Judge Gre?? required significant changes to the proposed decree before he would consent to enter the settlement under the Tun??ey Act's public interest standard, holding that ''[i]t does not follow... that ?? Court] must ?? ??uestioningly accept a [consent] decree as long as it somehow, and however ?? inad??tely, deals with the antitrust... problems implicated in the lawsuit.'' SIIA ?? respect??lly requests that this Court follow Judge Greene's prudent actions and send ?? parries bac?? to the negotiating table to formulate an appropriate PFJ. This Court should re?? ??e its con??s on on the PFJ until after the pending State case has been litigated.

C. The PFJ Fails to Address the Core Violations Affirmed by the D?? Circuit

1. The PFJ Does Not Eliminate Microsoft's Binding of its M??eware to its Operating System As the C??S indicates, the core manner in which Microsoft unlawfully mainta??d its Win?? Operating System (''OS'') monopoly was by bundling and tying platform ??dleware to the OS. Microsoft used this strategy to defeat the alternative platform threats pos?? by Nets?? and JAVA. The DC Circuit ruled that these actions constituted unlawful ??intenance of mo??poly under Section 2.

a. Failings of the PFJ

It is critical for this Court to understand that the business and economics that ??ive the software industry demonstrate conclusively that the ubiquity of a development platf?? will almost always beat technological superiority. The common interest of software dev??bers and cons?? in adopting the most uniform platform is the basis of the Microsoft mone??y. As a result, if Microsoft is allowed to continue to bind or bundle its middleware offerings th the Windows OS, the ubiquity of its middleware will be permanent, and active middiew?? comp?? will never emerge. Microsoft will enjoy a perpetual maintenance of its nopoly, codified and reinforced by to the PFJ, and consumers will suffer a significant retardi?? of innnov??tion that would have otherwise occurred. The negative consequences of this ??ome on innov??tion cannot be overstated. If there is no way to reach consumers except throu?? Microsoft's platform, and if Microsoft remains free to cut off the access of applicati?? that are ''too ??ssful,'' then there are few incentives for independent innovation in the fie?? that Microsoft occupies. Yet one of the principal comparative advantages currently enje?? by the Un??tates'' economy and its consumers is generally superior technological deve?? ??nent and innovation. Allowing Microsoft's monopoly to continue unfettered (as the PFJ doe?? would signi?? erode this advantage over a short time.

The CIS recognizes this central fact and claims to have addressed it. The CIS ??ays that the PFJ will ensure that OEMs (manufacturers of PCs) have the contractual and eco??nic freed?? to, distribute and support non-Microsoft middleware products without fear??oercion or retaliation by Microsoft. Further, the CIS claims the PFJ will ensure that OEMs have he freed ?? to configure the personal computers they sell to feature and promote non-Microsoft midd?? are, and will ensure that developers of these alternatives to Microsoft prod?? are able to fea?? those products on PCs. The CIS also claims the PFJ will ensure that OEM ??ave the freedom to offer non-Microsoft middleware, by requiring Microsoft to provide the OEMs with the ability to customize the middleware installed.

SIIA considers these goals to be laudable. But flaws in the PFJ as written m?? that it cann?? achieve these goals, or even reduce the monopoly Microsoft currently enjoys??

i. The ''Plumbing'' Problem

First, merely allowing OEMs and end-users (individuals and businesses) to ??veicons and shor?? cuts (so-called ''end user access'') does not solve the underlying problem. ?? PFJ leaves all of the browser middleware on the PC hard disk, which means that it is ava??le to Window, and all Windows applications. In other words, the PFJ does nothing to re??e or modi??y the code itself- the hidden ''plumbing': by which Microsoft has bound Intel Explorer (IE). Windows. As a result, third-party software developers can continue to rely Microsoft's middleware plumbing—as long as they write Windows applications. N??e of the incer??ves that bind developers to Microsoft will change under the PFJ because dev??ers will still b??sured that Microsoft's middleware will be installed on about 95 percent of??sktop PCs whether or not the ''end user access'' is removed. In short, Microsoft can still enjoy benefit it wres??ed from Netscape and JAVA when it forced their middleware out of the main??un. That bene??vas not a ubiquitous icon—it was ubiquitous plumbing.

The PFJ thus fails to address the network effect that drives the Microsoft mo??oly corrp??tiors will still lice the same

applications barrier to entry because Microsoft's development platform platform will still be ubiquitous. ISVs will therefore continue to write ??plications to the vi??osoft APIs, ignoring the more narrowly distributed—and therefore highest perunit?? ??lrematives. If anything, the PFJ helps to lock in this network effect by mere??iving OEM?? and end users the option to remove the icons and shortcuts rather than allow them to decide?? whether to add the Microsoft middleware in the first place. For this reason are the PFJ fails to meet even the requirements of antitrust remedies law and does not comport the DC Circuit opinion.

ii. Distribution of middleware

As is detailed throughout these comments, it is import-ant for this Court to un??stand that Microsoft currently enjoys a monopoly in the distribution channel—namely, the Win??ws oper?? system. The PFJ does nothing to alter this monopoly since Microsoft is ali??ed to contr?? integrating its middleware into its ubiquitous OS. The ''removal'' of the mi??eware in the s??peificial manner proposed by the PFJ permits Microsoft to commingle code for middleware with the OS, and does nothing to prevent Microsoft from protecting its w??ows monep??ly power through the same exclusionary means used against Netscape and ??A. Nothing is more persuasive than experience, and experience suggests that granting Ms the right?? uninstall'' IE is a meaningless remedy In fact, Microsoft has already revis?? Windows XP so that OEMs may'' ''uninstall'' end user access to IE. Nor one OEM to date has?? en adva??age of this option.

iii. Reliance on OEMs

SIIA also believes that the PFJ's reliance upon OEMs in this section of the is mis??d OEMs have historically been low-margin economic dependents of Micr??ft, and they have therefore been reluctant to challenge Redmond. Since 1995–98, this situa?? I has worseued. Currently, PC manufacturers face falling prices and demand. It is not ec??mieally rational in this market environment to expect OEMs to invest in the research and de??pment, and product design work, necessary to replace Microsoft's ''free'' middleware with ?? products of c??peting vendors. OEMs should have the option to ship Microsoft middleware hey choo?? do so by obtaining it from Microsoft, and not because they were forced to so by Microsoft's bundling or bolting of the middleware are to the OS.

iv. Lack of exclusivity

Another essential element of the PFJ's supposed remedy to Microsoft's mon??ly is to crea??e ''marketplace'' for competitive middleware on the PC desktop. This ''marke??ce,'' however is illusory. It will never occur under the current structure of the PFJ. Deve??ers canno??be offered the ''Microsoft plus'' market that Netscape and JAVA offered befo?? Microsoft's unlawful counterattack. Microsoft will still have to all PCs for fr?? by virtue of its ?? r??ution monopoly. Consequently, its competitors can only hope to be instia?? alongside Microsoft's middleware on some of the machines sold by OEMs. Instead ''Microsoft plus'' they will have to settle for ''Microsoft minus.'' Since software dev??pers write first ?? the most widely available middleware (the applications barrier to entry l9), c??eting middle are vendors will not pay much for the chance to run a distant second to Mir??oft in ubiquity. Nor does the PFJ allow independent middleware companies to purchase a ??icrosoft-free'' market; without the commingling remedy, alternative middleware vendors cart?? pay for exclusivity. The PFJ only permits competitive middleware vendors to pay for share ??ccess to some PCs. SIIA's proposed anti-bundling remedy, in contrast, would immediately ??ease the value and competitiveness of the ''marketplace'' by permitting PC manufacturers to y differn??late their products with competing middleware.

b. Remedies for the PFJ's failings

The appropriate remedies proposed by SIIA for this bundling problem are n??erous because the problem is so central:

Microsoft should be prohibited from incorporating any middleware it the OS (including for purposes of this section IE), and prohibited from making any Microsoft Middleware Product the default middleware, i?? order to prevent the continuation of the applications barrier to entry. Further, the definition of Middleware Product in the 2000 Decree s??ld be amended by:

The definition of ''Bind'' in Section 7.d of the 2000 Decree should be supplemented to add ''and all of its related files, including, without limitation, by commingling of code;'' IE, and other browsers (includ?? MSN Explorer) should be eliminated from the definition of'' Middle?? Product, but instead covered by the open source remedy described and Microsoft should be prohibited from ''altering or interfering with the choice of middleware by a user or OEM, including without limitation setting or changing MIME types to automatically launch a Microsoft Middleware Product, plug-in or other Microsoft software.'' Microsoft should be provided with a 90-day transition period in whi?? reconfigure Windows XP and any other existing OS products that currently bind Middleware Products with the OS. Three other remedial points bear discussion here. First, the current definition Microsoft Middleware or Microsoft Middleware Product allow Microsoft to unilate?? Dete??e the scope of its obligation simply by deciding whether to ship a product ??rately from Windows. The definition under the PFJ provides that if Microsoft has distribu?? middleware separately from the OS, it is a Middleware Product. In S??A's view the defin??on should provide that if anyone distributes middleware separately from the Middleware Product, and subject to the binding prohibition. Thus, if a competitor c?? middleware technology, Microsoft would therefore be precluded from introducing it versic?? integrated: with the OS, and thereby stifling the potential for the new middleware techn??logy to erode the applications barrier to entry. In other words, the proposed r?? definition would ensure that Microsoft cannot gate'' the development of middleware integ?? new innovations pioneered by third-parties into its OS, instead of distri?? Mi??ft ''clone'' as a separate retail product.

Second, the Office Suite of productivity applications and the Outlook email infor??tion management program should be added to the definition of Middleware order preclude Microsoft from evading the constraint of this section of the PFJ by b?? or O?? technology (each of which exposes APIs and can erode the applications entry ?? the OS. Third, Microsoft should be required to provide IE source code on an open s?? descr??bed below. This is necessary because IE, which once was a classic example ?? middleware, has now been so thoroughly integrated into the OS by Microsoft that P?? Mi??ft to bind middleware to IE would allow .Microsoft to circumvent the anti-b?? pro??on. Under a properly revised PFJ: IE would be treated as a Windows Operating System Product ''for purposes of this section.'' To the extent middleware is available in the retail channels from competitors, Microsoft would be barred from tying, binding, or bolti?? (either contractually or technologically) similar technology to the operating system. Microsoft would be prohibited from shipping Windows to OEMs wit Middleware or Middleware Product included. Both OEM and end users would, of course, be free to use Microsoft middleware received by download, or sold in retail stores. OEMs would also be free to procure Microsoft's middleware separat?? and include that software on their retail PC systems. Microsoft products that would fall under the middleware restrictions l include Media Player and Windows Messenger. The Court of Appeals'' decision in this matter supports the SIIA's proposed a?? reined?? While the Appellate Court reversed the District Court's conclusion that Mi?? exc??y conduct violated Section 1 as a per se unlawful tying arrangement, it ?? affirmed liability for monopoly maintenance under Section 2 for this same behavio?? ''[t]??ologically binding IE to Windows... both prevented OEMs from pre-insta?? bro??s and deterred consumers from using them.'' The Court specifically fo?? Mic??ft's commingling of software code for Windows and IE was unlawful and r??, that its remand of the Section 1 tying claim was wholly consistent with imposing S?? liabi??y for essentially the same conduct: ''The facts underlying the tying allegation overlap ??th those set forth.., in connection with the * 2 monopoly maintenance c?? Thus, this Court is not limited in an3'' fashion in altering the PFJ to restrict Microsof?? bund?? and bind other software with the OS.

The DC Circuit's express affirmance of liability for binding IE to Window signi?? because Microsoft sought to limit ;he Court's holding solely to the more on which the DC Circuit ''also affirmed, of excluding IE from the so-called ''add/re?? Micr??ft argued that its commingling of code was appropriate and that the Court s?? affi?? the ground that it had not allowed end users a means of deleting the IE i?? desk?? The Court of Appeals rejected Microsoft's argument out-of-hand.

2. The PFJ Does Not Prevent Microsoft from Using Window Features to Protect Its OS Monopoly

a. Failings of the PFJ

The current computing market is shifting away from client-side software, to??d an

envit??ent of Internet-based (''distributed'') applications and Web services. Eve??ng from spread sheets and music to air travel reservations and photo development can be off?? as a web service. Microsoft has made clear its desire to shift its entire business from a produ??icensing model to a model in which it derives revenue from a subscription of services. Microsoft has designed Windows XP to distribute key middleware components such as Passport, ??dows Messenger, and Windows Media Player, while at the same rime making them archit??urally necessary for the provision of many internet services, in addition, Microsoft has in??singly been ??ding Web-based services into its Windows operating system, thereby plac?? competitive and innovative services at a great disadvantage. This is an all-too-fami?? tactic. By bundling and tying its Web-based services and Internet middleware to Windows?? Microsoft further reinforces the applications barrier to entry achieved by locking us?? into its own Web-based services and proprietary Internet interfaces. The CIS stares that the PFJ is designed to prevent recurrence of the same or ??ilar prac?? that Microsoft employed to reach its current monopoly position. As disc??ed above, however, the PFJ does not achieve the goal stated by the CIS because it fails to proh?? Microsoft from continuing to bundle and tie middleware to its Windows operating s??m, despi??he Court of Appeals'' conclusion that these same acts were among Microsoft??ore Shern?? Act violations. The PFJ does nothing to impede Microsoft from repeating ?? pattern of exclusionary conduct because the PFJ is restricted to the software market and produ??hat existed in 995–98, and does not address today's Web-based marker in which service??nd multi??ia are replacing client-side software. The PFJ does not cover Web services?? Web-based applications, or Internet content, all of which Microsoft has integrated into Window??P. Therefore Microsoft is free simply to continue using its familiar repertoire of anti??petitive tacti??s (e.g., tying; technical restrictions on user choice, etc.) to protect its OS again??reats in the Web-based market through its Windows XP design. These inadequacies of the ??run completely counter to tile public interest and only compound the problems caused b?? Microsoft's unlawful conduct by enabling Microsoft to extend its unlawfully-won monopoly to next generator of technology.

b. Remedies for the PFJ's Failings

The PFJ should be modified to explicitly foreclose Microsoft's use of Windo??XP features to protect its Windows monopoly against Internet-based competition from ??er product?? and Web-based services. More specifically, with respect to the PFJ's OE??ovisions, SIIA proposes the following:

. the OEM provisions should be amended so that Microsoft may not re??ct (by contract or otherwise), or retaliate directly or indirectly against, a ?? OEM from modifying, adding or deleting icons, taskbars, toolbars, li?? and default pages, or other similar end user features, in Internet Exp?? and successor browser products whether or not such browsers are distributed together with or separately from a Windows Operating Sy??m Product;

. the OEM provisions should be expanded to cover the current configu?? on of Windows XP by permitting OEMs to remove, modify'' or substitute ?? ''My Photos,'' ''My Music'' and similar OS folders; and

. Section 3.a.iii.2 of the 2000 Decree should be clarified to require Microsoft to compensate an OEM for the placement of any icons of Microsoft products or services on the Windows desktop.

. With respect to tying of products and services, the prohibition on contractual tying in Section 3.f of the 2000 Decree, precluding Micro?? from ''conditioning'' a Windows Operating System Product license on 'OEM or other licensee'' agreeing ''to license, promote or distribute'' ??y other Microsoft software product, ''whether or not for a separate or positive price,'' should be reinstituted. In this regard, this provision ??uld be supplemented to include a prohibition on tying or bundling Web-??ed services, or access to Web-based services, with the Windows OS or ??Microsoft Internet browser.

Only with these modifications can the PFJ satisfy DOJ's own remedial goal?? the Court of Appeals'' requirement to prevent future monopolistic practices. The modification?? the OEM provisions are essential to enabling OEMs'' flexibility to differentiate their products OEMs must be free to eliminate or alter start menus and to integrate value-added technologies i??eir offerings. This ability must not be constrained by first having to remove or otherwi?? ??hange the Windows bundle. The key to an effective remedy is changing the ability of Microsoft to make all systems integration and software bundle decisions, and moving some of that dec??-making power down the supply chain either to the OEMs, or integrators, acting on their beh?? Moreover this ability should not be limited to fringe, applications, but should give OEMs the ability to focus on the core applications actually driving PC sales and demand at any??en point. This modification is designed to prevent the further reinforcement of the ap??tions barrier to entry by locking users into Microsoft's Web-based services. Microsoft's ??rol over interoperability interfaces is anticompetitive; it directly reinforces the applications b??er to entry reduces opportunities for ISVs and competing platform suppliers to cr??platform applications, and prevents emerging computing platforms (e.g., handheld devices, d??al telephones, etc.) from evolving into at least partial substitutes for desktop PCs.

Finally, it is critical to give OEMs the ability to customize and earn revenue??m desktop and browser configuration. Unfortunately, Microsoft's ability to impose its produc??acement and icons on the browser and the desktop for both products and services, without ''??ng'' for me placement, undercuts the ability of OEMs to earn revenue primarily because it e??inates the ability of the OEMs to provide exclusivity. This was most evident m Summer 2001??hen AOL's deal with a major OEM for placement of an AOL icon on the Windows des?? was thwarted by Microsoft's insistence that its corresponding icons also be included by??OEM, without compensation. Microsoft's action undercut the economic value of the AO??clusive arrangement and the OEM's ability to exercise its right to desktop flexibility.

The Court of Appeals's remedial standard in this case supports SIIA's prop??ban on con??al tying, which goes directly to Microsoft's ability to control the applicati?? barrier to entry. The District Court is specifically, obligated under the DC Circuit's standard ''ensure there ??ain no practices likely to result in monopolization in the future.'' This req??s a cont??al tying prohibition to include not just the markers in which tying was used??eviously to m??in Microsoft's OS monopoly, but also the markets, such as the Web-based ??vices and applications integrated in Windows XP, in which tying would likely result in new m??polies in the future. A prophylactic ban on contractual tying is necessary, taking into account?? Court of Appea??s remand of the Section 1 claim, because without it Microsoft could easily ??e a prohi?? on technical bundling middleware with Windows.

With respect to Web-based services, two additional points directly support th?? Contra??al remedy. First, ''Hailstorm''—now renamed NET MyServices—is a de??opment platform that industry experts agree is middleware under any definition. Second, un?? products, there has never been a claim that technological efficiency is achieved by ty?? Web-based services to the OS. Therefore, the Section 1 tying issues addressed by the C?? of Appe?? are immaterial to a tying ban on Web-based services. The Appellate Cou??ite clearly recognized that ''[t]he facts underlying the tying allegation substantially overlap wit??ose set forth in Section II.B in connection with the §2 monopoly maintenance claim.'' ??use OEM and ?? contractual tying was a central element of Microsoft s unlawful monopoly ??intenance, it should equally be a central component of any remedy.

In its discussion of relief, the Court of Appeals did not indicate that any part??lar form of exclusionary behavior was off-limits, but at most that there should be an ''indicat?? of significan causal connection'' between a remedy and maintenance of the Windows ??nopoly. Curiously Assistant Attorney'' General James has reportedly argued that elimination ?? tying relief from the PFJ was required because the DC Circuit ''excluded'' the tying clai?? In the con?? of the Court's actual decision, that is plainly incorrect. Regardless of the de?? on by DOJ and the State plaintiffs not to retry Section 1 liability, the Court of Appeals re??d was based solely on application of the particular clements of Section 1 tying law, indepe??nt of both Section 2 liability (which it affirmed) and remedy.

3. Microsoft Has Unfettered Ability. to Define Certain Term?? the PFJ

a. Failings of the PFJ

The PFJ does not adequately remedy Microsoft's monopolistic conduct beca?? it grants Microsoft complete freedom to decide what constitutes middleware and what qualifi??as a platform software product. Under the PFJ, Microsoft Middleware is limited to soft?? code that Microsoft (1) distributes separately from the OS, and (2) trademarks. A relat?? deficiency of the PFJ is

its provision that [t]he software code that comprises a Windows Oper??g System Product shall be determined by Microsoft in its sole discretion.''

This ability to categorize its own products gives Microsoft enormous flexibi?? to circu??ment the requirements of the PFJ, many of which hinge on product definition. ?? For exam?? merely by placing a product that would ordinarily be considered middlew ?? ''inside'' the OS, or by adding the trademark ''Windows'' to a generic designation. Microsoft ?? exclude the product from the PFJ's middleware definition, thereby avoiding the triggering o??e API disclosure provisions. According to the CIS, the PFJ will ensure that OEMs have the freedom to of?? non-Microsoft middleware by requiring Microsoft to provide the OEMs with the ability ??ustomize the middle ware installed. More specifically, the CIS asserts that ''[t]he limits in th?? definitions ensure that the provisions of the Proposed Final Judgment apply to products that ca??edibly be said to pose, alone or in combination with other products, nascent threats to the appl??tions barrier to entry.''

The PFJ cannot possibly achieve the stated goals of the CIS if it continues to ??ow Microsoft to determine for itself what middleware can be included in the OS, and th??ope of a Windows Operating System Product. By unilaterally exercising its powers under th?? FJ, Microsoft can target competing middleware providers and deny ISVs and others the?? PIs needed to interoperate with Windows. As a result, the PFJ permits competitive gaming of?? settlement in o?? maintain Microsoft's monopoly power, thus reducing innovation and ch??eling OEM flexibility into those areas chosen by Microsoft because they do not threaten Microsoft's market power. Microsoft's ability to manipulate these crucial product definitions w??d deprive consumers of whatever limited benefits that the PFJ does provide.

b. Remedies for the PFJ's Failings

To have any hope of achieving the C1S's goals, the PFJ must be modified to ??nove from Microsoft the power to unilaterally decide the scope of its provisions. The traderma??mitation in the Middleware definition, and the ''sole discretion'' proviso in the Windows Ope??ng System Product definition, should both be removed from the PFJ. The concept of ''redistributable'' should be eliminated as well from the: PFJ?? his would fore?? Microsoft's ability to keep key technologies outside the definition of Mid??vare by simply ??lining to make stand-alone versions available and thereby harming those ?? plat?? (such as the Apple Macintosh) to which it ports Middleware today. As di??ssed above, the CIS asserts that the PFJ's definitional limits will ensure the PFJ's applica?? only to comp??itively significant products. Contrary'' to this claim, however, there is no rati?? conn?? between trademark status or stand-alone distribution and the competitive ??nificance of ??leware. Indeed, in some respects these factors act at cross-purposes to the F?? because they encourage the same type of technical integration with new middleware that Microsoft used with ?? to eliminate the threat from Netscape and JAVA.

4. The API Disclosures Under the PFJ Act to Reinforce The?? Applications Barrier to Entry According to the CIS, the API disclosure provisions of the proposed decree?? ''creat[e] the opportunity for software developers and other computer industry participants to ??elop new middleware products that compete directly with Microsoft by requiring Microsoft t?? sclose all of the interfaces and related technical information that Microsoft's middleware uses ?? interoperate with the Windows operating system.'' While SHA concurs with the i?? of the CIS, a careful examination indicates that this statement cannot be reconciled with th??rms of the PFJ. The PHJ would not provide middleware competitors with the information ??ded to interoperate. If anything, it allows Microsoft itself (as it does now) to decide wheth?? when, and which AP's to release to potential competitors, and includes mitigating provisions ?? undermine any apparent disclosure and fortify the applications barrier to entry.

The information disclosure and interoperability sections of the PFJ are amo??s most complex. The core of the provisions are found in Section III.D, which addresses the ??ue of API disclosure, and Section III.E, which addresses the disclosure of communications pro??ols. These core provisions rely on numerous definitions which serve to undercut the effe??eness of these ??tions. SIIA describes below the impact of each definition. While Section III.J appears at the end of the PFJ, and III.D and III.E appear??ard the beginng of the PFJ, Section III.J is directly relevant to the scope of the disclosure??nd, in fact, relevant to no other provision of the PFJ). Section III.I.5 is also carefully exa??ed in S??A's analysis as it appears to grant Microsoft unique rights to insist on cross licer??to ''any'' intell?? property developed through the use of Microsoft's APIs.

a. Failings of the PFJ—Section III.D.—API Disclosu?? PFJ provision III.D requires Microsoft to disclose '':the APIs and related doc??entation that are used by Microsoft Middleware'' (defined in the PFJ) ''to interoperate'' (under??ed in the PFJ) ''with a Windows Operating System Product'' (defined in the PFJ). This pro??on simply restates Microsoft's current business practices.

Relevant to the question of whether any new information is actually require?? the definition of documentation'' within the context of API disclosure. ''Documentation ??is defined in Section VI.E of the PFJ as all information regarding the identification and means of using APIs that a person of ordinary skill in the art requires to make effective use of those APIs. Such information shall be of the sort and to the level of specificity, precision and detail that Microsoft customarily provides for APIs it documents in the Microsoft Developer Network.

It is therefore unclear whether any information disclosure is required under ??section of the PFJ that is not already part of Microsoft's information disclosure regime through ?? Microsoft Developers Network. The fact that the critical term ''interoperate'' is left ??efined suggest that the parties did not have a meeting of the minds regarding the kind of in??mation disclosure that is required under the PFJ. Likewise, the decree does not specify wha??meant by ''use'' of APIs. In fact, the phrase ''technical information'' does not even appear in th??roposed decre??. In contrast, the 2000 Decree's interim conduct remedies included a detail??efinition of ''Technical Information'' (Section 7.dd) that the Department and Microsoft have ??out expla?? eliminated from the proposed decree.

The utility of the information disclosure is also constrained by what Microsoft's permitted to define under the PFJ. As previously noted, Microsoft ''in its sole discr??'' shall determine the software code that comprises a Windows Operating System Product. ??crosoft, therefore, could redefine some or all of a particular ''middleware'' technology as par?? Window's and escape any of the disclosure requirements of Section III.D.

Similarly, the definition of ''Applications Programming Interfaces'' lacks cle??nd effective meaning. APIs are defined as ''interfaces, including any associated callba??terfaces, that Microsoft Middleware running on a Windows Operating System Product uses t??ll upon that Windows Operating System Product in order to obtain any services from that W??ows Operating System Product.'' This definition is inherently ambiguous because it de??ds on two terms, Windows Operating System Product and Microsoft Middleware, which are ?? defined by Microsoft alone.

It also remains unclear when there would be any information disclosure req??d by the PFJ. API disclosure for new ''Windows Operating System Products'' is required in ??mely ?? mann??r''

This term is defined as ''at the time Microsoft first releases a beta test ?? of a Windows Operating System Product to 150,000 or more beta testers.'' In the sof?? e industry, of ?? the ?? ''beta tester'' has a meaning distinct from ''beta copy.'' In the context ?? Microsoft products, even assuming that Microsoft has ever had 150,000 ''beta tester ?? it would be easy to circumvent the timeliness requirement of this provision by limiting distri?? on to under 100 000 beta testers—a number that is substantial.

The professed objective, as stated by the government, is to encourage ''midd?? are innovations.'' Yet, according to the specific terms of the PFJ, innovators are ?? those who are not entitled to APIs under the proposed decree. What innovators require is ?? the APIs that Microsoft middleware calls upon to perform its functions, but rather others, like ??indows APIs, that the next or broadened competing programs can call when executing their ??. By PFJ at 17. james.htm

b. Failings of the PFJ—Section III.E—Communicati?? Protocols

The CIS asserts that the provisions in Section III.E of the proposed decree w prevent Microsoft from incorporating into its Windows Operating System Products features functionality with which its own sender software can interoperate, and then refusing make avai?? information about those features that non-Microsoft servers need in order ??ave the same opportunities to interoperate with the Windows Operating

System Product.'' the dec?? API disclosure provisions, the specific obligations of Microsoft found in th?? FJ do not meet ?? Department's own test articulated in the CIS.

Section III.E of the decree does not require the disclosure of any APIs to co?? ??titors, only the release of ''Communications Protocols.'' Microsoft is free to refuse to disc ?? to comp??s any of the APIs that enable its server OS products to interoperate with ??ows, ?? Middleware.. or with Microsoft applications such as Office and Ou?? Thus. the ?? by Windows to interoperate with Microsoft s server OS, and vice-ve?? are simply ?? disclosable under the proposed decree. Nothing in the prevents Microsoft from building ''features and functionalities'' for server interoperability into Windows.

The definition of ''Communications Protocols'' itself is extraordinarily ambi??s. The dec?? defines Communications Protocol in Section VI.B as: the set of rules for information exchange to accomplish predefined tasks bet?? Windows Operating System Product and a server operating system produc?? via a network, including, but not limited to, a local area network, area network or the Internet. These rules govern The format, semantics, timin??cing, and error control of messages exchanged over a network. This ??tion does not prescribe what predefined tasks'' are encompassed, and the ??rase ''for?? semantics, sequencing, and error control of messages'' can just as easily be. d to apply only ?? physical means of sending information to or from a server (the rules for ?? smitting information packets over a network) rather then the content of such information (the ??es for structuring and interpreting information within such packets).. Indeed, although the descri?? Section III.E as providing support for ''features and functionalities,'' those ns do not appease ther in the substantive provision or the definition of Communications Proto Moreover, the key terms of Section III.E (like Section III.D, described above ??re undefined. Microsoft is allowed to define the term Windows Operating System Pr?? The co??nding prong of Section III.E is that Communications Protocols are disclosa?? when used ?? a Windows Operating System Product to interoperate with ''a Microsoft set operating system product.'' This important term, which provides the boundary'' for Microsoft'' ??ligation to disclose crucial information to rivals, is nowhere defined in the PFJ. Likewise,?? Section III.D, the failure of'' Section III.E to define ''interoperate'' reminds one of the stice ?? prior failure to define ''integrate'' in the 1995 consent decree.

The CIS asserts the term ''server operating system product'' includes, but is limited to, the ?? Windows 2000 Server product families and any successors. The PFJ, however, does not c??ain any of this language. Since consent decrees are interpreted as contracts, use of the ?? to supplement a decree in ways in which the parties did not agree is arguabl?? Unenforceable.

As with the definition of Windows Operating System Product, the scope of ??ndows server ??ating system product''—and thus Microsoft's Communications Protoco?? sclosure obligations—as a matter of law is subject Microsoft's sole discretion Therefore. ion III.E requ?? only the disclosure of the rules to accomplish predefined tasks'' (defined b?? Microsoft) by which a ''Windows Operating System Product'' (defined by Microsoft) interoper?? with a ''Microsoft sever operating system product'' (defined by Microsoft).

Section III.E does not cover protocols that are implemented in Internet ?? to support interoperability with Microsoft's server OS products. Many, if not most, ?? with servers occur via the Internet browser. Therefore, Microsoft can e y evade any ?? scope of this provision by incorporating proprietary interfaces and ?? cols into IE rather than Windows.

The obligations of Section III.E only apply to Communications Protocols th??re ''?? ... on or after the date this Final Judgment is submitted to the Court.'' ??onsequently all of the Communications Protocols built into Windows 2000 and Window ?? are expt?? disclosure because they were implemented before the proposed decree ??submitted. This ??ing proviso thus provides a ''safe harbor'' for all current Microsoft server pr ?? since under the anguage of Section III.E their means of interoperating with Windows nee ever be disclesed.

c. Section III.J. Carve Out.

Any disclosure provided by Sections III.D. and III.E. is mitigated by the car, ?? in ?? J, which permits Microsoft to refuse to disclose, in its discretion, protoc?? API's, and ?? information that are necessary for competition in the market and which Microsoft has ??. This Section of the PFJ is overbroad given the ''District Court finding ?? the Court of Appeals ruling. For example, this Section would arguably allow Microsoft ?? to disclose any APIs between the IE browser and the Windows OS, and the Communi?? ?? between IE and ISS, Microsoft's web server, because of the browser's rel??ce upon authe??cation and encryption technologies.

Section III.J.2 is even more troubling because it appears to give Microsoft th??ght to disclosure requests even where legitimate needs are shown to promote intero?? ability refuse For ??, based upon highly subjective criteria determined by Microsoft, it coul??fuse to ?? an API, Documentation or Communications Protocol if: i) Microsoft determ?? that there is not ?? ''reasonable business need'' for the information, or ii) if the entity fails to m?? ''reasonable objective standards established by Microsoft for certifying the authentic and viability of its business,'' or iii) if the entity does not agree ''to submit at its own ?? ?? program using such APIs, Documentation or Communication Protocols to ??rd-party verification approved by Microsoft.''

d. Section 11I.I.5—Mandatory Cross ''Licensing

The requirements of Section III.I.5. reinforce the monopoly position of Microsoft and are incon??sent with the abuses found by the Courts. This Section is sweeping in its bre?? by provi??ing Microsoft with the right to insist upon a cross license to ''any'' intellectual ??perty rights ?? to the exercise of a third-party's options under the PFJ, including ac ?? sing APIs ?? Communications Protocols granted under Sections III.D. and III.E. the ??sible safely provided by the last clause is entirely illusory due to the breadth of the cross??se.

e. Other Failings of the PFJ

The CIS claims that the PFJ will prevent Microsoft from hampering the dev, operation of ''potentially theatening software'' by withholding interface information permitting its own product to use hidden or undisclosed interfaces. The PFJ's trea?? Of APIs ?? to achieve the goal stated by the CIS for several reasons. API's are centra?? The barrier-Microsoft's control of Windows APIs reduces costs for Wind, developers and raises costs for rivals. As the Court of Appeals explained, because controls the APIs, ''porting existing Windows applications to the new version of ?? much less costly than porting them to the operating systems of other entrants who ?? freely include APIs from the incumbent Windows with their own.'' More fundam??lly, mere?? focusing upon Windows APIs used by Microsoft Middleware Products is no create conditions necessary for effective competition by alternative operating systen alternative Middleware. By requiring that APIs and similar information relate to ?? purpose of interoperating with a Windows Operating System Product'' the PFJ doe undermine, but instead reinforces, the applications barrier to entry. Disclosing Win?? it easier for ISVs to write more middleware applications for the Wind.

As described in Section II.C.1 above, by limiting the add/remove provisions ''access'' to middleware, the PFJ allows the code itself to remain on all Windows ?? which ?? incentives for ISVs to write to the APIs exposed by Microsoft mid instead of competitors. Thus, removing the obstacle of hidden or delayed APIs will non-Microsoft Middleware, since Microsoft Middleware code will continue to be ??

Additionally,. failing to require Microsoft to disclose APIs and similar interf?? (file formats data structures, code??s, and protocols) needed to interoperate with Microsoft?? Middleware and the Microsoft Office family allows Microsoft to repeat its anti-Net: of ?? cross-platform middleware that poses a competitive threat. The PFJ's require disclosure of Platform Interfaces similarly allows Microsoft to hamper ISVs competing platform developers in the competition for other platforms, such as non-I??desktops, handhelds and mobile phones.

f. Remedies for the PFJ's Failings

In order to create the appropriate market incentives necessary to reduce the a ?? SDA urges that any effective remedy must: expand API disclosure rights to include MS Office Middleware (Wo?? Excel, PowerPoint, Access, Outlook), include APIs and similar interfaces exposed by, or required to interop?? effectively with Microsoft Middleware, and expand the definition of Microsoft Middleware, and include Platform Interfaces. To be more specific, the following changes should be made to the PFJ: The API disclosure provisions of Section 3.b of the 2000 decree, inch their applicability to ''Communications Interfaces and Technical Information''- as well as the definitions thereof and of ''Timely Main—should be expanded to require Microsoft in addition to

make availa??to ISVs, IHVs, and OEMs, on the same terms as APIs: all ''file formats,'' ''data structures,'' ''compression/decompression algorithms ('co-de??s')'' ''protocols'' and related interfaces for its Applications products and Middleware, including but not limited to Office; and APIs, Communications Interfaces and Technical information allowing for interoperability of Microsoft Office with any Microsoft Platform Software, Windows Operating System Product, or Microsoft applications software product.

Microsoft should also be required to make available to all ISVs, IHV OEMs and third-party licensees all ''Platform Interfaces'' required to enable software installed on other computing devices (including but limited to servers, handheld devices, digital phones, etc.), whether Microsoft software, or that of any other company, to ''Interoperate Effectively'' with any Microsoft Platform Software, Windows Opera System Product or Microsoft applications software product. ''Platfor?? Interfaces'' and ''Interoperate Effectively'' should be defined as set f??in Appendix A.

S??A's proposal to expand the availability of API information to include Pla?? Inte??s (PIs), as well as Windows APIs, ensures that both ISVs and competing pl ?? soft?? vendors will have adequate technical information to develop applications ??ther OS platforms that can ''Interoperate Effectively'' with the Windows OS and other Micro ?? appli??nt??ons and middleware software. As a result, ISVs would face lower economi??bstacles in porting Windows applications to other OS platforms, and would have an incentive ?? tempt to develop cross-platform applications That would run equally well on any PC operatin?? ??stem, or other ?? device such as a desktop, handheld, or mobile device.

In considering this remedy it is important for the Court to understand that All isclosure ?? by which third-party software products run on the Windows OS, but ?? competing PC and non-PC platforms. Therefore, API disclosure alone has a counte??ductive ill ?? impact by reinforcing both the Windows platform, and the applications ?? to entry The communications protocols go to the broader question of allowing third ?? to ?? and add value to the operating system environment by better understand the way in which its different pieces communicate. By expressly including file formats and a structures for Microsoft applications (e.g. Office, Outlook, Exchange) in the inform, m that Microsoft is required to disclose to ISVs, the proposed remedy would reduce Micro ?? ability to expl??it its control of these critical interfaces (its ability to cut off the air supply o Vs) to reinforce the applications barrier and to disadvantage competing middleware and ?? software vendors.

S??A's proposed remedy would benefit consumers by providing a uniform b on which middleware and applications developers unaffiliated with Microsoft could design, ?? and ship competing software products that are interoperable with the Microsoft OS and ?? dominant applications and middleware products, thus eliminating exces?? and ?? stemming from software incompatibilities. Consumers would benefit ?? an expar?? choice of timely, interoperable software products, allowing them to make ??chasing decisio??s on the objective merits of product features and functions, rather than Micr?? unilateral power to control and offer interoperable software products.

As expanded, the remedy would also facilitate entry'' by independent platforn?? venders and act to diminish the applications barrier to entry protecting Microsoft's ?? First, by requiring the disclosure of file formats and related technical in?? for Office and Outlook—two Microsoft applications products that dominate their respe?? the proposal would support the competitive development of applications ??can read/write files created by these Microsoft products, thereby providing consumers w a choice of applications in these key product categories for non-Microsoft PC platforms.

Second, the inclusion of PIs and the extension of APIs to include technical ?? mation for Office/OS interoperability would provide a level playing field on which unaffilia?? platform softw?? vendors and middleware developers could write cross-platform software a??ompeting OS pro??uots. In the absence of the market incentives that would have been created?? dives??re, these informational parity provisions will ensure, if enforced effectively??at the Windo?? OS monopoly is not used by Microsoft to constrain the development of ??eting platf??s and applications through the control of PIs and related technical informat??

5. The PFJ Fails to Prevent a Repetition of Microsoft's Anti??apetitive Acts With Respect to NET

a. Failings of the PFJ

Microsoft has developed its .NET Framework (and has also designed Wind??XP) with the ??ion of protecting its underlying Windows franchise and leveraging its desk?? OS monopoly into the broader realm of internet-based applications, Web services, and ??dheld OS sofi??. Microsoft's efforts to develop proprietary APIs and interfaces for its NE'??amework, incl??g he Common Language Runtime (CLR) it has now substituted for Java, h??been disc??d in detail in a number of trade and general business publications. In short?? first exti??shing the cross-platform threat posed by JAVA technology, Microsoft deve??d a substitute executable runtime environment, limited to the Windows platform only??NET Frarm?? is the functional equivalent of JAVA, but is compatible only with the W??ows elie??d server OS products, and with Microsoft's COM software design structure?? Cons??tly, by maintaining the proprietary, and Windows-centric nature of this N?? Frar??, Microsoft has succeeded in locking Web server providers into use of ??indows serve??S products, and it has precluded other OS platform vendors from competing??the ''Crea?? today's networked PC users.

The impact on?? and on consumers competition resembles the effect in 1995–9?? Micro??'s campaign against Netscape and JAVA. Consumers are denied a choice??tintime en??s, the applications barrier to entry is strengthened against competition ??non-Micr??ft runtime environments, and Microsoft's Windows OS monopoly is protec?? against the ??r threat from server-based applications.

The CIS claims generally to prevent a repetition of Microsoft's past exclusi?? conduct and??e specifically, to protect the competitive significance of non-Microsoft Mi?? ware, networks which depends on content, data, and applications residing on servers and passing o?? such as the Internet. The PFJ neither accomplishes the stated goals of the CIS nor ??isfies the Court ?? Appeals standard of review.

The 2000 Decree included a broad API and ''Communications Interface'' pr?? ion thatreq?? disclosure of interface information for interoperability between non-Micro: OS platfor?? non-PC platforms (handhelds, phones, etc.) and Windows. The PFJ, howe?? takes a more ??ow approach, limiting API disclosure requirements to middleware alone a; ??ailing to addre?? interoperability with other platforms or applications. As a result, Microsoft ??rategy of ''Windo?? everywhere'' is essentially unaffected by the PFJ.

b. Remedies for the PFJ's Failings

In order to prevent further monopolistic practices by Microsoft in relation to NET initi?? SIIA proposes to include in the PFJ a remedy that maximizes the degree o ??terface info??ion disclosed by'' Microsoft, including with respect to its .NET framework f?? server interc??e ability, and requires that Microsoft port .NET to non-Windows client and s??r operating systems. Specifically, Microsoft should be required to disclose to OEMs, ISVs and all other parties covered by Sections 14 and II.C.9 of these Comments all APIs, Communications Interfaces, protocols and related technical interfaces required or useful for interoperability between the .NET Framework and a Windows Operating System Product, and ?? the .NET Framework and a Windows server operating system product or any Web-based server (including Web, applications, commerce and other Internet servers); and the .NET Framework, within six months of the effective date, Linux and the Top three non-Microsoft server OS platforms, and to Macintosh and the top three non-Microsoft client OS platforms (including the leading non-Microsoft handheld com puting OS).

As discussed in Section II.C.7 below, the appropriate remedy for Microsoft ??lawful cond??t specifically directed against JAVA, designed to restore a ''but for'' market is '''unf??ed''' by Microsoft's illegal activities, is to require the inclusion of JAVA ?? the Wir??S. The remedy proposed here with respect to .NET is similar. Since M: soft has substi?? its own, proprietary middleware for JAVA—seeking to use its ubiquito?? distri?? capability to extinguish rival technologies—it should be prevented fro??rofiting by its foreclosure of rival platforms. Indeed. the PFJ includes JAVA expressly in th?? ??finition of Mi?? eware, but has no provisions designed to restore the competitiveness of this ??hnology or c??ain Microsoft's present efforts to make a proprietary substitute for JAVA.

?? Microsoft III, 253 F.3d at 103 (citation omitted).

By opening the .NET Framework interfaces, thereby'' permitting competing s ??r vendo??s to interoperate with Windows

PCs running .NET, and by porting .NET to o?? PC plat??s, SIIA's proposed modification would help to prevent the end user lock-in ??forced by MET. Effective relief in this case must prevent Microsoft's further reinforceme??the app??s barrier to entry, which the Court of Appeals expressly found to be the ?? e most impo??t factor protecting Microsoft's Windows OS monopoly? This remedy is ??ssary both ??eve the stated goals of the CIS and, as required by the Court of Appeals ??deny Mi??ft the ''fruits'' of its exclusionary tactics directed to Java and favoring the ??'' Fra??ork.

6. The PFJ's Lack of a Remedy for Internet Explorer Allow ??icrosoft to Retain ''Fruits'' of Its Monopoly Maintenance

As the Court of Appeals affirmed, Microsoft's exclusionary practices illegal ??naintained its O??opoly against the threats posed by Netscape and JAVA?? Since the beg?? ng of Micr??ft's campaign against the middleware threat, Netscape's market share has d??ned from ore?? percent to less than 10 percent. Microsoft's product—IE—has swept the f??rew??ing Microsoft's anticompetitive conduct by eliminating the browser as a viab??distrobi??ion channel for non-Microsoft middleware and APIs. As a result, develope most impo??t distribution channel—other than Windows itself—is now subject to Mi?? sows mono??ly*;control. Moreover, IE provides Microsoft with the power to require the t??of Microsoft's proprietary. APIs, communications interfaces, and/or security protocols ?? interoperability with desktop PCs via the Internet. As Microsoft's recent exclusion?? AVA from, ??and Windows XP amply demonstrates, Microsoft has used its browser mon?? y to exc?? distribution of any non-Microsoft platform software. Unfortunately, un?? the PFJ it can ??e to do so.

a. Failings of the PFJ

The CIS claims that the PFJ will prevent recurrence of the same or similar p??ices employed by Microsoft to reach its current monopoly position, and restore the coral tire threat pos??iddleware prior to Microsoft's unlawful conduct? Further, under the r?? dial stan??mandated by the Court of Appeals in this case, the PFJ must deny Micros?? e ''fruits'' violations. The PFJ plainly fails to meet both the stated goals he CIS, of its ?? ??erman Act and the Court of Appeals standard. Despite Microsoft's dominance of the Web bro?? market, which ??tained as a direct result of its unlawful conduct, the PFJ does not provid?? y remedy'' for ??hether open source, licensing, source code access, or even API availability ??addition, with the PC interface migrating rapidly'' from the desktop to the Web browser, this s ??oming of the ?? will permit Microsoft to do with IE whatever the PFJ precludes it from d ?? with Wind??s desktop.

b. Remedies for the PFJ's Failings

It is therefore S11A's position that the PFJ should require Microsoft to licens ??e source code??E on an ''open source'' basis, thus removing from Microsoft the ability to u ??rowsers as a?? cations and Internet gateway that further preserves its OS monopoly. Sp??ically: Microsoft should be required to disclose and make available for lice?? an?? third-party—within 60 days of the PFJ's effective date, and thereafter at least 180 days prior to its commercial distribution of any?? browser product—all source code for IE and any successor Browse?? products.

Such license should grant a royalty-free, nonexclusive perpetual lic?? on a non-discriminatory basis to make, use, and distribute products implementing or derived from Microsoft's source code pursuant to t?? industry-standard GNU General Public License agreement. Microsoft should be permitted to assess an appropriate license fee in ?? to recover its administrative overhead and distribution costs associat?? with open source licensing of IE. The proposed open source approach is linked directly to the central charge ??onopoly maintenance affirmed by the DC Circuit. Not only is Microsoft's IE monopoly a?? it'' of its unlaw?? OS monopolization, but the browser represents one of the best API platfor ??on which ISVs ??develop cross-platform software applications that would help erode The ap ??ations bar?? entry. Moreover, an open source requirement would reinforce the standard ??elated provisions discussed in Section II.C.10 below by. eradicating Microsoft's ability to ?? propr?? IE browser standards to extend its desktop OS monopoly into Internet- a server- based app??ications. Because the browser has become the de facto standard interface—Internet aud??video, e-commerce and electronic mail applications, an open source remedy ??ents Mic??ft from biasing these crucial digital markets to Microsoft's own software an ??rmats by supp??g only proprietary interfaces in IE.

Finally, an open source requirement is the only mechanism that creates a ''b?? r'' mar??, restores the market to what it would have been but for Microsoft's suc??ful anti??etitive strategy of foreclosing Netscape from the market, and eliminating ?? hreat the browser to the applications barrier to entry. Thus, the open source bro ??r remedy posed by wo??dress the browser-specific unlawful conduct central to the monopoly main?? ??ceviola?? affirmed on appeal.

The proposed modification to the PFJ would eliminate Microsoft's ''fruits'' ?? foreclose the ??e protecting its OS market power. This would serve the interests of consi?? s by rest?? competition and innovation in browsers and precluding Microsoft from us?? IE as a vehic?? controlling the Internet standards, protocols and interfaces that lie at the ??rt of a netw??ed PC marketplace. In addition, it would: lower barriers to competition for desktop OS software and middlewa??y eroding Microsoft's power to dictate the APIs. communications inter ??es and security protocols by which PCs can interoperate with other devi?? and software platforms over the internet; redress Microsoft's monopolization of the distribution channels for desktop middleware runtimes; and foster (and perhaps restore) competition within the major distribution channels for desktop middleware.

As discussed above, the proposed IE remedy is necessary to satisfy the requi??ent that any ??f in this case remove from Microsoft the ''fruits'' of its monopoly maintenar ??violation.

The C??rt of Appeals opinion also supports the open source remedy in other respect?? n its reve??f the attempted monopolization claim, the Court chastised DOJ and the tri?? tort for not ??ifically defining Internet browsers as a relevant product market. It is clea?? ??wever, that li??e the Section 1 tying, claim, the attempted monopolization claim was simply ??ther legal theor??ising from the same set of operative facts. As the Court recognized, the p??iffs ''made the ?? argument under two different headings—monopoly maintenance and atte??ted mo??ation.'' As a form of unlawful monopoly maintenance, the Court had n?? fficulty hol??g that ''Microsoft's efforts to gain market share in one market (browsers) ser?? to meet the ??t 10 Microsoft's monopoly in another market (operating systems) by keepin ??val browsers from gaining the critical mass of users necessary to attract developer atten?? t away from ??ndows as the platform for software development.'' Thus, DOJ's failure to?? roduce aff??ve evidence defining a relevant market for Internet browsers cannot stand a barrier to fashi??g relief that restructures IE in order to eliminate its use as a vehicle for mai??ining Microsoft's desktop OS monopoly.

In sum, Microsoft's abuse of monopoly power through IE must be remedied pro??s directed specifically at IE, something the PFJ completely fails to address, ??is one of the ??ironies of the settlement proposed by DOJ that in a case centered around ?? either the API provisions nor any other section of the PFJ redresses Microsoft's acquisition of ??yet in Inte??wsers, and its concomitant effect of reinforcing Microsoft's Windows m?? poly pow?? ignoring the browser issue the PFJ ensures that there will never be a corn ??itive oppp?? ity to reinvigorate browser competition, or to provide middleware cornpetit?? in the range ?? Internet-based technologies controlled by the browser.

7. The PFJ Fails to Rectify Microsoft's Unlawful Conduct A ??nst JAVA

a. Failings of the PFJ

The CIS states that the PFJ is designed to restore the competitive threat that ??Idleware prod??, such as Sun Microsystems JAVA, posed prior to Microsoft's unlawful act ??s. The PFJ ??ever, fails entirely to address the fact that Microsoft s illegal tactics thwart JAVA tecj??gy, which would have significantly eroded the applications barrier to entry?? ??e Court of Appeals found that Microsoft violated Section 2 by entering into exclusive ISV d?? for distrib??ion of Microsoft's own, incompatible version of JAVA, and by deceiving developers into ??ing JAVA applications with Microsoft tools that produced only Windows-c ??patible code. Microsoft also unlawfully destroyed Netscape as a viable distribution cha?? or JAVA tecj??gy

b. Remedies for the PFJ's Failings

SIIA's proposed remedy therefore requires inclusion of the JAVA runtime e?? onment in Mi??scft's OS products, and prohibits Microsoft from distributing any JAVA de ??pment tools. S??ifically, for a period of seven years, Microsoft should be required to dish ??te free of charg?? binary form in all copies of its Platform Software (including upgrades and ??isions such as Service Packs) the latest version of the JAVA Middleware as delivered to M??soft, at least ?? days prior to

Microsoft's commercial release of any such Platform Software ?? addition Microsoft should be enjoined from distributing: any Platform Software in beta or final commercial form unless such Platform Software includes the latest version of the JAVA Middlewa??

Runtime as delivered to Microsoft in binary form by Sun Microsyste ??no later than 90 days prior to distribution by Microsoft of such Platform Software or any upgrade or revision thereto; any Microsoft Operating System Product that requires, favors or advantages the utilization or functionality of any Microsoft Middlew?? Runtime (including the .NET framework) relative to the utilization o corresponding functionality of any competing Middleware Runtime ?? application, including (without limitation) the JAVA Middleware Runtime; any Office product that favors or advantages the utilization or functionality of any Microsoft Middleware Runtime, including the ?? framework, relative to the ??tilization or corresponding functionality ?? ny competing Middleware Runtime or application, including (without limitation) the JAVA Middleware Runtime; and any developer tool or development environment for the JAVA lang?? (including any tool or development environment that uses or convert: JAVA source or class files to other formats). The DC Circuit explicitly upheld Microsoft's Section 2 liability for exclusi??y con??t di??ected specifically at JAVA. The Court affirmed Judge Jackson's conclus??that Mi??ook steps to ''''maximize the difficulty with which applications written i?? a could be p?? from Windows to other platforms, and vice versa.'''

To eliminate the threat posed by JAVA, Microsoft acted to destroy the value ??he tech??gy by polluting the industry standard set of JAVA interfaces and protocols, ??crosoft then ??ed its monopoly power by requiring its customers to adopt and distribute it ?? omc??ble, non-standard JAVA runtime and tools implementations. As the CIS ??n M??t fried to ''extinguish Java'' because ''a key to maintaining and reinforcing ??appli??tons barrier to entry has been preserving the difficulty of porting application?? ??om Win??s to other platforms, and vice versa,'' which JAVA was designed to elimina??

??A's proposed remedy would increase consumer choice by fostering corer- ion and innov?? in middleware. Similarly, it would foster competition and create innova?? among ope??g systems by promoting the competitive distribution of middleware, and ere?? Micr??ft's power to dictate The APIs, and related interfaces by which PCs interope?? with netw??ed devices. It would also redress Microsoft's specific acts ofmonopolizati?? irected at JA?? and thus deny Microsoft ''the fruits of its statutory violation.'''

8. The PFJ Fails to Mandate Porting Requirements

a. Failings of the PFJ??

Another significant shortcoming of the PFJ is its failure to mandate that Mic?? ft port its key ??uctivity (Office), browsing (IE), and other Microsoft Middleware Products ??on-Mic?? operating systems. In the current market, such operating systems (Apple, ??ax, etc.), as well as handhelds (Palm, etc.), set-top boxes (Liberate, etc.), phones (Nokia, etc.) ?? other Inter??er abled appliances will only be provided with a level playing field to comp?? if Microsoft provides porting of its now-dominant products.

Mi??rosoft's ability and willingness to exploit the porting issue to its advanta?? as been spec??lly demonstrated m this case. Both the District Court and the Court of App?? ??dged That Microsoft previously used its monopoly power over Office to im??e an unla?? e??clusiona?? deal on Apple for distribution of IE on the Macintosh? This ??e of mos??f monopoly power by Microsoft is not specifically prohibited by the PFJ. ?? t result, Mic??ft could continue to use its monopoly power over Office, -and the overwhelr?? do?? of IE, to constrain and eliminate competition from other OS platforms b?? fusing, or thre??g to refuse, to port Office or IE to those platforms. By ignoring this realit?? e PFJ egle??s a critical component of the Microsoft monopoly, and significantly compro?? s its abili?? effectively eliminate what the Court of Appeals identified as the single m?? reportant factor??cting Microsoft's Windows OS monopoly: the applications barrier.

b. Remedies for the PFJ's Failings

The CIS asserts that the PFJ will ensure that OEMs have contractual and eco??nic free?? make decisions about distributing and supporting Non-Microsoft Middle?? Prod?? without fear of retaliation or coercion by Microsoft. The foregoing will pu??rtedly be achi??s reply by prohibiting Microsoft from retaliating against an OEM that supp??or dist??s alternative middleware or operating systems. But OEMs will not be e??mically free ??rt or distribute alternative operating systems until control of the applica??s barrier is se?? from Microsoft. Since The porting of Office, IE and other Microsoft Midd??re

Pro?? is a crucial element in re-establishing competition in the market for opera?? systems, SIIA ??ses that Microsoft should be required: to port Office, within six months of entry of final judgment, to Linux the top three non-Microsoft PC platforms (including the leading non-Microsoft handheld computing OS) based on shipments in a year; to port future versions of Office, within six months from the date that ?? products become commercially available for use with a Windows Operating System Product, to Macintosh and the top three non-Micro: PC platforms (including the leading non-Microsoft handheld comput?? OS); to port IE and other Middleware Products that Microsoft ports to any non-Microsoft OS platform to Linux and the two most significant other non-Microsoft PC platforms; and to provide the same or similar functionality in such ported Office applications and Middleware as that available with the Windows Operating System Product version of the application. Without modifying the PFJ to include such specific language, the only way ??revent ''Po??g b??ackmail'' by Microsoft would be lengthy and expensive litigation attemp?? to show that a ??al, or threat to refuse, porting would constitute a change in Microsoft's ''??mercial rela??'' with an OEM. Requiring Microsoft to port its Office and IE Middleware ducts to non??soft operating systems is essential to overcoming the applications barrier ??d tjere??roviding OEMs with the contractual and economic freedom the CIS promi.??—for at leas??easons, described below. Without a remedy specifically'' addressing Offi?? the OE?? not be free of Microsoft's monopoly pressure. For example, Microsoil?? d be free ??dition pricing advantages for Office on an OEM's adoption of Microsoft ??dleware.

First, Microsoft's monopoly power over the Office business applications sui?? Word, Exce??werPoint, Access, Outlook—provides it with the ability to constrain and ?? inate?? comp??ion from other OS platforms by refusing (or as in the case of Apple, threate?? to refuse??t Office. The most important contributor to the applications barrier to en?? is MS Offi??ch currently holds a dominant share of over 95 percent of the business pr??ctivity so??applications market. Without the ability to run MS Office on a PC, users h?? little or no ?? except to select a Microsoft platform in order to maintain read/write intero?? ability with the most important applications product in today's software market.

Second, MS Office serves as the basis for Microsoft's current strategy of ex?? ting its desk t??O?? dominance into the broader realm of handheld and other non-PC comp?? systems. Thus the porting of Office would directly address the applications barrier to entry, ?? would pro??reased recentives?? investment in, and consumer purchase of, cornpetra?? soft?? for both PCs and other computing devices, such at handhelds. In addition, exposing its o?? of APIs, Office itself can represent a useful means of encouraging cross-?? form mid??are, but only if it is available on non-Microsoft platforms. Microsoft's refu?? to port MS ??e, except in return for Apple's agreement to make IE the default browser f?? ??e Ma??h, was thus manifestly anticompetitive and a major reason for Microsoft's ??ntenance of its ?? monopoly.

Third. ISVs and consumers today effectively have no choice in browser fun??ality Other ??n Microsoft's IE browser. As a consequence, Microsoft can now choose to ??antage its OS ?? any competing operating system either by refusing to port IE to the cor?? ng OS, by doing so significant]y later than for its OS products, or by porting only inferior ??ns of IE. Like??, ??icrosoft can use the dominance of its IE product to extend its desktop O ??onopol to that :o/non-PC devices, such as handheld computers. Unlike virtually every ISV?? Microsoft has re?? to port either its Office software or Internet Explorer to the Palm OS. A?? en sour??ion of IE, as proposed in Section II.C.6 above, can eliminate Microsoft's?? ity to prese?? as a proprietary interface to the Internet; however, it cannot alone rectify ?? porting problem d??e to the lack of browser competition. Because Microsoft has established browser as a ??enue product, there is no profit opportunity for any ISV or platform cor??itor to create ??ux. Palm (or other handheld, digital phone, set-top box, etc) or other ver?? t of Intera??/Explorer. Fourth, because Microsoft's anticompetitive conduct destroyed the Internet ??ser as an

econ??callyy significant market, it should be required to redress that harm by portin?? E to other plat??s. This flows directly from the recognition in the CIS that ''Microsoft's a?? succeeded in eliminating the threat that the Navigator browser posed to Microsoft's ??rating system?? .... The adverse business effects of these restrictions also deterre??etscape from ?? taking technical innovations in Navigator that might have attracted cons??rs and reven??'' Because porting the Navigator browser to all significant PC platforms ??an integr?? part of Netscape's competitive strategy until Microsoft began its unlawful c??aign, a remedy should restore the pro-competitive effect—a ubiquitously, available browse at exposes uniform APIs on all OS platforms—that has been lost as a result of Micro??'s violatio??s.

Arguments that porting is impossible or too costly are not legitimate. Micro?? ports versio??s of Office, Outlook, Media Player, IE and other middleware to the Macintos ??day, some of which are available free, and others for purchase. Furthermore. as the Coun?? Appeals explai??ed the important economic consideration in porting is usage, as opposed to a??lute volu?? Particularly as to software (like IE and Outlook) that exposes its own APIs, ??sage share, ?? the underlying operating system, is the primary determinant of the platfor?? ??allenge a [pr??] may pose.'' Thus, requiring That Microsoft port to other OS platforms ?? principal, ubiqu?? ?? middleware/applications it now controls merely replicates what would be easy decisi?? ?? a stand-alone company that, unlike Microsoft, did not have an economic disad??tage other OS platforms. Because a firm that did not have a Windows mon??ly would port both Office and IE, Microsoft should be required to port these crucial products.

Finally, creating a viable market for Linux would immediately introduce pri?? comp??tion to the Windows OS. Linux—which is currently free—would be a po??tially attractive alternative to Windows, even in the OEM channel, if Office, IE and Outlo?? were all available for that client platform.

9. The PFJ Places a Disproportionate Reliance on OEMs to ??rease Competition

a. Failings of the PFJ

As noted previously, the PFJ's overwhelming reliance on OEMs as the prin?? ?? means for in??ing competition into the OS market is unjustifiable. Rather than adopt a m?? ??faceted approa?? focusing on all of the contributors necessary to adequately reinvigorate co??ition in the OS marker, the PFJ mistakenly focuses merely on allowing OEMs greater ''flexil??y'' to custor?? Windows icons and non-Microsoft middleware. By doing so the PFJ tur?? blind eye to the economic realities of today's market. OEMs are currently under such ext?? ??dinary financial pressures today that, even if they had the business experience necessary to ??er the software business, they have no financial incentive to purchase and incorporate into ?? r PCs anything other than the full Microsoft software package. The failure of any OEM to on Microsoft's offer last summer to replace icons in the Windows XP desktop makes pl. this reality.

The PFJ is purportedly designed to restore the competitive threat that non-Mi??soft middl?? products posed prior to Microsoft's unlawful undertakings. As noted a??e, the CISc?? that the PFJ does this by giving OEMs ''the contractual and economic fr??m to make ??isions about distributing and supporting non-Microsoft software products t?? have the poten??a to weaken Microsoft's personal computer operating system monopoly with fear of coerci?? or retaliation by Microsoft.'' The PFJ only provides such freedom to OE?? in form, however, not in substance. Changes in OEM and retail PC market conditions—una?? ??owledged by the DO??—make it highly unlikely that contractually liberating the OEM distribut?? channel, without significantly more, can effectively serve as the prime vehicle for restoring C comp??tion. Such market changes include dramatically shrinking margins, price pr??ires, and slowing demand in the PC sector—trends that are the opposite of the high-flying e?? ??mic indici?? of the PC hardware market from 1995–98 when Microsoft's vertical restricti?? foreclosed OEM distribution to its middleware rivals.

In this current economic environment, provisions which merely give OEMs t?? ability to remove products or services, or that give OEMs the ability to make changes to the ??ting system ?? not succeed in achieving the stated goal of the CIS. The competitive la?? cape of the PC s??clor today is one of rapid commoditization with shrinking R&D budgets.

b. Remedies for the PFJ's Failings

Creating choice and differentiation in the PC sector is dependent upon two st?? first, the PP must fundamentally redefine the relationship between Microsoft and all OEM ?? affirmatively transferring some design and bundling decisions from Microsoft to the Ms (in the PC supply chain); second, the PFJ must create a regime in which OEMs have an??nomic ?? to choose alternative bundles of ??oducts and services for the Windows OS ??form from other vendors, thereby encouraging competition on the merits in the applicatio?? midd?? are and other non-OS markets.

In order to accomplish these objectives S??A proposes that Microsoft be req?? to license Windows to independent ISVs and software integrators (including platform ??are com??ors)who would be protected by the same API disclosures, desktop configu?? flexib??lity, and pricing nondiscrimination guarantees as provided to OEMs under the ?? J. More spec??cally, Microsoft should be required to license the base binary code of Window including new ??ions and upgrades of Windows at a reasonable time before shipping of that duct to OEM ?? all third parties so that the licensees may create and license competitive b?? ??es comprised of Windows and non-Microsoft applications, middleware, services and to??

((a)) licensed third parties should have all the rights to modify the OS and IE desk?? links and related interfaces as provided to OEMs in Sections III.E and III.H of the??;

((b)) licensed third parties should have all the rights of access to APIs and other re??ical information as provided to OEMs in Sections III.D and III.E of the PFJ.

((c)) licensees should be protected by the same OEM nondiscrimination safeguard??ovided ?? Sections III.A, III.B and III.F of the PFJ;

((d)) Microsoft should be required to provide complete transparency of its agreeme?? with ??EMs and others;

((e)) the licenses should be made available for a price equal to the lowest (per volu?? ??price that Microsoft charges for any current version of the Windows OS to OEMs o?? her end user licensees, including enterprise customers, add any volume discounts sho?? ??e ??ardized and published; and

((f)) Microsoft should be prohibited from taking actions to interfere with or degrad??e in??eroperability of third-party applications with Windows.

This licensing proposal would foster wholesale-level competition for combin?? ??S and application bundles, thereby making available critical systems integration services to ??Ms seeking ??o provide alternative software packages to retail customers. The SIIA prop?? recognizes the realistic limitations on OEMs in creating and defining alternative sof?? ??re bundles (including middleware) and therefore creates opportunities for systems inte??ors and others to ''stand in the shoes'' of the OEMs and exercise their same rights to modify ?? cust?? the Windows desktop and middleware selections. This remedy works in??em with the ?? on middleware bundling, the provisions regarding OEM restrictions, and the ??I and tech?? information disclosure. It would limit Microsoft's ability to choke off the ??elopment of new middleware and potential rival platforms by creating an alternative means fo?? ??aker of those so ??products and services to distribute them to OEMs and, potentially, co??mers. By producing potential rival, retail-level bundles of software applications and servic ??with the OS, the licensing proposal could offer an important means to foster the technologica?? development and consumer acceptance of non-Microsoft middleware and potential a native platforms.

Adoption of the licensing provision would result in at least three major benef?? to cons?? and competition. First, the provision would allow the market, rather than ??crosoft, to deter?? the applications on, and configuration ?? consumers'' PC desktops. The?? ??ense would ??Microsoft's ability ;o use its OS monopoly to favor its own products ove?? comp?? software. End users would be able to choose among competing, custon?? ??d bundles of applications that are as seamlessly integrated into the operating system as ??crosoft's products are?? today.

Second, in addition to to promoting consumer choice and creating competitio?? retail-level OS Application bundles, the licensing proposal would help preserve competitio ?? appli??, e-commerce, and other markets that Microsoft has targeted with its ille??actics. By given there applications/services and the investors, engineers, developers, and ??ers behind them—an alternative means to obtain access to consumers, the licensing pro?? ??alwould give ??petitors in these markets a new protection from Microsoft's anticompetiti?? cries. Con?? would benefit from the new

choices, new applications, and new services ?? would resu??t.

Third, with a variety of licensees potentially acting as systems integrators an?? sellers, this ?? would provide the OEMs an efficient way of procuring bundles of speci?? ??ed software to resell to consumers.

10. The PFJ Pails to Constrain Microsoft From Converting O?? Industry Standards Into Exclusive Microsoft Protocols

The CIS states that the PFJ is designed to prevent recurrence of the same or s?? far prac?? that Microsoft employed to reach its current monopoly position. Microsc?? mono?? over the PC operating system market gives it a unique ability to appropria?? or its sole use and benefit technology first developed by others. By embracing industry st??rd technology. Microsoft ensures that its products benefit from the innovations of other?? ??y adding proprietary extensions to industry standards, Microsoft can effectively approp?? re those stanca?? for its sole benefit and can also extinguish the threat to Microsoft's proprie ?? standards posed by voluntary, open industry standards.

The Court of Appeals affirmed that this is what Microsoft did to JAVA. It in?? ionally deceived ??AVA developers and entered into exclusive ISV deals for distribution of ??osoft's own, incompatible version of JAVA. The Court explained that Microsoft fragment, he

JAVA standard in order to ''thwart Java's threat to, Microsoft's monopoly in the ma?? for operating systems,'' and to ''[k]ill cross-platform Java by grow[ing] the polluted Jav??arket.'' SO

a. Failings of the PFJ

The PFJ, however, does not restrict Microsoft's ability to modify, alter, or re??e to supp?? computer industry standards, including JAVA, or to engage in campaigns to??eive developers of rival platform, middleware, or applications software. By choosing to??port only its own, proprietary implementation of open industry standards, Microsoft can conti??to exclu?? meaningful competition from alternative platform vendors. In addition, Mic??oft will be ins position to dictate the interfaces and protocols by which products other than I, such as servers. handhelds, or telephones, can interoperate with PCs running Microsoft's des??p OS, and the applications that run on those PCs.

b. Remedies for the PFJ's Failings

SIIA proposes as a remedy that the PFJ constrain Microsoft's ability to conve??pen industry standards into exclusive Microsoft protocols through ''extension'' or other un??teral condu?? Specifically, Microsoft should be enjoined from modifying, altering, sub-se??g or super-se??ing any industry-standard Communication Interface or Security Protocol, e??pt to the extent that such modified Communication Interface or Security Protocol is complian??th, and appr??ved by. an independent, internationally recognized industry standards organizat?? Security protocol should be defined as set forth in Appendix A.

This proposed remedy would protect consumer choice in platform software by ??suring that co??s??ers are not required to purchase only Microsoft applications and other sof??tre products??n order to interoperate with Windows. It would foster innovation by ensuri??hat

?? Id. at 76–77 (citation omitted).

Microsoft has a business incentive, reinforced by the PFJ, to extend industry standat?? for sound engineering reasons, rather than anticompetitive foreclosure. The PFJ would requir?? at Microsoft additions to open industry, standards be approved as compliant with a volt??y industry standard available for support by all competitors; importantly, however, it ??ld not otherwise restrict Microsoft from developing new technologies, interfaces, or standa?? in propr??t??ry format.

11. MS Office Should be Included in the PFJ

Microsoft Office, a hybrid of application and middleware is a significant con??nent of the current applications barrier to entry. The Court of Appeals relief standard in this??se, tracking United Shoe, requires that a remedy ''ensure that there remain no practices??ly to result in monopolization in the future.''[81] To foreclose prospective antitrust practice??t is settled law that a remedy is not limited merely to the proven violations, but should e??mapass untr??ed roads'' the monopolist could use into the future to protect its market pow?? ''when the purpose to restrain trade appears from a clear violation of the law, it is not necess?? that all, of the ?? traveled roads to that end be left open and that only the worn one be closed.

a. Failings of the PFJ

The CIS states that the PFJ is designed to prevent recurrence of the same or s??lar practices that Microsoft used to reach its current monopoly position.[83] The PFJ does ??: achieve these stated goals because the PFJ's API, pricing, exclusive dealing, and OEM flexib?? provisions are all limited to Windows platform software. Due to the dominant market?? are of ??

Microsoft III, 253 F.3d at 103 (citation omitted).

?? Int'l Sall Co. v. United States 332 U.S. 392, 400 (1947).

?? CIS at 3.

MS Office—around 95 percent of the business productivity suite market—Microsoft dange??sly positioned to evade any relief by repeating the stone exclusionary and i??al acts employing Office, instead of Windows OS, to the same devastating effect upon the ??sumer. More??ver, as previously described, Office exposes its own set of APIs and can there ?? essentially function as a middleware alternative to operating system software.

b. Remedies for the PFJ's Failings

A remedy must cover MS office in order to foreclose Microsoft's ability to e??e the PFJ's ??sions by engaging in the same conduct with Office that is prohibited with ??indows. Speci??i??lly MS Office, the largest component of the applications barrier to entry, should be included in a number of provisions in order to prevent evasion of the remedy. These ??lude:

. Disclosure of APIs supporting interoperability of Office and Window Microsoft 1Middleware (see Section II.C.4 above);

. Disclosure of proprietary file formats for Office (see Section II.C.4 above);

. Prohibiting binding of Office with the Windows OS (see Section II.C. above); and

. Requiring Microsoft to price its Windows and Office products offered enterprise customers (i.e., all non-OEM customers) on a stand-alone b?? without any volume or other discount arising from combining the sale such products with any other Microsoft software product. Legitimate volume discounts for either Windows or Office products are not other ??e affected by this provision.

As noted above, the existing scope of the API provisions is overly narrow sin??hey seem?? require transparency in the OS/middleware interface, but not correspondin??enness in the ??face between either applications or Office and the Windows OS. Under th??IA proposa?? Office, Outlook, and JAVA would be encompassed by the Middleware defi?? on in order to preclude Microsoft from evading the constraint of the remedy by binding Off Outlook o?? JAVA technology (each of which exposes APIs and can erode the applic??ons barrier to entry) to the OS. Similarly, the scope of ''multimedia viewing software'' s??ld be expanded from merely viewing digital content to encompass the entire spectrum of func??ion??ities provided by Real Player, Windows Media Player, and the like, in ord?? prevent Microsoft from evading the middleware bundling provisions by simply segmenting i?? multi??e?? middleware into different sub-products or applications.

12. The PFJ Fails to Stop Microsoft From Intentionally Disab?? Competitors'' Products

a. Failings of the PFJ

The PFJ lacks any general ''catch-all'' enforcement provision designed to sto??icrosoft from taking intentional action to disable or adversely affect the operation of competi?? middle ware or applications products. The CIS claims that the PFJ has the teeth need ??to ensure that ??soft cannot thwart the purposes or remedies of the PFJ, and that the PFJ ??prive Microsoft of the means with which to retaliate against, or hinder the development of ??peting products k4 Unlike the District Court's interim decree in 2000, however, the PFJ ine??cably fails ??o ??clude a general prohibition of such conduct, relying instead upon narrowly ??wn prohibitions limited to specific forms of conduct.

b. Remedies for the PFJ's Failings

?? order to remedy this glaring problem, SIIA proposes that the PFJ be altered that Section (.3 of the 2000 Decree is restored verbatim:

Microsoft shall not take any action that it knows will interfere with or degrade the performance of any non-Microsoft Middleware when interoperating with any Windows Operating System Product without notifying the supplier of'' such non-Microsoft Middleware in writing that Microsoft intends to take such action, Microsoft's reasons for taking the action, and any ways known to Microsoft for the supplier to avoid or reduce interference with, or the degrading ?? the performance of the supplier's Middleware.

In addition, Microsoft should be prohibited from promoting any standard as?? en'' unless it has standards-body approval.

As is discussed in detail above, the Court of Appeals found that Microsoft ha?? aff??

deceived JAVA developers and improperly entered into exclusive ?? ISVs for dis??ution of Microsoft's own incompatible version of JAVA. Moreover, the d??ct cou?? Findings of Fact are replete with findings, none of which were overturned on the eff?? that Microsoft intentionally made it more difficult for Netscape and JAVA tun on the Windows platform. For instance, Judge Jackson found that the purpose of Micro's techni?? integration of IE ''was to make it more difficult for anyone, including syste?? administrators and users, to remove Internet Explorer from Windows 95 and to simul??usly complicate the experience of using Navigator with Windows 95.''[85] ''Microsoft's re?? respect the user's choice of default browser fulfilled Brad Chase's 1995 promise to n?? the use of any ??wser other than Internet Explorer on Windows a?? experience.'' By i??rasing the lik??lihood that using Navigator on Windows 98 would have unpleasant conseque?? for users, ??ierosoft further diminished the inclination of OEMs to pre-install Navigator) Windows'' ??6 The obvious adverse impact on consumers of intentional interference with cor??ting middleware and applications is evident: consumers are denied choice of software and ?? market is ar??ally tipped toward Microsoft products on a basis other than the performance the products themselves. This is a classic way in which Microsoft's maintenance of its, monopoly harms both competition and consumers. In order to ensure that Microsoft ??not intentionally degrade the performance of competitors'' products, including middlewa?? such tactics should be specifically outlawed.

?? Findings of Fact at 79 ¶160.

?? Findings of Fact at 85 ¶172.

III. CONCLUSION

As noted previously, because it may be difficult for this Court to reach a con?? regarding the PFJ without prefiguring a decision on nearly identical ''live'' issues in ?? State case currently before this Court, SIIA respectfully requests that this Court take this n??er under advise?? until the State case has concluded. Alternatively. this Court should adop??A's propo?? remedy, as described in these comments.

Respectfully submitted,

Ken Wasch, President (Bar No. 93??4)

Software and Information Industry ??sociation

090 Vermont Avenue, NW

6th Floor

Washington, DC 20005

(202) 289–7442

Douglas L. Hilleboe (Bar No. 3860

Steptoe & Johnson LLP

1330 Connecticut Avenue, NW

Washington, DC 20036

(202) 429–3000

Dated: January 28. 2002

APPEND??X A DEFINITIONS OF ''PLATFORM INTERFACES,''

''INTEROPERATE EFFECTIVELY'' AND ''BROWSER''

Platform interfaces'' means all interfaces, methods, routines and protocols tl??enable any Mico??oft Operating System or Middleware Product installed on a Personal Con??ter to (a) execut?? fully and properly, applications designed to run in whole or in part on any M soft Platform Software installed on that or any other computing device (including without ??nitation ?? server??ligital telephones, handheld devices), (b) Interoperate Effectively with Micr??ft ?? Platform Software or applications installed on any other device, or (c) perform netw?? security I, ?? prot?? such as authentication, authorization? access control: or encryption.

''Interoperate Effectively'' means the ability of two different products to acce:??tilize and/or support the full features and functionality of one another. For example, non-??osoft Platf?? Software ''Interoperates Effectively'' with an application designed to run on ??crosoft Platfor?? Software if such non-Microsoft Platform Software can be substituted for the ??icrosoft Plafor?? Software on which such application was designed to run, and nonetheless e?? le the application user the ability to access, utilize and support the full features and function y of the ?? application without any disruption, degradation or impairment in the functionality or??ures of the application.

??Internet Browser'' means software that, in whole or in part, (i) makes hyperte?? ??ransfer protoccl?? (HTTP) requests in response to user input: (ii) converts or renders hypertext ??kup language HTML) and extensible markup language (XML) to any displayed form. or interme??linte representation with the intent to display it; (iii) displays or keeps in mere stores in any way ''cookies,'' which are named values sent from web servers to web br??sers?? with the expectation that the browser send back the named values back to the server??uture intera??ion; (iv) displays, keeps in memory or otherwise stores a collection of unifo??resource It locat?? URLs) representing a history of a use's interaction with web servers; (v) di??ys or?? keeps in??memory or otherwise stores ''bookmarks,'' which are named URLs configur??e by a user; c?? runs JavaScript programs or runs programs in any computer programmi??anguage which is broadly compatible with JavaScript. The standards and formats referenced his definition include all successors to those standards and formats that may arise during term of the Final Judgment. The technical elements identified in subsections (i) to (vi) inclu?? not only the for??n of these functionalities as They currently exist and have existed in the past, also as They come to exist in the future, even if they come to be known by different names.

IN THE UNITED STATES DISTRICT COURT FOR. THE DISTRICT OF COLUMBIA

UN?? STATES OF AMERICA, Plaintiff, Civil Action No. 98–12-CKK MICROSOFT CORPORATION, Defendant. Defendant.

STATE, OF NEW YORK: et al., Plaintiffs, Civil Action No. 98–123 ??KK, MIC??CFT CORPORATION, Defendant.

COMMENTS OF SOFTWARE & INFORMATION INDUSTRY ASSOCI??ION ON PROPOSED FINAL JUDGMENT

Ken Wasch, President (Bar No. 934984)

Software and Information Industry Associ?? n

1090 Vermont Avenue. NW

6th Floor

Washington, DC 20005

(202) 289–7442

Douglas L. Hilleboe (Bar No. 386091)

Steptoe & Johnson LLP

1330 Connecticut Avenue, NW

Washington, DC 20036

(202) 429–3000

Dated: January 28, 2002

COMMENTS OF SOFTWARE & INFORMATION INDUSTRY ASSOC??ION ON PROPOSED FINAL JUDGMENT

??uant to Section 2(b) of the Antitrust Procedures and Penalties Act (the ''i??ney Ac?'') 15 U.S.C. §16(b)-(h) (2000), the Software & Information Industry Associati?? (''SIIA'') ?? submits these comments on the Proposed Final Judgment (''PFJ'') filed by the Unite??tates Department of Justice (''DOJ'') on November 6, 2001.

SIIA is the principal trade association of the software code and information ??tent corporate education, and intellectual property protection to more than 800 leading st?? are and information companies. Our members develop and market software and electronic??tent for business education, consumers, and the Internet. SIIA's membership is comprised ??arge and small software companies, e-business and information companies, as well as many ??r traditional and electronic commerce companies of varying sizes. Among SIIA's key public policy issues is the promotion of competition in the ??ftware industry. SIIA has promoted these principles of competition in a variety of fora, in??ng the federal counts.

I. In??duction and Summary

The PFJ proffered by DOJ represents a remarkable change of heart-or, per?? more accu??tely a loss of heart. For whatever reason, DOJ proposes to end one of its m?? important and successful monopolization cases with a settlement that reflects neither its litigat?? position nor the decisions it won at trial and on appeal. A settlement as weak as this would, ?? been disappointing, but perhaps understandable, if it had been reached before trial, in su??t situation, ?? and sometimes DOJ must take a bird in the hand. But in this ??e, much of the litigation is past; and the new Administration arrivals are not free to decide w?? legal?? theories ?? apply to this case. The law'' of this case is settled. The trial and appeals cou?? have alreac??nade findings of fact and conclusions of law. These findings and conclusio?? ??annot be ??ignored in a proceeding whose raison d??tre is protecting against an improperly mot??ed or expedient compromise of the public's interest in enforcement of the, antitrust laws.

Appropriate relief in an antitrust case should end the unlawful conduct, pry o?? the market to competition, avoid a recurrence of the violation and others like it, and und?? antic??et??tive consequences. Unfortunately, SIIA submits that the PFJ does not ac??aplish these goals and ignores significant parts of the Court of Appeals's decision regarding ??icrosoft's ?? anti??olations and their consequences. Even where it seems to address the viola ?? is DOJ filed, its PFJ on November 6, 2001,. which, if approved by this Court, ??ld terminate United States action against Microsoft Corporation (''Microsoft'') in th??ase and prtovid??tain remedies for Microsoft's violations of the Sherman Act that were uph?? by the United

States Court of Appeals for the District of Columbia. See United Stares v. Mi?? Corp 25:3 F.3d 34 (DC Cir.) (''Microsoft III'') (en bane), cert. denied, 122 S. Ct. 35 2001). In addition to DOJ and Microsoft, nine State plaintiffs agreed to the terms of the PFJ. ??wever, nine State plaintiffs and the District of Columbia concluded that the relief provided b??e PFJ is woefully ??nadaquate and thereby continue to pursue a complete remedy through ?? identified by the Court, the PFJ is so porous that it provides little or no protection 1st a repetition of Microsoft's past anticompetitive acts. Flaws in the PFJ's Remedies. The two most salient remedies imposed Microsoft PFJ und?? concern flexibility for OEMs to install competing middleware and A?? DOJ's future Co?? Impact Statement (''CIS'') stresses the importance of preventing??ises in these areas. The theme of the CIS and PFJ is that competition was injured in this ?? prin??ly because Microsoft's illegal conduct maintained the applications barrier ??try in the perso?? computer operating system market by thwarting the success of middle ware ??it would have re??ed competing operating systems gain access to applications and other need compl??tents. The PFJ is intended to restore competition. In fact, however, the PFJ so loosely that it is likely to have only the most modest effect on Microsoft's actions—none at all o??s ability to monopolize new sectors of the information technology market.

a. Middleware. Middleware was at the heart of the case. Impelled by enth??asm for the Interne, PC users embraced Netscape's browser, and Netscape (particularly'' in c??pination led a Competitive Impact Statement (''CIS'')required I ?? under the ??tunney Act. 15 U.S.C. §16(b). The CIS provides an abbreviated history he legal?? proc?? in this case, describes Microsoft's monopolistic and anticompetitive pra??es that the District Court and the Court of Appeals held to be Sherman Act violations, and ??apts to expla??hy in DOJ's opinion, the PFJ remedies such violations and provides appro??e ?? bene?? lot consumers.

Middleware is ''platform software that runs on top of an operating system—uses opera?? system interfaces to take advantage of the operating system's code and fun??nalley—and si??u??taneously exposes its own APIs so that applications can run on the middle?? itself.

An application written to rely exclusively on a middleware program's APIs could run all operating systems on which that middleware runs. Because such middleware also run??n Windows, application developers would not be required to sacrifice Windows compa??lity if they chose to write applications for a middleware platform.'' CIS at 11. desk??ip This is not simply an academic observation on the part of SIIA and its m??ers. For practi??ally every one of our members, the rise of independent middleware opened r??opportu??ities that were the objects of intense strategic focus. The reason for this fo?? was that our members'' programs suddenly could use Netscape and JAVA as mediators to in launch, and run on the desktop. For the first time in years it seemed possible that independe?? software ??enders (ISVs) would have a way. to reach the great majority of computer users ind??ndent of Microsoft. Indeed, because they could run on other operating systems, JAVA and ??cape's browser suddenly offered these ISVs an even broader market than they could obtain ?? developing for the Microsoft operating system. The CIS describes how this competitive threat struck at the heart of Microsoft monopo??y, and Microsoft's counterattack used every possible weapon, including su?? unlawful tacti??a ''leveraging'' its operating system monopoly. The PFJ seeks to prevent Mi??soft from repeatto?? these tactics by ensuring that future middleware vendors are not denied ac??; to the desktop. But the measures chosen are unlikely to have that effect. As a matter of dr??ng, they are f??y weak. Microsoft itself is expressly granted nearly complete control over ?? meaning of m??dleware'' under the PFJ.

Equally important, these measures are written for a world that no longer exist ?? The h??ils moved on. The PFJ grants to hardware makers the fight to add middlewa??cons to their First but these companies simply lack the financial strength and the motivation ?? develop new. software that might threaten Microsoft. To take one example, OEMs have been ??ured by ??rosoft's Microsoft for several months that they may customize their desktops by uninstalling Internet Explorer; not one has actually done so. Meanwhile, the PFJ does not give in??endent software vendors who might challenge Microsoft the one thing that would tempt then ?? a channel to users that is not subject to exclusionary practices by Microsoft. On the ??trary, the PFJ pro??ects middleware only after Microsoft has launched a similar product, by wh?? time it is too late. Developers of applications will always develop first and most enthusiastical?? or the most ?? deployed platform, because that platform becal?? it offers them the largest marke?? the most users ??, in turn, will typically choose the most widely deployed platform becan?? it offers them ?? greatest choice of applications. This reinforcing circle—-a well established ??twork effect—in at the heart of Microsoft's dominance of the industry. Cross-platform mid?? ware threatened Microsoft in 1995–98 because it could offer developers an even bigger m?? et—a Microsoft plus'' market.

?? Microsoft cannot be seriously challenged in that way again because no n??entrant to the middle ware market can hope to equal the ubiquity of Microsoft in that market, le?? one achie??e the. ''Microsoft plus'' market that Netscape and JAVA offered in 1995–98.

b. APIs The PFJ also requires that Microsoft disclose the APIs used by Mi??soft middleware to interoperate with the Microsoft operating system. Here, too, the PFJ. ??ers both from ?? drafting, and from a curious blankness regarding the sources of Micros?? Dom??ce of the market. The provision is replete with terms that are not defined (''inter??perate''), are defined only. vaguely (''API''), are defined based on how a pro?? is named or distributed (''Microsoft Middleware'') or, most remarkably, are left to be defined ?? Microsoft's ''so1e discretion'' (''Windows Operating system Product'').

In any event, the PFJ does little more than throw Microsoft into a briar patch?? as long called ?? Microsoft's competitive dominance depends on having the largest stab??f application developers writing for its users. To write programs for Microsoft users, t?? deve??per must have access to Microsoft's APIs. The APIs are their air supply, an??licrosoft has every reason to give developers access to that air supply- within limits. As lon??s Microsoft can keep its hand on the valve, as long as it can cut off the air supply to d??lopers who are too independent or too successful, it has every incentive to provide extensi?? Info??ion about its APIs. And the PFJ leaves the valve firmly in Microsoft's hant??y allow?? Microsoft to impose royalties and other restrictions on developers who obt?? access to the APIs. The PFJ thus requires little or nothing more than Microsoft would provid?? its own. Unless developers can be guaranteed an air supply that does not depend on Microso??hey will not chal??erage the company that can unilaterally cut them off. 2. Backward-Looking Remedies. In short, when all is said and done, this ?? wagers everything on a series of measures that might have prevented Microsoft from unlaw??y dest??ng Netscape in the browser wars. Even this is open to question, but the real??blem with the PFJ lies deeper, for there is not the slightest chance that these measures will ??ow a new com??or on the order of Netscape to emerge. The market has moved on. Focusin??ly on preve??ing a repetition of the unlawful actions Microsoft took in 1995–98 is like negt??ting an end to World War II by letting the Germans keep Paris as long as they promise to re??d the ?? Mag??t Line.

Such a limited focus is not just improvident, it ignores the instructions of the ??rt of Appea?? that any relief ''terminate'' Microsoft's unlawful monopoly and ''deny'' the ??pany the ''fruits'' of its unlawful conduct. This cannot be accomplished by relying on the eme??ce of some yet to-be-identified middleware challenger. To the contrary, Microsoft has alr?? soli?? its unlawful victory, into a browser monopoly, and it now bids fair to make ?? entire Interne?? into a proprietary Microsoft environment. Any remedy that seeks to deny M??soft the fruits of its unlawful conduct must at a minimum prevent Microsoft from using the ??e conduct to extend its control of services that rely on Internet Explorer.

For that reason, SIIA urges that the PFJ be expanded to address present and??e ?? and not just the dead past. The PFJ must take steps to reduce the massiv??tructural advantage that Microsoft has achieved by unlawfully leveraging its operating systen??tonopoly into a??nternet-access monopoly. These steps include opening the code of Internet??plorer ?? (''IE'' restricting exclusionary uses of Windows XP and the tools that make up Mi??oft's ??NET in??tiative, preventing Microsoft from ''polluting'' standards by adding propriet?? exten??ons, and inclusion of Microsoft's productivity applications in any relief. ??

3. Missing Principle. One further gap in the PFJ deserves mention, If the ??sific changes required by the PFJ are of very dubious force, the only provisions likely to??e continuing value are those that spell out broad principles of conduct. Here too there??

??nuch room ?? disappointment. The PFJ does not prohibit Microsoft from intentionally di??ling or adve?? affecting the operation of competing products. No explanation is offered ?? this ?? omiss??on.

4. Procedure. Finally, SIIA wishes to address one procedural point. At the ??er of this pr??ceeding are the decisions of the Court of Appeals and the District Court. Wh??hey say about Microsoft's conduct and about the appropriate remedies are an essential part o??e public interest analysis. But they are also at the heart of the case between the remaining liti??ing States and Microsoft. It may be difficult to reach a conclusion about this PFJ without prefi??ng a decision on the very. issues that the parties intend to litigate before the Court in the ne??future. To do ??o on the basis of a few Tunney Act filings rather than a full record might do a?? justice to the p??ies to that litigation. S??A therefore respectfully requests that this Court ?? the PFJ and its terms under advisement until the conclusion of the litigation.

In sum, the PFJ, as written, represents a failure of will and technological wis??m that cannot be approved by this Court consistent with the unanimous liability decision o??e Court of Appeals, traditional standards of antitrust remedy law, or the Tunney. Act.

II. ARGUMENT

A. Standard of Review

Under the Tunney Act, this Court is required to review a proposed settlemen?? deter??e whether it serves the ''public interest.'' In most instances Tunney Act pr??edings occur prior or to trial and without any judicial findings of liability. The Act was passed ??open this stage of the proceedings to the sunlight of public scrutiny. In the unique procedura??ntext of this case however, where the Court of Appeals issued an opinion on the merits prio?? the ini?? of Tunney Act proceedings, the ''public interest'' standard must necessarily ?? applied consistent with the Court of Appeals opinion. The Court of Appeals ruled, ''[t]he Su?? me Court has expl??ed that a remedies decree in an antitrust case must seek to 'unfetter a mar,?? from antice??petitive conduct,'' Ford Motor Co., 405 U.S. at 577, to 'terminate the illegal??nopoly, deny to the defendant the fruits of its statutory violation, and ensure that there remai??) practices likely to result in monopolization in the future.'' Thus, this Court must ??sider each of these factors in its public interest analysis.

Ordinarily, the Department of Justice is given prosecutorial discretion in de??ng whe?? bring a civil antitrust action. As a result, courts generally require that a ??posed settlement only be ''within the reaches of the public interest','' for which approval ?? warranted even if it falls short of the remedy the court would impose on its own.'' Thus, in ??ical Tunney Act cases, courts have permitted entry of consent decrees which were merel?? consistent wire the government's general theory of liability as manifested in its complaint'' a ??chat ''grani??[ed] relief to which the government might not be strictly entitled'' under the m?? rust laws, Bech??, 648 F.2d at 660. In this case, after trial and with the benefit of an extensive factual record, the ??tort of Appeals held specifically that relief must seek to ''terminate'' Microsoft's operating, ??tern mo??, ''unfetter'' barriers to competition to the OS market, and ''deny'' Micros??he

The CIS, however, articulates a different and considerably less rigorous start ??d for a rem?? ??n an antitrust case. According to the CIS. ''[a]ppropriate injunctive relief, ??hould: (1) end the ??lawful conduct; (2) 'avoid a recurrence of the violation and others like it: ??d (3) undo its anticompetitive consequences.'' Significantly, the formulation advocated DOJ does not re?? the remedy to 'terminate'' the illegal monopoly, or to 'deny the defendan??e fruits of its un??awful conduct. Regardless of whether the DOJ formulation may have been ??propriate in pas??cases, it is simply the wrong standard of review for the remedy in this case, v??re the District Court and Court of Appeals have clearly outlined how Microsoft violated th?? ??herman Act. The PFJ is deficient under either formulation. There are substantial disparities ??tween the CIS and the PFJ. And the DOJ has not even attempted to defend the PFJ under the r??e stringent, and binding, Ford/United Shoe/ Grinnell standard That this Court must seek ??enforce.

B. S??A's Remedy Proposals are Reasonable and Proportional to M??osoft's Unlawful Conduct??s proposed modifications to the PFJ, described in detail below, are boy ??amerous and substantial. Regrettably for consumers, Microsoft's already proven monopolist?? Lets have so de??ed competition in the operating systems market that adoption of these pro??als is critic?? if the PFJ is to ''unfetter'' the market from Microsoft's anticompetitive cond?? ''terminate'' Microsoft's illegal monopoly, deny Microsoft the ''fruits'' of its She?? violations, and prevent future monopolistic acts, in accordance with the ford/United?? Shoe/Grinnell standard for remedies.

There are similarities between tiffs case and the AT&T divestiture, the last ??ge monopolization settlement under the Tunney Act. S??A submits that in this case the ?? is similarly completely inadequate to remedy the serious antitrust violations in this ma?? In the former matter Judge Greene reviewed the evidence on all issues except remedy. Af?? evidentiary hearings, third-party submissions, and lengthy oral argument, Judge Gre?? declined to approve the consent decree as proposed because he concluded that it was inadequ?? in certain areas and precluded the Court from effective oversight and enforcement. Judge Gre?? required significant changes to the proposed decree before he would consent to enter the settl??ant under the ??ey Act's public interest standard, holding that ''[i]t does not follow, that [?? Court] must ??questioningly accept a [consent] decree as long as it somehow, and however?? inade??tely, deals with the antitrust... problems implicated in the lawsuit.'' SHA?? respectfully requests that this Court follow Judge Greene's prudent actions and send ?? parties back to the negotiating table to formulate an appropriate PFJ. This Court should re??e its cone??s on on the PFJ until after the pending State case has been litigated.

C. The PFJ Fails to Address the Core Violations Affirmed by the D?? Circuit

1. The PFJ Does Not Eliminate Microsoft's Binding of its M??lleware to its Operating System

As the CIS indicates, the core manner in which Microsoft unlawfully mainta??d its Winc??ws Operating System (''OS'') monopoly was by bundling and tying platform, ??Idleware to the OS. Microsoft used this strategy to defeat the alternative platform threats pos?? by Netse??pe and JAVA. The DC Circuit ruled that these actions constituted unlawful ??tintenance of mo??poly under Section 2.

a. Failings of the PFJ It is critical for this Court to understand That the business and economics that ??ire the software industry demonstrate conclusively that the ubiquity of a development platf??t will almost always beat technological superiority. The common interest of software der??bers and consumers in adopting the most uniform platform is the basis of the Microsoft mon??y. As a result, if Microsoft is allowed to continue to bind or bundle its middleware offerings ??th the Windows OS, the ubiquity of its middleware will be permanent, and active middlew?? comp??tition will never emerge. Microsoft will enjoy a perpetual maintenance of its??nopoly, codified and reinforced by to the PFJ, and consumers will suffer a significant retardi?? of innovation that would have otherwise occurred. The negative consequences of this ??ome on innovation cannot be overstated. If there is no way to reach consumers except throu?? Micro?? platform, and if Microsoft remains free to cut off the access of applicatio?? that are

MTC–00030615

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA UNITED STATES OF AMERICA Plaintiff, v. MICROSOFT CORPORATION, Defendant. Civil Action No. 98–1232 (CKK) STATE OF NEW YORK, et al., Plaintiffs, v. MICROSOFT CORPORATION, Defendant. Civil Action No. 98–1233 (CKK) COMMENTS OF AOL TIME WARNER ON THE PROPOSED FINAL JUDGMENT TABLE OF CONTENTS Page INTRODUCTION 1

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COMMENTS OF AOL TIME WARNER ON THE PROPOSED FINAL JUDGMENT

Pursuant to Section 2(b) of the Antitrust Procedures and Penalties Act, 15 U.S.C. §16, AOL Time Warner respectfully submits the following comments on the Proposed Final Judgment (''PFJ'') in the above-referenced matter.

INTRODUCTION

The Proposed Final Judgment sets forth a decree that is too limited in its objectives and too flawed in its execution to meet the Tunney Act's ''public interest'' test. It allows Microsoft to continue to bind and bundle its middleware applications with its Windows Operating System (')—even though the Court of Appeals found Microsoft's actions in this regard to be illegal. And its patchwork of constraints on Microsoft's conduct is so loophole-ridden and exception-laden as to render its provisions ineffective. As a result, the PFJ is inadequate to promote competition and protect consumers, and the Court should refuse to find that its entry would be ''in the public interest.'' 15 U.S.C. §16(e).

The PFJ comes before the Court in an unprecedented posture for a Tunney Act proceeding. This proposed settlement was reached—not as the case was being flied, nor as it was being tried, nor even as it was being appealed—but rather, after the Court of Appeals for the District of Columbia Circuit unanimously affirmed a finding of illegal monopoly maintenance by Microsoft. Such circumstances surely require a more rigorous application of the ''public interest'' standard than when a case is settled before the first interrogatory is even served—the usual situation when a Tunney Act review is conducted. Helpfully, a readily available and judicially administrable measure of the ''public interest'' is available for use in this special circumstance: the four-part test for ''a remedies decree'' established by the DC Circuit in this very litigation. United States v. Microsoft, 253 F.3d 34, 103 (DC Cir. 2001). Applying this standard, we believe that the Court should find the PFJ to be in the ''public interest'' only if it (1) ''unfetter[s] a market from anticompetitive conduct''; (2) ''terminate[s] the illegal monopoly''; (3) ''den[ies] to the defendant the fruits of its statutory violation''; and (4) ''ensure[s] that there remain no practices likely to result in monopolization in the future.'' Id. (internal quotations omitted). We believe that there are at least three reasons why the Court should conclude that the PFJ does not meet this test. First, since July 11, 2001 (for the browser) and December 16, 2001 (for other middleware), Microsoft has been implementing many of the PFJ's remedial provisions. Thus, the Court need not speculate about the impact these provisions would have on the industry if they were put in place; rather, it can seek submissions and review evidence on whether these critical provisions are beginning to work as they .are being implemented by Microsoft. We believe that any such inquiry will reveal that the original equipment manufacturers (''OEMs'') are not exercising the flexibility that the PFJ ostensibly provides them, because the loophole-ridden PFJ gives too few rights to the OEMs and does too little to protect the OEMs in the exercise of those rights. As a result, there is little reason to believe that the PFJ will prove effective in restoring competition, terminating Microsoft's monopoly, or stripping Microsoft of the fruits of its illegal acts.

Second, the PFJ fails to prohibit Microsoft's signature anticompetitive conduct: the binding of its middleware applications to its monopoly operating system, and its bundling of these products to further entrench its OS monopoly. The factual questions that surround these legal issues are quite complex, but here again, the Court has a powerful tool to employ: the extensive factual findings entered by the District Court. These factual findings document Microsoft's purposeful commingling of middleware application code with the Windows OS to harm competition, as well as the contractual bundling of those applications with the OS, to force OEMs to distribute Microsoft's middleware, and to raise distribution hurdles for middleware rivals. Given the PFJ's failure to ban practices that the District Court and the Court of Appeals found to be at the center of Microsoft's illegal maintenance of its OS monopoly, the PFJ does not meet the ''public interest'' standard.

Third, even with regard to those limited objectives that the PFJ does attempt to achieve—i.e., the creation of ''OEM flexibility'' to promote desktop competition—the proposed decree is so ridden with loopholes, exceptions and carve-outs as to render it ineffective. These deficiencies are highlighted when the PFJ is compared to previous remedial plans considered in this case, including Judge Jackson's interim conduct remedies and the mediation proposal offered by Judge Richard Posner (which Microsoft apparently agreed to even before it had been found liable for antitrust violations).

Finally, we believe the Court will find the remedial proposal of the litigating state attorneys general (''Litigating States'' Remedial Proposal'' or ''LSRP'')—and the Court's consideration of that proposal—to be useful in its review of the PFJ. Most immediately, the LSRP provides a benchmark as to what one group of antitrust enforcers believes to be compelled by the ''public interest'' in order to achieve the case's remedial objectives. Moreover, the LSRP provides a helpful point of comparison for some specific aspects of the PFJ—i.e., a way to illustrate why particular PFJ provisions are ineffective, by comparison. And third, the Court's consideration of the LSRP will adduce testimony and other evidence that should be weighed in determining whether the PFJ should be approved. Taken as a whole, a comparison of the PFJ with the Litigating States'' Remedial Proposal shows why the latter, and not the former, faithfully meets the remedial objectives set forth by the DC Circuit and serves the ''public interest'' as expressed in the nation's antitrust laws.

I. THE COURT SHOULD USE THE REMEDIAL OBJECTIVES ESTABLISHED BY THE DC CIRCUIT IN THIS CASE AS THE STANDARD FOR ASSESSING WHETHER THE PFJ IS ''IN THE PUBLIC INTEREST.''

Passed by Congress in 1974, the Antitrust Procedures and Penalties Act, commonly known as the ''Tunney Act,'' provides that a proposed consent decree may be entered in an antitrust case only if the district court determines that such entry is ''in the public interest.'' See 15 U.S.C. §16(e). Given that the Court will receive numerous submissions on this point, we do not provide here a recitation of the Tunney Act's provisions, or an extensive analysis of the standard of review under the Act. Instead, we focus on just one, overriding ''procedural'' question: How should the Court measure ''the public interest'' in this unique case? For reasons we will explain below, we believe that the measure of the ''public interest'' to be applied in reviewing the PFJ can be found in the remedial objectives set forth by the DC Circuit in its consideration of this litigation. See Microsoft, 253 F.3d at 103.

First, while the Tunney Act itself does not define ''public interest,'' the case law makes

clear that the Court must begin its analysis ''by defining the public interest'' in accordance with the basic purpose of the antitrust laws, which is to'' 'preserv[e] free and unfettered competition as the rule of trade.''' United States v. American Tel. & Tel. Co., 552 F. Supp. 131,149 (D.DC 1982) (quoting Northern Pacific Ry. Co. v. United States, 356 U.S. 1 (1958)). As a general rule, a court has discretion to reject a proposed consent decree that is ineffective because it fails to address or resolve the core competitive problems identified in the Department of Justice's complaint. United States v. Microsoft Corp., 56 F.3d 1448, 1457–62 (DC Cir. 1995). As this Court stated in United States v. Thomson Corp., 949 F. Supp. 907, 913 (D.DC 1996), the court has a responsibility ''to compare the complaint filed by the government with the proposed consent decree and determine whether the remedies negotiated between the parties and proposed by the Justice Department clearly and effectively address the anticompetitive harms initially identified.'' A court should ''hesitate'' in the face of specific objections from directly affected third parties before concluding that a proposed final judgment is in the public interest. United States v. Microsoft, 56 F.3d at 1462. And it ''should pay 'special attention'' to the clarity of the proposed consent decree and to the adequacy of its compliance mechanisms in order to assure that the decree is sufficiently precise and the compliance mechanisms sufficiently effective to enable the court to manage the implementation of the consent decree and resolve any subsequent disputes.'' Thomson Corp., 949 F. Supp. at 914 (citing United States v. Microsoft, 56 F.3d at 1461–62).

In the context of this proceeding, tremendous guidance as to the content of the public interest test can come from the earlier decision of the Court of Appeals in this case. In that decision, the DC Circuit wrote:

[A] remedies decree in an antitrust case must seek to ''unfetter a market from anticompetitive conduct,'' to ''terminate the illegal monopoly, deny to the defendant the fruits of its statutory violation, and ensure that there remain no practices likely to result in monopolization in the future.''

Microsoft, 253 F.3d at 103 (quoting Ford Motor Co. v. United States, 405 U.S. 562, 577 (1972) and United States v. United Shoe Mach. Corp., 391 U.S. 244, 250 (1968)). These words, in our view, form the essence of the public interest test to be applied by the Court in this Tunney Act proceeding.

First, on its face, this passage speaks of the object of a ''remedies decree in an antitrust case,'' without differentiating between a decree that is achieved through negotiation and one achieved through litigation. Thus, the Court of Appeals'' ruling would appear to be directly controlling here, insofar as it states the measure of adequacy for any remedial decree, however achieved. There is no apparent reason why the ''remedies decree'' negotiated by the Department of Justice with Microsoft should not have to meet the standard of adequacy generally set forth by the Court of Appeals in its decision. This is particularly true given that the passage merely ''defin[es] the public interest in accordance with the antitrust laws.'' Accord American Tel. & Tel. Co., 552 F. Supp. at 149.

How wide a ''gap'' between a hypothetical litigated result and the proposed settlement is permissible in these circumstances is a question that need not be answered here because the PFJ falls so very short of meeting any reasonable understanding of the ''public interest,'' given its failure to address many of Microsoft's illegal acts and its loophole-ridden provisions in the areas that it does purport to cover.

[I]t is not necessary that all of the untraveled roads to [anticompetitive conduct] be left open and that only the worn one be closed. The usual ways to the prohibited goals may be blocked against the proven transgressor.

Additionally, ''antitrust violations should be remedied 'with as little injury as possible to the interest of the general public'' and to relevant private interests.'' Id. (quoting United States v. American Tobacco Co., 221 U.S. 106, 185 (1911)).

Second, the four-part test established by the DC Circuit here would give the Court a clear and manageable standard on which to evaluate the proposed decree's adequacy. Use of the DC Circuit's formulation thus avoids one of the principal bases of controversy and difficulty in Tunney Act reviews -i.e., the lack of a judicially manageable standard for assessing the public interest and the consequent risk that judges will inappropriately use standardless judgment to review an exercise of prosecutorial discretion. Thus, unlike in other Tunney Act cases, where a court lacks an appropriate benchmark on which to measure the purported benefits of the settlement (and thus must be careful not to impose its judgment for that of the Justice Department), here, there is a clear benchmark for the Court to use: the standard set by the Court of Appeals with regard to a ''remedies decree.''

Moreover, to the extent that insisting that the PFJ meet the standard set by the Court of Appeals would result in a more exacting review than the review imposed in other Tunney Act proceedings, that would be appropriate in this circumstance. For while the overwhelming majority of decrees reviewed under the Tunney Act occur in a pre-trial context—where the court lacks a judicial finding of illegality against which to measure the efficacy of the proposed settlement—this proposed settlement was reached after an appellate affirmance of liability. Because the public has invested its resources and time, and taken the risk to win a judgment of liability and defend that judgment on appeal, it has a right to expect a more rigorous decree that meets a higher standard of review. Under these circumstances, the Court's review under the Tunney Act should not be deferential to the Justice Department; instead, the Court should apply the Court of Appeals'' four-part test and determine if the PFJ meets that test.

As explained in more detail below, the PFJ fails to meet the DC Circuit's four-part test, because contrary to the claims of the Department of Justice, it will neither ''provide a prompt, certain and effective remedy for consumers,'' nor ''restore competitive conditions to the market.'' (See CIS at 2.) Specifically, it does not ''unfetter [the] market from anticompetitive conduct,'' because it does not even try to stop Microsoft's illegal binding and bundling practices—or effectively limit Microsoft's ability to coerce OEM behavior to its liking. It does not ''terminate the illegal monopoly'' because it does not effectively promote rival middleware, and because its provisions are so laden with loopholes, exceptions and carve-outs. It does not ''deny to the defendant the fruits of its statutory violation,'' because it allows Microsoft to continue to leverage its OS monopoly to gain market share in other markets. And it does not ''ensure that there remain no practices likely to result in monopolization in the future,'' because it leaves Microsoft free to exploit the OS monopoly to gain dominance in critical new markets. Failing to address the core anticompetitive wrongs that were found at trial and upheld on appeal against Microsoft, and failing to meet the four-part remedial test established by the DC Circuit, the PFJ is manifestly contrary to the public interest and should be rejected.

II. AS MICROSOFT STARTS TO IMPLEMENT MOST OF THE DECREE'S PROVISIONS, THE COURT SHOULD CONSIDER HOW—IF AT ALL OEMS ARE RESPONDING.

As noted above, the question before the Court is whether the PFJ is ''in the public interest.'' 15 U.S.C. §16(e). In making that determination, the statute indicates that the Court may want to consider, inter alia: (1) ''the competitive impact'' of the PFJ, (2) whether it results in the ''termination of alleged violations,'' and (3) ''the impact of [the PFJ] upon the public generally and individuals alleging specific injury.'' Id.

Fortunately, contrary to most other courts conducting Tunney Act reviews, this Court need not struggle with evaluating the ''competitive impact'' of the PFJ in a factual vacuum because Microsoft has been, according to its own statements, implementing some provisions found in the PFJ since last July, and the bulk of its provisions since December. That means the Court need not base its ''public interest'' judgment on abstract legal and economic analyses only; instead, the Court's analysis can (at least in part) be shaped by a consideration of how Microsoft is beginning to implement parts of the PFJ, and how the PFJ's provisions are starting to work in practice. 7 We believe that such a practical review will demonstrate that the portions of the PFJ in question show little prospect—if any- that they will ''unfetter the market,'' ''terminate the monopoly,'' or ''deny'' to Microsoft ''the fruits of its violation.''

A. There Is No Indication That Microsoft's Implementation Of Major Aspects Of The PFJ Is Even Beginning To Promote Competition Or Helping To Loosen Microsoft's Control Over The Desktop.

In the joint stipulation filed with the Court on November 6, 2001, Microsoft stated that it would ''begin complying with the [PFJ] as [if] it was in full force and effect starting on December 16, 2001 .'' (Stipulation and Revised Proposed Final Judgment at 2 (November 6, 2001).) While provisions with specific timetables were exempted from this

pledge—resulting in an excessive delay for some of the PFJ's competitive protections many of the PFJ's remedial provisions were covered by it. Thus, with regard to many provisions of the PFJ, the proposed decree has been ''in effect'' since mid-December.

Microsoft's stipulation offers the Court a unique opportunity to learn, not just how the PFJ would serve the public interest once implemented, but instead, whether the PFJ provisions already in effect are showing signs that they are likely to serve the public interest. These provisions have now effectively been in place for 43 days—and by the time of a likely hearing or other proceeding to consider this question (presumably, in March or April), will have been in effect for three to four months.

Microsoft may protest that a three- to four-month period in which parts of the PFJ will have been applied is inadequate to test those remedies. And that is doubtlessly true with regard to some measures of the PFJ's effectiveness, such as whether Microsoft's share of the OS market has shrunk from near absolute to anything less. But there are other measures of the PFJ's effectiveness that should be readily discernible even in this relatively short time.

Among the questions we believe that the court could determine, by the time of a heating in March or April, would be:

.Have the OEMs exercised (or even attempted to exercise)—in any way beyond the prevailing industry practice prior to December 16th—the flexibilities to remove/replace icons, start menu entries, and default settings for Microsoft middleware products, that are purportedly provided in Section III.C.1 of the PFJ? If not, why not?

.Are non-Microsoft middleware products gaining new distribution via the OEMs as a result of the provisions of Sections III.A. and III.C.2 of the PFJ, as implemented? If not, why not?

.Are non-Microsoft middleware products, to a greater extent than before implementation of the PFJ, attaining the benefits of an ''automatic launch,'' pursuant to the provisions of Section III.C.3 of the PFJ? If not, why not?

.Is any OEM offering a dual-boot computer, as authorized by Sections III.A.2 and III.C.4 of the PFJ? If not, why not?

.Are there new IAP offerings being made at the conclusion of PC boot sequences, pursuant to Section III.C.5 of the PFJ? If not, why not?

. Has any ISV, IHV, IAP, ICP or OEM gained any additional Windows licensing tights that it did not have prior to the implementation of the PFJ, pursuant to Section III.I of the PFJ? If not, why not?

. Has Microsoft terminated any payments to OEMs that were anticompetitively advantaging Microsoft's products, and that are now forbidden, pursuant to Sections III.A and III.B of the PFJ? Based on our knowledge of industry developments, we believe that the answer to each of these questions is ''no,'' with perhaps some very rare and isolated exceptions. Thus, despite Microsoft's proclaimed implementation of large portions of the PFJ, there is scant evidence of OEMs even attempting, let alone succeeding, to offer consumers new choices with respect to middleware products. Even in a relatively short time frame of a few months, one would expect to find numerous OEMs reaching agreements to promote or carry multiple non-Microsoft products. But no such evidence exists. No doubt, that is why countless industry observers and analysts have concluded, after examining the PFJ, that ''[t]he changes we will see are minute. Microsoft can control its own destiny. It can do whatever it wants.''

Presumably, it cannot be in ''the public interest'' to settle a case after years and years of litigation - including a finding of liability for the government at trial, affirmed unanimously on appeal by the Court of Appeals (See Microsoft, 253 F.3d at 46)—for a remedial decree that effectuates only ''minute'' changes in the strategy the defendant was using to illegally maintain its monopoly. And yet, that is precisely what appears to be happening, as the effectiveness—or lack thereof- of parts of the PFJ are starting to be observed in application.

While we certainly agree with the Department of Justice that it will only be ''over time'' that any remedy could ''help lower the applications barrier to entry,'' (see CIS at 29), that objective will never be achieved if the PFJ does not lead OEMs to even begin to ''offer rival middleware to consumers and ... feature that middleware in ways that increase the likelihood that consumers will choose to use it.'' (Id.) That is: the pro-competitive journey of a thousand miles can never be completed if- as it appears to be the case—the PFJ does not create a market in which OEMs feel free to take that all-important first step. To the extent that much of the CIS suggests that the goal of the remedy is to create OEM flexibility for its own sake—i.e., to make sure that OEMs have the right to choose non-Microsoft products, whether or not they exercise that right—it misses the mark. The goal of this litigation is not to protect OEMs'' rights, but rather to protect consumers'' rights to enjoy a free and competitive market. In such a market, OEMs can be important surrogates for consumers, but only if they actually offer competitive choices. Likewise, to the extent that the other goal of the remedial proceeding is to reduce the applications barrier to entry, that objective is only achieved to the extent that the OEMs actually distribute and promote non-Microsoft middleware—it is not advanced by the unexercised presence of theoretical OEM choice.

Thus, the determination of whether the PFJ will be effective in promoting its purported ends—i.e., fostering OEMs in making those choices and creating opportunities for competition—need not be left for some subsequent proceeding or for antitrust scholars in future years. It can be ascertained now from the submissions that the Court is receiving, or, if those submissions are inadequate, it could be resolved by the Court in a proceeding where evidence is taken and testimony is heard. See Section V.B, infra. The manner in which Microsoft is already implementing portions of the PFJ is among the most probative considerations the Court can weigh in determining how—it at all—the proposed settlement will promote competition in the years to come.

B. The Provisions Of The PFJ Implemented By Microsoft Since July 11th Are Not Showing Signs That They Will Work To Restore Competition In The Browser Market.

In addition to the general applicability of the PFJ's provisions, several of its provisions have been in place—as they relate to the Internet browser—since Microsoft took steps to implement them after the Court of Appeals'' decision last June. As with the more general PFJ provisions discussed above, the Court should examine whether these browser-specific remedial provisions—which will have been in place for eight months by mid-March—have been effective to date. Again, we believe that the evidence to date shows that the provisions are showing no sign of effectuating change in the market; thus, the PFJ—which (with regard to browsers) does little more than codify these unilateral Microsoft actions does not meet the ''public interest'' standard.

On July 11, 2001, in response to the decision of the Court of Appeals, Microsoft announced a program of ''greater OEM flexibility for Windows.'' See Press Release, Microsoft Corporation, Microsoft Announces Greater OEM Flexibility For Windows, July 11, 2001. Specifically, Microsoft announced that it would amend its OEM license agreements to provide that: PC manufacturers will have the option to remove the Start menu entries and icons that provide end users with access to the Internet Explorer components of the operating system. Microsoft will include Internet Explorer in the Add/Remove programs feature in Windows XP. PC manufacturers will have the option to remove the Start menu entries and icons that provide end users with access to Internet Explorer from previous versions of Windows, including Windows 98, Windows 2000 and Windows Me ....

Consumers will be able to use the Add-Remove Programs feature in Windows XP to remove end-user access to the Internet Explorer components of the operating system .... Id. These provisions mirror the browser-related provisions found in Sections III.C.1 and III.H.1 of the PFJ. Indeed, they comprise almost the entirety of all browser-related remedial provisions found in the PFJ.

Thus, the question of whether the PFJ fulfills the Department of Justice's promise of an effective remedy for ''restor[ing] the competitive threat that middleware products posed prior to Microsoft's unlawful undertakings,'' can easily be assessed—at least with regard to the browser threat, which was such an extensive part of the Court of Appeals'' decision—by seeing how effective these unilateral Microsoft actions, taken in July of 2001, have been to date. And unlike the provisions discussed above, which were put in place only in December, it cannot be argued that these browser-related provisions have not yet been tested in the marketplace; rather, they were in place for the launch of Windows XP, which Bill Gates recently dubbed the ''best-selling release of Windows ever, and one that is creating great opportunities for PC manufacturers and our other partners in the industry.'' In the simplest terms, as we note above, these ''remedies'' will have been in place for eight months by mid-March of 2002.

We believe that the initial evidence shows that these provisions are completely ineffective. We are unaware of a single OEM that has used the ''flexibility'' provided to it by Microsoft to remove Internet Explorer from the Start menu, or from any of its multiple promotional placements on the PC desktop. Nor are we aware of any OEM that has elected to use any competitor to Internet Explorer as a default browser, or to promote alternative browsers to Internet Explorer in any way. Moreover, there is no indication—more than six months after Microsoft's July 11th announcement and four months after the first shipments of Windows XP—that Internet Explorer's commanding market share in the browser market has fallen in any measurable way. If the provisions of the PFJ are strong enough to ''restore'' competition to the marketplace, which DOJ claims they are (see CIS at 3 (''[t]he requirements and prohibitions [of the PFJ] will ... restore the competitive threat that middleware products posed prior to Microsoft's unlawful undertakings'')), one would expect to see that the market shares of Microsoft's browser competitors have increased during this time frame. There is simply no evidence of that. Not only is there a dearth of evidence suggesting that the PFJ's provisions are going to restore competition to the level enjoyed by Microsoft's rivals prior to its illegal conduct, but there is no evidence to suggest they are affecting the market at all.

A remedial provision that has no market impact cannot be said to be in the ''public interest,'' especially in a case like this where the damage from Microsoft's illegal campaign to eliminate rival middleware has already been done. In other words, because Microsoft has illegally driven down the market shares of its rival middleware developers, restoring competition to the marketplace requires much more than simply eliminating the illegal practices: only if the status quo ante is restored would OEM freedom of choice be meaningful. And yet, the evidence suggests that the PFJ provisions that relate to the browser will have no market impact, given the practical experience with highly similar proposals put in place by Microsoft last July. This is important evidence for the Court to consider when reviewing the PFJ.

III. THE PFJ IS NOT IN THE PUBLIC INTEREST BECAUSE IT DOES NOT EVEN ATTEMPT TO HALT MICROSOFT'S MOST INSIDIOUS PRACTICE: ITS ILLEGAL BINDING AND BUNDLING OF MIDDLEWARE APPLICATIONS WITH THE WINDOWS OS.

In this submission—and doubtlessly in the many others the Court will receive—we identify a number of specific deficiencies in the PFJ. See Section IV, infra and Attachment B. But one omission stands out above all others: the failure of the PFJ to limit Microsoft's ongoing and insidious efforts to maintain its monopoly—and leverage and entrench that monopoly—by tying its middleware applications to the Windows OS. This conduct—found illegal by the District Court and upheld as illegal by the Court of Appeals (see Microsoft, 253 F.3d at 67)—is left unchecked by the PFJ. By contrast, a remedy to address this practice appeared in the interim conduct remedies offered by the District Court, as well as the remedial proposal designed by Judge Richard Posner (''Posner Proposal''). The practice is also addressed extensively in the litigating states'' proposed remedy. By failing to remedy one of Microsoft's ''signature'' anticompetitive acts, the PFJ—even before reaching its many other defects—falls far short of the four-part remedial standard set by the Court of Appeals, and by the same token, fails to meet the public interest test established by the Tunney Act.

In explaining why it did not seek to limit Microsoft's tying of middleware applications to Windows in the PFJ, the Justice Department has suggested that there was no basis for such a remedy because of the Court of Appeals'' reversal of the District Court's finding of liability under Section 1 of the Sherman Act, and the appellate court's direction that the remedy here should ''focus[] on the specific practices that the court had ruled unlawful.'' This analysis fundamentally misapprehends the implications of the Court of Appeals'' ruling: contrary to DOJ's view, the Court of Appeals did not suggest that an anti-tying remedy was inappropriate or unnecessary here; indeed, much of the Court of Appeals'' decision is a strong declaration of how Microsoft's various forms of tying violated Section 2 of the Sherman Act. See, e.g., Microsoft 253 F.3d at 65–67. A remedy that truly ''focused on the specific practices that the court had ruled unlawful'' would have to address the tying practices that the Court of Appeals ''ruled unlawful''; the PFJ does not.

Because Microsoft's various forms of middleware applications tying are critical tactics that it uses to maintain its illegal monopoly, they must be ended if the remedy is to ''terminate the monopoly.'' (See Microsoft's Tying Strategies To Maintain Monopoly Power In Its Operating System (''Mathewson & Winter Report''), attached hereto as Attachment A.) Furthermore, the opportunity to gain market share as a result of such tying is one of the principal fruits of Microsoft's illegality, and should therefore be denied to it. As a result, the failure of the PFJ to address Microsoft's tying is a fundamental flaw that alone merits rejection of the proposed decree.

Importantly, we note that the legal and economic arguments presented below are reinforced by the empirical observations set forth in Section II, supra. That is, the legal and economic analysis below which suggests that a remedy without a ban on tying will be ineffective in theory, is supported by the fact that such a remedy—imposed in part since July, and more substantially since December—is proving to be ineffective in practice.

A. The Court Of Appeals Explicitly Held That Code Commingling—A Form Of Tying Unaddressed By The PFJ—Violates Section 2 Of The Sherman Act.

In affirming the District Court's findings of fact concerning Microsoft's practice of commingling the code for its own middleware products with the code for the Windows OS, the Court of Appeals made clear that such commingling was an unlawful act in violation of Section 2 of the Sherman Act. See Microsoft, 253 F.3d at 65–67. Specifically, the Court of Appeals concluded that Microsoft's ''commingling has an anticompetitive effect ... [and] constitute[s] exclusionary conduct, in violation of §2.'' Microsoft, 253 F.3d at 6667 (emphasis added). According to the appeals court, Microsoft's ''commingling deters OEMs from pre-installing rival browsers, thereby reducing the rivals'' usage share and, hence, developers'' interest in rivals'' APIs as an alternative to the API set exposed by Microsoft's operating system.'' Id. at 66. Moreover, the Court of Appeals affirmed the District Court's finding that such commingling was done, deliberately and intentionally, to advance Microsoft's anticompetitive aims. Id.

Notwithstanding these clear declarations by the Court of Appeals, this practice is not prohibited by the PFJ. Such a prohibition was omitted despite the finding that it is illegal—and despite the Justice Department's recognition that the first remedial objective in a decree should be to ''end the unlawful conduct.'' (See CIS at 24.) Thus, Microsoft remains free to bind its middleware applications, including the browser, to its Windows OS —making it impossible for an OEM, or a consumer, to remove that application from a PC without doing damage to that PC's operating system.

Microsoft's suggestion that competition is adequately served by allowing OEMs to pre-install rival middleware and to remove end-user access to Microsoft middleware—instead of banning commingling- is incorrect for several reasons. First, as the District Court found and the Court of Appeals affirmed, commingling of code strongly deters—and may even prevent—OEMs and consumers from using middleware products offered by Microsoft's competitors (because the Microsoft product is inextricably intertwined with the OS and is thus both easier to use and harder to remove). Why would an OEM include a competing middleware product that will cost money to install and use up valuable space on the hard drive when Microsoft's product is already there and has been so tightly knit with the OS that it cannot be removed without doing damage to the OS? As the Court of Appeals noted (citing the District Court's holding), Microsoft's commingling has both prevented OEMs from pre-installing other browsers and deterred consumers from using them. In particular, having the IE software code as an irremovable part of Windows meant that pre-installing a second browser would ''increase an OEM's product testing costs,'' because an OEM must test and train its support staff to answer calls related to every software product preinstalled on the machine; moreover, pre-installing a browser in addition to IE would to many OEMs be ''a questionable use of the scarce and valuable space on a PC's hard drive.''

Microsoft, 253 F.3d at 64 (citations omitted).

As long as commingling is permitted, OEMs and other third party licensees will have no incentive to take advantage of the limited freedom provided by the PFJ and will continue to use Microsoft's middleware products at the expense of its competitors. As a result, commingling reduces Microsoft's

distribution costs for its middleware applications to zero. It also raises the distribution costs of rival middleware application makers -who not only must pay for something that Microsoft gets for free (i.e., distribution via OEMs), but must also pay an added bounty to persuade OEMs to install their applications as the second such application on a PC. This, of course, assumes that such an added payment strategy for such middleware would even be plausible (which is highly doubtful, except in rare cases) and would not be defeated by Microsoft, a rival with roughly $39 billion in cash available to deter the prospect of being outbid by other middleware developers for PC access.

The other way in which code commingling illegally enhances the position of Microsoft middleware is by encouraging applications programmers to write their programs to Microsoft's products. (Mathewson & Winter Report at ¶¶14–16.) Third party developers decide how to write their applications based upon what APIs they believe will be available on the broadest number of computers and will enable their products to function most smoothly. See Microsoft, 253 F.3d at 55. Because the PFJ will allow Microsoft to continue commingling its middleware and OS code, it essentially guarantees that Microsoft's application programming interfaces (''APIs'') are universally available in all Windows environments (in other words, on virtually all PCs)—and that software developers who write their applications to Microsoft's APIs can write directly to the OS. This is true regardless of whether or not end-user access to the middleware product is visible. As a result, third party software developers (whose business interests are to develop successful applications, not to challenge Microsoft's monopoly) will almost always write their programs to Microsoft middleware.

Thus, in the end, as both the Court of Appeals and the District Court concluded here, commingling itself deters OEMs from installing rival middleware. See Microsoft, 253 F.3d at 66; Findings of Fact, 84 F. Supp. 2d at 49–50, ¶159. No doubt this is why every other remedial plan contemplated in this litigation—from the Posner Proposal, to Judge Jackson's interim remedial order, to the proposal set forth by the Litigating States—has prominently included a ban on code commingling (or, at the very least, a requirement that Microsoft make available a non-commingled version of Windows). Yet, despite that, despite the Court of Appeals'' holding, and despite the District Court's factual findings, the PFJ fails to prohibit or limit this practice in any manner whatsoever.

Microsoft has already demonstrated its willingness and ability to fend off threats from competing middleware products by illegally commingling code with the Windows OS. As currently drafted, the PFJ gives the company a green light to continue this anticompetitive and illegal practice. The public interest requires that Microsoft's practice of tying its middleware and operating system, via code commingling, be prohibited.

B. Microsoft Uses A Variety Of Other Tying Practices To Maintain Its Operating System Monopoly; If The Monopoly Is To Be ''Terminated,'' Such Contractual Tying Must Be Prohibited.

The Justice Department's insistence that the remedy in this case should not include a general tying prohibition because the government abandoned its Section 1 tying claim is logically flawed. Contrary to DOJ's assertions, as discussed at length above, the ultimate remedy in this case must ''terminate'' Microsoft's illegally maintained monopoly- and that can only happen if the remedy addresses those behaviors that anticompetitively maintain the Windows monopoly. The bundling, or contractual tying, of Microsoft's middleware products to its Windows OS is clearly such an anticompetitive behavior: it is the signature tactic used by Microsoft to maintain its monopoly and fend off competitive challenges, and it has been expressly found to be illegal by the Court of Appeals. See, e.g., Microsoft, 253 F.3d at 61 (the restriction in Microsoft's licensing agreements that prevents OEMs from removing or uninstalling IE ''protects Microsoft's monopoly from the competition that middleware might otherwise present. Therefore, we conclude that the license restriction at issue is anticompetitive.'') (emphasis added); see also Mathewson & Winter Report at ¶¶13–33. Put another way, various tying practices were found by the Court of Appeals to illegally reinforce Microsoft's OS monopoly and thus must be banned in order to realize the remedial mandate of the Court of Appeals and the public interest objectives of the Tunney Act.

The anticompetitive nature of tying is apparent on its face: it reduces competition and consumer choice, making it less likely for Windows consumers to acquire and use non-Microsoft middleware products for reasons unrelated to the merits of those products. See Microsoft, 253 F.3d at 60 (upholding District Court's conclusion that contractually restricting OEMs'' ability to remove IE ''prevented many OEMs from distributing browsers other than IE''); see also Mathewson & Winter Report at ¶23. Microsoft only makes Windows available for license to OEMs in a bundle that includes a number of its middleware applications (e.g., Internet Explorer, Windows Media Player, Windows Messenger, MSN). Microsoft also contractually prohibits OEMs from removing its applications from the bundled offering. As explained in the attached economic report from Professors Frank Mathewson and Ralph Winter, such tying is anticompetitive and should fall under the purview of these remedy proceedings for four principal reasons: (1) it reinforces Microsoft's monopoly by increasing the applications barrier to entry against OS competitors; (2) it reinforces Microsoft's monopoly by deterring direct challenges to the OS itself as the platform of choice for software developers; (3) it weakens the greatest current competitor to Windows—prior versions of Windows; and (4) Microsoft's more recent practice of tying the Windows Media Player to the OS creates a new variant of the applications barrier to entry problem for potential OS rivals: a content-encoding barrier to entry. (See Mathewson & Winter Report, passim.)

First, tying anticompetitively strengthens Microsoft's OS monopoly by reinforcing the applications barrier to entry against OS competitors. (Id. at ¶¶14–16.) The dominance of the Windows standard in a wide range of applications, including a few particularly important applications, hampers entry into the operating system market because an entrant has to offer both a new operating system and a full set of applications, or hope that applications will quickly develop once the new operating system becomes available. See Microsoft, 253 F.3d at 55 (applications barrier to entry stems, in part, from the fact that ''most developers prefer to write for operating systems that already have a substantial consumer base''). This is referred to as the applications barrier to entry, and the District Court found that it served to protect Microsoft against an OS challenge from IBM in the 1990s. Id. (upholding District Court's finding that ''IBM's difficulty in attracting a larger number of software developers to write for its platform seriously impeded OS/2's success'').

By engaging in tying to gain dominance in key applications markets, Microsoft can turn the already-daunting applications barrier to entry into a virtually insurmountable shield. As the Court of Appeals explained, ''Microsoft's efforts to gain market share in one market (browsers) served to meet the threat to Microsoft's monopoly in another market (operating systems) by keeping rival browsers from gaining the critical mass of users necessary to attract developer attention away from Windows as the platform for software development.'' Microsoft, 253 F.3d at 60. If Microsoft controls the key applications, it can unilaterally decide not to make those applications available for even the most-promising rival operating systems. Microsoft's tying thus anticompetitively advantages its position in the middleware applications market and sustains its OS monopoly as well. (See Mathewson & Winter Report at ¶66.)

Consider, for example, Microsoft Office. At one point, companies such as Corel and Lotus provided the most popular versions of these applications. At that time, to compete with Microsoft's Windows, rival operating systems needed to persuade Corel and Lotus to port their applications to those rival systems. Now that Microsoft has successfully leveraged Windows to obtain dominance in the Office suite of applications, however, rival OS providers would have to persuade Microsoft to port Office to rival systems.

If Microsoft can gain dominance with key middleware applications such as Office, MSN Messenger, and Windows Media Player, it can ensure that rival operating systems cannot meet customers'' demands for the most popular applications. That is, when Microsoft's browser, Microsoft's media player, and Microsoft's instant messenger are dominant in those applications markets, Microsoft may choose not to write its applications to interoperate with a potential rival OS—making it much more difficult for nascent operating systems to compete with Windows. Thus, Microsoft's tying, over time, takes today's very high ''applications barrier to entry,'' and raises it immeasurably higher. (See Mathewson & Winter Report at ¶66.)

Second, tying reinforces Microsoft's monopoly by deterring direct challenges to the OS itself as the platform of choice for software developers. (Id. at ¶¶17–19.) A clear incentive for Microsoft to tie its Internet Explorer browser with Windows was the threat that Netscape—on its own, or combined with Java software—would eliminate Microsoft's network advantages in the operating system by providing middleware that would offer a competing platform for software developers. As the District Court and Court of Appeals found, Netscape and Java were particular threats to Microsoft's dominance in operating systems because they potentially represented a platform/programming environment in which software applications could be developed without regard to the underlying operating system. See Microsoft, 253 F.3d at 74. With middleware, the success of a new operating system no longer depended on the development of new code by every application developer. (See Mathewson & Winter Report at ¶19.)

If rivals develop valuable, widely distributed middleware, software vendors could very well begin to write most of their applications directly to that middleware, and the applications barrier to entry would disappear. By using anticompetitive tying to dominate each promising field of middleware, Microsoft ensures that software developers face a unified field of proprietary Microsoft OS and middleware interfaces. (Id.) Thus, Microsoft's tying practices serve, in this way too, to reinforce and entrench its illegal OS monopoly.

Third, tying weakens the greatest current competitor to Windows—prior versions of Windows. (Id. at ¶¶27–30.) Existing versions of Windows provide competitive constraints on Microsoft for a simple reason: if new versions of Windows are insufficiently innovative or too expensive, consumers will choose to retain their older versions of the product. Through tying, however, Microsoft weakens this source of competition in two ways. First, new versions of Windows are marketed as much for new applications as for new OS features. Windows XP, for example, is being marketed in part for its inclusion of new applications, such as Windows Media Player 8.0—not just based on innovations and improvements to the OS itself. Second, middleware applications such as Internet Explorer, Windows Media Player (with the attendant Microsoft Digital Rights Management), and MSN allow Microsoft to track consumer usage. Microsoft's binding of these products to Windows thus creates a total product that lends itself to usage and leasing fees. By gradually reducing the price of Windows and increasing the usage fees on its tied applications, Microsoft can shift to a usage or leasing revenue model, rather than a revenue model based on sales. This eliminates the competitive threat from previous versions of Windows (in addition to providing Microsoft with the fruits of its illegal behavior, as discussed in Section III.C, below). (See id. at ¶28.)

One might argue that the durable-goods monopoly problem is eliminated by Microsoft's refusal to allow OEMs to install (without penalty) old versions of Windows. As explained in the attached Mathewson & Winter Report, this is incorrect for two reasons: ''(i) increases in the price of the new version of Windows will reduce overall demand for new PCs, as users invoke the option to keep existing PCs with the old version, and (ii) there is a retail market for new versions of Windows software for installation on existing PCs. Both (i) and (ii) provide channels through which the existing stock of Windows software provides some competition for a new version of Windows (i.e., it increases the elasticity of demand for the new version). If the price of a new version is increased, the demand for the new version is reduced because fewer consumers will purchase new PCs as the price increase for Windows raises the price of the overall package of the PC and the (mandated by Microsoft) new version of Windows, and because some consumers who would have purchased Windows to install on their old PCs will now refuse to do so.'' (See Mathewson & Winter Report at 12 n. 10.)

Fourth, in addition to these three general ways in which Microsoft's contractual tying reinforces the OS monopoly, Microsoft's more recent tying of its media player to the OS creates yet another special and highly significant reinforcement of the Windows monopoly. (See Mathewson & Winter Report at ¶36.) This problem results from the close connection between the media player and Microsoft's proprietary media encoding format, Windows Media Audio (''WMA''). Because Microsoft does not license the WMA format to some rival media players—including, most notably, the only other media player with substantial market presence, Real Player—Microsoft's media player is the only major player that can play content encoded in Microsoft's format. As Microsoft's format becomes more and more widespread—it is currently growing in use at a rate ten times that of its rivals—more and more content will become viewable and playable only via Microsoft's media player, which is only distributed via Microsoft's OS.

In such a market, then, a rival OS would have to overcome not only today's applications barrier to entry to compete with Windows—that is to say, it would have to persuade application writers to write their applications to interoperate with their OS—it would also have to overcome a new, even more daunting ''content encoding barrier to entry''—i.e., it would have to persuade owners of thousands (or perhaps even millions) of pieces of multi-media content to re-encode their content in formats that the media player used by the rival OS could read. (Id. at ¶¶37–38.) This barrier to entry applies not only to rival PC operating systems, but also to evolving operating systems for handheld and mobile communications devices, since consumers will want to access the best streaming content using those devices. Thus, the currently daunting applications barrier to entry is raised many times higher by virtue of the tying of the Windows Media Player (and its related proprietary formats) to the Windows OS.

All four of these anticompetitive effects are mutually reinforcing, because of the network effects operating between the applications sector and the operating system market. (Id. at ¶¶31–33.) Achieving dominance in applications (through tying) strengthens the dominance of the OS, because buyers in the OS market are more assured of available applications. The greater dominance in the OS market in turn feeds back into greater dominance in applications, since the tying strategies take the form of imposing an artificial advantage relative to applications of the dominant OS supplier. The greater Microsoft's share across all middleware applications markets, the greater the applications barrier to entry.

Thus, a remedy that does not forbid Microsoft's anticompetitive tying leaves in place one of Microsoft's most powerful tools to maintain its OS dominance—and as a result, does not ''unfetter'' the market or ''terminate'' the illegal monopoly. For this reason, the PFJ's failure to include a ban on bundling is not in the public interest.

C. By Allowing Microsoft To Continue To Tie Its Middleware Applications To Windows, Microsoft Retains One Of The Most Valuable ''Fruits'' Of Its Illegal Acts.

The Court of Appeals made clear that one necessary element of any remedy in this case was to ''deny to [Microsoft] the fruits of its violation.'' See Microsoft, 253 F.3d at 103 (quoting United Shoe Mach. Corp., 391 U.S. at 250). This is in accord with the prevailing doctrine in this area. See Grinnell Corp., 384 U.S. at 577; 2 P. Areeda & H. Hovenkamp, Antitrust Laws ¶325(c) (2d ed. 2000).

The Court of Appeals found that Microsoft illegally maintained its OS monopoly by engaging in anticompetitive practices. See Microsoft, 253 F.3d at 51, 66. Here, because of the nature of its monopoly, one of the most lucrative fruits of Microsoft's illegal behavior is the ability to bundle its other software products with the OS and reap gains in those markets as well. In this way, the PFJ's failure to ban such tying clearly renders it deficient, because without such a prohibition it will fail to prevent future violations of Section 2, as discussed above—and also fail to prevent Microsoft from reaping the benefits of the OS monopoly that it illegally maintained. Without such a prohibition, Microsoft will be able to continue profiting from its anticompetitive behavior and will have evaded any real punishment for breaking the law.

For these reasons, as with the ban on code commingling discussed above, every other remedial proposal considered in this litigation included a ban on Microsoft's contractual tying via bundling. A formulation of such a ban was found in Judge Jackson's interim conduct remedies, which—in addition to the ban on binding middleware products to the OS—would also have prohibited Microsoft from ''conditioning the granting of a Windows Operating System Product license ... on an OEM or other licensee agreeing to license, promote, or distribute any other Microsoft software product that Microsoft distributes separately from the Windows Operating System Product in the retail channel or through Internet access providers, Internet content providers, ISVs or OEMs.'' United States v. Microsoft, 97 F. Supp. 2d 59, 68 (D.DC 2000).

Judge Posner's proposal would have prohibited tying any middleware product

with the OS unless Microsoft offered a version of the OS without the middleware application, and did so at a reduced price. See Posner Proposal §3(9). The litigating states also have proposed a very similar remedial approach. (See LSRP at 4–6.) Thus, it is only the PFJ, among the various proposals, that has failed to take this essential step to terminate Microsoft's OS monopoly, and deny Microsoft the fruit of its illegal acts. A remedy without such a provision cannot be in the public interest.

IV. THE PROPOSED FINAL JUDGMENT FURTHER FAILS THE PUBLIC INTEREST TEST, BECAUSE IT DOES NOT ACHIEVE EVEN THE LIMITED OBJECTIVES THAT IT HOLDS OUT AS ITS AIMS.

As demonstrated above, the PFJ fails to address Microsoft's anticompetitive tying of middleware applications to the Windows OS, and consequently fails to fulfill the remedial mandate of the Court of Appeals. Yet, even for those anticompetitive acts that the PFJ does attempt to address, it does not provide an adequate remedy for Microsoft's illegal conduct. Indeed, the PFJ is so replete with carefully crafted carve-outs and exceptions that many of its provisions, though well intentioned, are rendered meaningless. The result is that the PFJ will do little, if anything, either to terminate Microsoft's monopoly or constrain its ability to fend off middleware threats in the future. And, as we argue above, the preliminary experience with these provisions—since the onset of their implementation by Microsoft provides little reason to believe that the PFJ will be effective in practice. See Section II, supra.

While any conduct remedy will, of course, have limitations and the potential for evasion, none of the major defects in the PFJ are inherent in the nature of this sort of remedy. The Litigating States'' Remedial Proposal provides a useful contrast on this point. Unlike the PFJ, the LSRP does not leave certain of Microsoft's anticompetitive acts unaddressed or leave Microsoft with the ability to perpetuate its operating system monopoly by illegally eliminating competitive threats from middleware developers. The Litigating States'' Remedial Proposal prevents Microsoft from continuing its anticompetitive practices, is designed to restore the competitive balance in the marketplace, and seeks to ensure that competitive threats may emerge in the future unhindered by Microsoft's anticompetitive conduct. As such, it fully comports with the Court of Appeals'' decision and provides this Court with a clear roadmap of what the public interest requires in this case.

To avoid undue length or repetition, we do not here provide a comprehensive list of all the numerous inconsistencies, loopholes, and shortcomings of the PFJ; we have included, in Attachment B, a more complete listing for the Court's benefit. (See A Detailed Critique of the Proposed Final Judgment in U.S. v. Microsoft, Attachment B.) In this Section, instead, we focus on six critical deficiencies in remedies that (unlike tying) are purportedly addressed in the PFJ: (1) the PFJ's failure to prevent Microsoft's discriminatory licensing practices; (2) its limited and slow-moving API disclosure provisions; (3) its inadequate protections for OEMs from retaliation; (4) its failure to promote distribution of Java; (5) its ''gerrymandered''finition of middleware; and (6) its complete lack of an effective enforcement mechanism. Where helpful, we contrast the relevant provision in the litigating states'' proposal for comparison's sake. By comparing the two proposals on a few central issues, it should be clear why the LSRP, and not the PFJ, addresses Microsoft illegal conduct in manner that both comports with the Court of Appeals'' decision and serves the ''public interest'' under prevailing antitrust law.

A. The PFJ Allows Microsoft To Continue Engaging In Discriminatory. And Restrictive Licensing Agreements To Curtail The Use Of Rival Middleware Products.

One of the ways in which the District Court found, and the Court of Appeals upheld, that Microsoft illegally protects its operating system monopoly from rival middleware is through discriminatory and restrictive licensing provisions. Specifically, the Court of Appeals found that Microsoft uses its licenses not only to reward OEMs that utilize and promote its products (and to discriminate against those OEMs that wish to promote non-Microsoft products), but also to restrict the manner in which OEMs can distribute rivals'' products. See Microsoft, 253 F.3d at 61–67.

Despite these findings, the PFJ permits Microsoft to continue to employ discriminatory and restrictive licensing agreements to curtail the use of its competitors'' products. As currently structured, the PFJ allows Microsoft to continue its use of discriminatory and restrictive licensing provisions to fend off nascent threats from middleware competitors in several ways. First, the PFJ explicitly allows Microsoft to provide market development allowances to favored OEMs; it likewise allows Microsoft to enter into ''joint ventures'' with OEMs, that, in practice, are little more than shells for arrangements by Microsoft to shower financial rewards on OEMs that are willing to refuse to deal with Microsoft's competitors. Given the intense competition and low margins in the OEM industry, these rewards would create a decisive competitive disadvantage for ''disfavored'' OEMs, forcing them to accede to Microsoft's restrictive terms.

The PFJ's mechanisms for enabling these anticompetitive tactics are surprisingly explicit. Under Section III.B.3 of the PFJ, Microsoft is allowed to pay OEMs ''market development allowances'' to promote Windows products. Thus, OEMs that promote Microsoft products apparently can receive de facto cash rebates on their Windows shipments, while OEMs that deal with Microsoft's rivals will pay full list price. This preferential behavior in the browser market was found illegal by both the District Court and the Court of Appeals. See Microsoft, 253 F.3d at 60–61. Microsoft should be allowed to engage in legitimate pricing decisions, but those decisions should be limited to volume-based discounts published in its price lists.

Second, under Section III.G.2 of the PFJ, Microsoft may use ''joint ventures'' to escape any restrictions the proposed settlement would place on its licensing practices. For example, Microsoft may join an OEM in a joint venture for any ''new product, technology or service'' or improvement to any existing ''product, technology or service,'' provided that the OEM contributes significant developer ''or other resources.'' (See PFJ at Section III.G.2.) In such an arrangement, Microsoft can seek, and obtain, a pledge that its partner be ''prohibit[ed] ... from competing with the object of the joint venture . . . for a reasonable period of time.'' (Id. at III.G.) Thus, Microsoft could enter into a ''joint development'' project for the ''new product'' of ''Windows X for Preferred OEM Y.'' The OEM's contribution could be entirely in marketing and distribution. Yet, under the language of the PFJ, it appears that Microsoft would have the ability to contractually prohibit OEMs in such joint ventures from offering products or services that compete with Microsoft. Given Microsoft's history of abusive and coercive behavior toward OEMs, it should not be allowed to enter into joint ventures with OEMs that result in exclusive agreements. Otherwise, in no time at all, Microsoft will use the opportunity to squelch competition.

Third, the PFJ purports to provide OEMs with the freedom and flexibility to configure the computers they sell in a way that does not discriminate against non-Microsoft products. Under Section III.C, the PFJ ostensibly prohibits Microsoft from entering into an agreement that would - among other things—restrict an OEM's ability to remove or install desktop icons, folders and Start menus, and modify the initial boot sequence for non-Microsoft middleware. However, the PFJ contains carve-out provisions that may render these prohibitions effectively meaningless. Under the express terms of Section III.C.1 of the PFJ, Microsoft may retain control of desktop configuration by being able to prohibit OEMs from installing or displaying icons or other shortcuts to a non-Microsoft product or service, if Microsoft does not provide the same product or service. Thus, for example, if Microsoft does not include a media player shortcut inside its ''My Music'' folder, it can forbid an OEM from doing the same. This turns innovation—and the premise that OEMs be permitted to differentiate their products—on its head: under the PFJ, rivals can ''compete'' with Microsoft, but they are never allowed a chance to bring a product to market first, to offer a functionality before Microsoft does, or to benefit from their innovations before Microsoft determines that it is ready to meet (and if history is a guide, extinguish) these competitive challenges.

Additionally, under the PFJ, Microsoft can control the extent to which non-Microsoft middleware is promoted on the desktop by virtue of a limitation that OEMs may promote such software at the conclusion of a boot sequence or an Internet hook-up only if they display no user interface or a user interface that is ''of similar size and shape to the user interface provided by the corresponding Microsoft middleware.'' (See PFJ at III.C.3.) And OEMs are allowed to offer Internet Access Provider (''IAP'') promotions at the end of a boot sequence, but only for their own IAP offerings (whatever that ambiguous

limitation means). (See id. at III.C.5.) Thus, under the PFJ, Microsoft maintains the ability to set the parameters for competition and user interface. In order to promote competition from rival middleware, Microsoft must be prohibited from entering into restrictive and discriminatory contractual agreements with its licensees. Although remedial proposals could have been crafted to address these anticompetitive practices, the PFJ falls short of this mark.

By contrast, the Litigating States'' Remedial Proposal would bring Microsoft's unlawful behavior to an end and thus provide competing middleware the opportunity to receive effective distribution through the important OEM channel. Under the LSRP, Microsoft would be required, at a minimum, to offer uniform and non-discriminatory license terms to OEMs and other third-party licensees. The LSRP would also require Microsoft to permit its licensees to customize Windows to include whatever Microsoft middleware or competing middleware the licensee wishes to sell to consumers. (See LSRP at 7–9.)

In addition, the LSRP specifically prohibits Microsoft from employing market development allowances, including special discounts based on joint development projects. It also gives OEMs and other third-party licensees the flexibility to feature non-Microsoft products in ways that increase the likelihood that consumers will use them, without providing broad exceptions that enable Microsoft to avoid its obligations. Thus, it is the LSRP—and not the PFJ—that meets the Tunney Act's ''public interest'' standard.

B. The PFJ Requires Microsoft To Disclose APIs Only In Certain, Narrow Circumstances.

Another key element of the government's case against Microsoft was the company's withholding of the operating system's API information from rivals, so as to illegally degrade the performance of rival applications. In any market where Microsoft is allowed to withhold APIs, rival software will perform imperfectly in the Windows environment, and Microsoft will illegally gain dominance. Accordingly, in order to promote competition from rival middleware developers, it is essential that Microsoft be required to provide timely access to all technical information required to permit non-Microsoft middleware to achieve interoperability with Microsoft software.

Section III.D of the PFJ imposes an obligation on Microsoft to disclose to Independent Software Vendors (''ISVs''), and others, the APIs that Microsoft middleware uses to interoperate with any Windows OS product. However, the PFJ's requirement for API disclosure is drawn much too narrowly to allow non-Microsoft middleware to compete fairly with Microsoft middleware. Here again, a comparison with the proposal of the litigating states is instructive.

First, the PFJ's disclosure requirement fails to prevent ''future monopolization,'' because it fails to apply to critical technologies that Microsoft is likely to use to maintain the power of its OS monopoly in the future. Because nascent threats to Microsoft's monopoly operating system currently exist beyond the middleware platform resident on the same computer, any effective API disclosure requirement must apply to all technologies that could provide a competitive platform challenge to Windows, including network servers, web servers, and hand-held devices. The PFJ does not; by contrast, the Litigating States'' Remedial Proposal expressly provides that Microsoft must disclose all APIs, technical information, and other communications interfaces so that Microsoft software installed on one computer (including personal computers, servers, handheld computing devices and set-top boxes) can interoperate with Microsoft platform software installed on another computer. (See LSRP at 11.)

Second, the PFJ creates an apparent exception for Microsoft's API disclosure requirement in the emerging areas of identity authentication and digital rights management (''DRM'')—critical applications that are also important to the prospects of Microsoft's ''future monopolization.'' Section III.J. 1 .(a) appears to exempt Microsoft from disclosing any API or interface protocol ''the disclosure of which would compromise the security of ... digital rights management ... or authentication systems, including without limitation, keys, authorization tokens or enforcement criteria.'' This exception is written much more broadly than any of the limits on Microsoft behavior, and could easily be used to protect Microsoft's APIs relating to DRM and identity authentication applications. The implication of this is that any rival DRM or authentication software will not function as well as Microsoft's DRM, Passport, and .Net My Services (formerly known as Hailstorm). Thus, under the PFJ, Microsoft may be able to degrade the performance of any rivals to any of these services.

These markets, however, are just as important to the next stage of the industry's evolution as browsers were to the last stage. DRM solutions, for example, allow content vendors to sell audio and video content over the Internet on a ''pay for play'' basis. Since the most prevalent use of media players in the years ahead will be in playing content that is protected in this fashion, if non-Microsoft media players cannot interoperate with Windows'' DRM solution, those media players will be virtually useless except for ''freeware'' content. Thus, if DRM is exempt from API disclosures under the PFJ, Microsoft can destroy the competitive market for one of the most vital forms of middleware—media players.

The authentication exemption is potentially even more far-reaching. Most experts agree that the future of computing lies with server-based applications that consumers will access from a variety of devices. Indeed, Microsoft's ''.Net'' and ''.Net My Services'' (formerly known as Hailstorm) are evidence that Microsoft certainly holds this belief. These services, when linked with Microsoft's Passport, may allow Microsoft to participate in a substantial share of consumer e-commerce transactions over the Internet, irrespective of which device is used to access the Internet (cell phones, handheld computers, etc.). If Microsoft prevents competition with its Passport standard, it may be able to realize its stated goal of charging a fee for every single e-commerce transaction on the Internet.

Under the guise of security, Microsoft has obtained a loophole in the PFJ that undercuts a critical disclosure requirement. Microsoft's legitimate security concerns which, of course, are shared by all of its major business rivals—do not require this loophole. Section III.J.2 of the PFJ excludes from disclosure rights any company with a history of software counterfeiting or piracy or willful violation of intellectual property rights, or any company that does not demonstrate an authentic and viable business that requires the APIs. This means that Microsoft only has to disclose to bona fide software rivals whose interests in security and stability are as great as Microsoft's. As added protection, Section III.J. 1 .(b) of the PFJ allows Microsoft to refrain from any disclosure simply by persuading an impartial government body, on a case-by-case basis, that a specific disclosure would put system security at risk. Together, these provisions provide Microsoft with all the room it needs to take legitimate security precautions.

Once again, the litigating states'' proposal provides a useful contrast. It contains no disclosure ''carve out'' to exempt DRM and identity-authentication from the general disclosure obligation imposed on Microsoft. (See LSRP at 11.) Instead, it creates a regime of timely, complete, and comprehensive API disclosure that will allow competitors an opportunity to challenge Microsoft's efforts to entrench its OS monopoly in a market where distributed computing is the dominant model—an opportunity that was sadly missed as the browser became critical to Internet-related applications, due to Microsoft's anticompetitive refusals to share technical information. Thus, once again, it is the LSRP, not the PFJ, that would meet the Court of Appeals'' objectives and the public interest standard.

C. The PFJ Does Not Ban Many Forms Of Retaliation By Microsoft Against OEMs.

The District Court found, and the Court of Appeals upheld, that in order to create a competitive market structure in which non-Microsoft middleware products are able to compete effectively with Microsoft products, licensees, such as OEMs, must have the ability to distribute and promote non-Microsoft products without fear of coercion or interference from Microsoft. Recognizing the central role that OEMs play in the distribution and ultimate usage of non-Microsoft middleware products, the PFJ includes an anti-retaliation provision which is intended to protect those entities that support or promote non-Microsoft products. According to the Department of Justice, this anti-retaliation provision ''broadly prohibits any sort of Microsoft retaliation against an OEM based on the OEM's contemplated or actual decision to support non-Microsoft software.'' (See CIS at 25.)

Unfortunately, the PFJ does not provide the broad protection from Microsoft's retaliation that the government claims it does. Indeed, the PFJ's anti-retaliation provision is so narrow that it will do little, if anything, to protect OEMs that wish to distribute or promote non-Microsoft products.

The PFJ's anti-retaliation provision is deficient in numerous respects. First, it

appears to create only a narrow range of procompetitive activities that OEMs can engage in without being subject to Microsoft retaliation. For example, the PFJ prohibits retaliation for OEMs that promote rival middleware, but does not appear to prohibit retaliation against OEMs that promote any other type of rival software (which, under the PFJ's language, probably includes rivals to Passport, MS Money, Windows Movie Maker, and MSN Messenger, just to name a few). Even if this glitch were unintentional, the ambiguity might still be sufficient to allow Microsoft to coerce OEMs into avoiding Microsoft rivals.

Second, even within the scope of protected OEM activities, the PFJ appears to bar only certain types of Microsoft retaliation. The PFJ prohibits Microsoft from withholding ''newly introduced forms of non-monetary Consideration'' from OEMs, but is less clear about whether Microsoft may use already-existing forms of consideration to retaliate against OEMs. (See PFJ at III.A.) More importantly, while the PFJ prohibits Microsoft retaliation via an alteration of commercial agreements, it does not appear to prohibit any other form of Microsoft retaliation (e.g., product disparagement) that Microsoft can imagine.

In addition, under Section III.A of the PFJ, Microsoft may, sua sponte, terminate an OEM's Windows license after sending the OEM two notices stating that it believes the manufacturer is violating its license. There need not be any adjudication or determination by any independent tribunal that Microsoft's claims are correct. All that is required are two notices; after that, Microsoft may terminate an OEM's license. This provision means that the OEMs are, at any time, just two registered letters away from unannounced economic calamity; after all, given Microsoft's monopoly on the operating system, termination of an OEM's Windows license is a death sentence for an OEM's business.

Again, such inadequate safeguards are not inherent in an effective non-retaliation protection. For instance, the Litigating States'' Remedial Proposal prevents Microsoft from taking any action that directly or indirectly adversely affects OEMs or other third-party licensees that in any way develop, distribute, support or promote competing products, thereby providing the type of protection contemplated by the Court of Appeals. (See LSRP at 13–14.) Thus, the Litigating States'' Remedial Proposal clearly prohibits Microsoft retaliation for any procompetitive OEM behavior and prohibits all forms of Microsoft retaliation. Importantly, the LSRP also prohibits Microsoft from retaliating against any individual or entity for participating in any capacity in any phase of this litigation. Again, it is the LSRP that meets the Court of Appeals'' objectives for this case—not the PFJ.

D. The PFJ Does Nothing To Remedy Microsoft's Illegal Camoaion To Eliminate Java.

Yet another aspect of the trial court's decision that was upheld on appeal by the DC Circuit was the District Court's finding that Microsoft's actions in eliminating the threat posed by Sun Microsystems'' Java technology were unlawful under Section 2 of the Sherman Act. See Microsoft, 253 F.3d at 74–75. The PFJ, however, omits any remedy for this core abuse. Thus, unlike either the District Court's remedy or the remedy Judge Posner suggested, the PFJ does not protect those specific products, such as Java, that actually compete with Windows today and offer alternatives to Microsoft's dominance.

The Litigating States'' Remedial Proposal addresses this deficiency by requiring that Microsoft distribute Java with its platform software for a period of ten years. (See LSRP at 17–18.) The LSRP recognizes, as did the District Court and Judge Posner, that in order to ensure that rival products such as Java can compete with Microsoft, they must receive the widespread distribution that they could have obtained absent Microsoft's unlawful behavior.

The requirement that Microsoft distribute Java with its operating system and Internet Explorer browser takes on even greater importance in light of Microsoft's recent behavior. For example, although the Court of Appeals upheld the trial court's finding that Microsoft targeted and destroyed independent threats from the Java programming language, see Microsoft, 253 F.3d at 53–56, 60, Microsoft announced less than a month later that it was dropping any support for Java from Windows XP. As The Wall Street Journal reported at the time, ''This favors Microsoft's new technologies, and will inconvenience consumers.... [I]f you want your Web page accessible to the largest number of people, you may want to drop Java'' and switch to Microsoft's competing set of products, which is under development and is known as .NET.'' Thus, notwithstanding the Court of Appeals'' holding that Microsoft illegally maintained its monopoly by requiring major independent software vendors to promote Microsoft's JVM exclusively (i.e., by requiring developers, as a practical matter, to make Microsoft's JVM the default in the software they developed), Microsoft is again acting illegally to maintain—and further entrench—its operating system monopoly against Java's middleware threat.

To remedy the specific and extensive anticompetitive tactics aimed at Java, as found by the District Court and affirmed by the Court of Appeals, Microsoft should be ordered—as outlined in the Litigating States'' Remedial Proposal—to distribute with its platform software a current version of the Java middleware. This would ensure that Java receives widespread distribution, thus increasing the likelihood that it can serve as a viable competitive platform to Windows. Although rivals such as Java will likely remain small players compared to the dominant Windows OS, their existence on the competitive fringe is critical to provide some competitive discipline to Microsoft on pricing and coercion matters. Moreover, the existence of these rivals creates a base for future developments that might one day provide true alternatives to Windows.

E. The PFJ Includes A ''Gerrymandered'' Definition Of Middleware.

Though not readily apparent, the effectiveness, or lack thereof, of the PFJ's restrictions on Microsoft's behavior heavily depends on the proposed agreement's definition of ''middleware.'' Under the proposed settlement, OEMs are protected from retaliation and can promote competitive alternatives to Microsoft products only in the area of middleware. Thus, if rival software falls outside of the definition of middleware, Microsoft can essentially use its coercive might to prevent that software from being distributed via OEMs. Conversely, if a Microsoft product is not classified as middleware, Microsoft is permitted to use coercion to force its adoption and promotion.

The PFJ adopts a new, and greatly narrowed, definition of middleware, both in terms of ''Microsoft Middleware Products'' and ''non-Microsoft Middleware.'' The result is significant because under the newly created definition, Microsoft may be able to subvert many of the PFJ's restrictions. The Litigating States'' Remedial Proposal defines middleware in a manner consistent with the definition adopted by both the District Court and the Court of Appeals. It thus prevents Microsoft from using a definitional shell game to avoid changing its unlawful behavior.

The District Court and the Court of Appeals adopted the same definition of middleware: software products that expose their own APIs; are written to interoperate with a variety of applications; and are written for Windows as well as multiple operating systems. See Microsoft, 253 F.3d at 53; see also Findings of Fact, 84 F. Supp. 2d at 17–18, ¶¶28–29. Thus, while the DC Circuit discussed browsers and the Java technologies as leading examples of middleware, Microsoft, 253 F.3d at 59–78, it never adopted an exclusive list limited to specific products (as the PFJ does).

Importantly, the Court of Appeals also agreed with the District Court that the appropriate category of ''middleware'' applications that merit protection against Microsoft's anticompetitive conduct includes any application that could operate separately or together with other such applications to create even the ''nascent'' potential for alternative platforms that could compete with Microsoft's OS monopoly. Id. at 52–54, 59–60, 74.

These standard definitions of middleware were also endorsed in the Posner Proposal, which, as noted above, Microsoft was reportedly ready to accept last year. Section 2(3) of the Posner Proposal defined middleware broadly, to include any ''software that operates between two or more types of software ... and could, if ported to multiple operating systems, enable software products written for that middleware to be run on multiple operating systems.'' Moreover, the substantive portion of the Posner Proposal, in Section 3(8)(c), explicitly included not just enumerated products, but also any ''middleware distributed with such operating system installed on one personal computer to interoperate with any of the following software installed on a different personal computer or on a server: (i) Microsoft applications, (ii) Microsoft middleware, or (iii) Microsoft client or server operating systems.''

The PFJ departs significantly from these established definitions of middleware and

instead adopts wholly new definitions for both ''Microsoft Middleware Products,'' and ''non-Microsoft Middleware.'' These definitions include several flaws that Microsoft may be able to use to anticompetitively advantage its applications, continue to profit from the fruits of its illegally maintained monopoly, and evade the practical consequence of the PFJ for many product lines.

To start, the PFJ's definition of ''Microsoft Middleware Products'' appears to limit this category to five specifically-listed existing products and their direct successors. This makes no sense for two reasons. First, why define the most critical term in the proposed settlement narrowly when Microsoft has already demonstrated its skill at evading consent judgments? And second, why does the list include certain Microsoft products, but arguably not their virtually indistinguishable cousins: i.e., Outlook Express, but not Outlook; Windows Messenger, but not MSN Messenger; the Microsoft JVM, but not MSN RunTime; Internet Explorer, but not MSN Explorer. Likewise, Microsoft middleware applications such as the MSN client software and Passport appear to be excluded. The significance of these omissions cannot be overstated. For example, although Microsoft must allow OEMs, under the PFJ, to remove end-user access to Internet Explorer, the decree's language appears to allow Microsoft to ban any effort to replace MSN Explorer with a competitor. This is a step backwards from the status quo.

Additionally, Section III.H.2 of the PFJ explicitly limits OEM flexibility to set non-Microsoft Middleware as a default so that it can be automatically invoked: the PFJ appears to allow OEMs to do so only with competitors of ''Microsoft Middleware Products'' that (1) appear in separate Top-Level Windows, with (2) separate end-user interfaces or trademarks. Thus, Microsoft might be able to avoid the PFJ's provisions simply by embedding Microsoft middleware with other middleware, or not branding it with a trademark. That means Microsoft—not the OEMs, and certainly not the market—would determine the scope of desktop competition and the pace of desktop innovation.

Conversely, the definition of the rivals to Microsoft Middleware Products ''non Microsoft Middleware Product''—is also jury-rigged to advantage Microsoft. Under Section IV.N of the PFJ, protected middleware products are limited to those applications ''of which at least one million copies were distributed in the United States within the previous year.'' Thus, developers have no protection from Microsoft's well-honed predatory tactics until they can obtain substantial distribution. The PFJ's middleware definition also does not explicitly include web-based services, the most important future platform challenge to the Windows monopoly. These web-based services represent an important and growing type of middleware, and the PFJ's failure to explicitly cover them may allow Microsoft to recreate and extend its desktop monopoly to new platforms.

The newly created and narrowly crafted definitions of middleware in the PFJ pave the way for Microsoft to avoid many of the prohibitions on its conduct. The middleware definitions in the LSRP, on the other hand, are consistent with those endorsed by the District Court and Court of Appeals, and ensure that the protections from Microsoft's illegal conduct are extended to Microsoft's competitors in critical middleware markets.

F. The PFJ Lacks A Meaningful Enforcement Mechanism.

For any remedy against Microsoft to be effective, it must include a strong, timely, and meaningful enforcement mechanism. The PFJ creates an extraordinarily weak enforcement authority—one that likely will be overwhelmed and co-opted by Microsoft. More specifically, as currently drafted, there are two principal problems with the PFJ's enforcement mechanism.

First, the proposed decree leaves all enforcement to a single, three-person Technical Committee (''TC''). With no looming antitrust proceedings to put pressure on Microsoft to behave, Microsoft will have every incentive to hinder the efforts of the TC. Moreover, Microsoft will have substantial insights and influence over the TC—Microsoft will appoint at least one member of the TC (the first two members will appoint the third); the TC will be stationed full-time on Microsoft premises; and the TC will rely for many types of enforcement on a compliance officer hired and paid for by Microsoft. In light of all this, it would be easy to imagine a situation where the TC, during the entirety of its existence, never took a single action critical of or hostile to Microsoft, no matter what behaviors Microsoft engaged in.

Second, the enforcement authority has no power other than the authority to investigate. The TC cannot expedite claims, assess fines, or otherwise move quickly to redress Microsoft's illegal behavior. If the TC finds any abuse, its only recourse will be to the courts, through mini-retrials of United States v. Microsoft. Moreover, under Section W.D.4.(d) of the PFJ, the TC is prohibited from using any of its work product, findings, or recommendations in any court proceedings. Thus, even if the TC eventually refers a matter to the courts, the proceedings will have to start from scratch. The history of the 1994 consent decree shows the futility of this type of approach.

By contrast, the Litigating States'' Remedial Proposal recommends the creation of a Special Master who is empowered and equipped to investigate Microsoft's behavior in a manner that is prompt and resolute. The appointment of a Special Master with defined remedial powers is essential if Microsoft's unlawful behavior is to be curbed and competition restored to the marketplace. Thus, the creation of a Special Master provides for a mechanism that is much more effective in ensuring Microsoft's compliance with the settlement decree, and does not suffer from the defects identified above in the PFJ's TC proposal.

First, unlike the TC in the PFJ, a Special Master, as selected by the Court, would be independent. He or she would not be dependent on Microsoft for resources, appointment, or other needs. Second, under the Litigating States'' Remedial Proposal, the Special Master would have the authority to identify, investigate, and quickly resolve enforcement disputes. For example, under the States'' proposal, the Special Master would have the power and authority to take any and all acts necessary to ensure Microsoft's compliance. (See States'' Proposed Text ¶18(b).) The Special Master would have the benefit of both business and technical experts. (See id. ¶18(d).) Upon receipt of a complaint, it would be required to make an initial determination of whether an investigation is required within fourteen days. After notifying Microsoft and the complainant of its decision to investigate, Microsoft would then have fourteen days to respond. After Microsoft's response, the Special Master would be required to schedule a hearing within twenty-one days, and fifteen days after the hearing, would be required to file with the Court its factual findings and a proposed order. (See id.

Unlike the enforcement mechanism in the PFJ, the creation of a Special Master as outlined by the States would prevent disputes over Microsoft's compliance from becoming wars of attrition that would drain the system and guarantee Microsoft victory. The history of this case, and of antitrust regulation in general, suggest the need for an enforcement mechanism that can ensure the timely resolution of any disputes and minimize any demand on judicial resources. The enforcement provisions contained in the Litigating States'' Remedial Proposal accomplish these objectives.

V. THE CIRCUMSTANCES OF THIS CASE STRONGLY MILITATE IN FAVOR OF GATHERING EVIDENCE AND TESTIMONY—EITHER IN A HEARING, OR THROUGH THE USE OF THE RECORD FROM THE REMEDIAL PROCEEDING—TO DETERMINE IF THE PFJ MEETS THE PUBLIC INTEREST TEST.

We believe, for the reasons presented above, that the PFJ fails the Tunney Act's ''public interest'' test and should be rejected. At the very least, however, there is ample basis for the Court to conclude that a rigorous hearing is needed to air the objections to the PFJ and resolve the doubts that the Court hopefully has about the proposed decree. While it need not be a lengthy proceeding, the Court may also want to consider accepting evidence and taking testimony- or alternatively, making use of record evidence it will receive in the upcoming proceeding concerning the LSRP. The question of what can be learned about the PFJ's prospects for effectiveness, since its partial implementation began in July (and, in other respects, December), is especially critical, and would benefit from additional fact-finding by the Court.

A. The Complexity And Significance Of This Case—And The Inadequacy Of The CIS—All Militate In Favor Of A Hearing On The PFJ.

Of all the cases in which courts have reviewed proposed consent decrees to make a public interest determination under the Tunney Act, the case most similar to the present action is American Tel. & Tel. Co., 552 F. Supp. at 131, aff'd sub nom Maryland v. United States, 460 U.S. 1001 (1983), in which Judge Greene subjected the

government's proposed consent decree with AT&T to intense judicial review. In AT&T, the court recognized that the proposed settlement not only would dispose of ''what is the largest and most complex antitrust action brought since the enactment of the Tunney Act, but [] itself raises what may well be an unprecedented number of public interest questions of concern to a very large number of interested persons and organizations.'' American Tel. & Tel. Co., 552 F. Supp. at 145. In light of the size and the complexity of the case, as well as its ''unfortunate history'' and the interests of third parties, the court held an extensive hearing to address key issues raised by the consent decree and the comments of interested parties. Id. at 147, 152. The case for an extensive hearing on the PFJ in this proceeding is overwhelming for similar reasons.

First, this is an extremely complicated case, to say nothing of the profound consequences any settlement will ultimately have on the computer and Internet industries. The economic significance of the computer industry is unquestioned. In such an environment, expert economic analysis is critical to help the Court not only understand the incentives that will drive Microsoft's response to any proposed settlement, but also assess whether the PFJ will succeed in bringing the monopolist's unlawful behavior to an end and promoting competition in a market that has long been restricted. Given the complexity of this case, the Court should not approve the PFJ without an adequate hearing to consider the many—and often technical—objections to it that will doubtlessly be raised in the Tunney Act submissions.

Second, in terms of the impact that any proposed settlement in this case will have on the public, Judge Greene's depiction of the AT&T case is, once again, more than fitting here: ''[t]his is not an ordinary antitrust case.'' Id. at 151. Microsoft is one of our nation's largest corporations. It plays a central role in one of the country's most critical and important industries, and thus in our country's economy. Any settlement that addresses Microsoft's illegal conduct in a manner that is consistent with the Court of Appeals'' decision and prevailing antitrust law will have far-reaching consequences on numerous organizations, both public and private, as well as on Microsoft, its employees, shareholders, competitors, and most importantly, consumers. Thus, a hearing to consider the breadth and depth of these consequences is in order before the PFJ is approved.

Third, a hearing should be held to require the Justice Department to answer the many questions surrounding the PFJ—raised here, and doubtlessly elsewhere—that the Competitive Impact Statement ignores or fails to adequately address. Why was a new, ''gerrymandered'' definition of middleware used in the PFJ—instead of the definition used by both the trial and appellate courts, and in every other remedial proposal? Why was a Java-related remedy omitted, when that was such a key part of the case? Why were only some forms of retaliation, for only some procompetitive acts, prohibited? And most importantly, why does the PFJ not address all of the anticompetitive wrongs that were found at trial, and upheld on appeal—including, most especially, Microsoft's unlawful tying? These questions are not answered by the CIS, as the Tunney Act directs and the public interest demands, and as the Court would surely desire. A full review of these questions, and many others, is needed by the Court before it can approve the PFJ (if it is inclined to approve the PFJ).

Thus, in light of the specific objections from third parties revealing the PFJ's numerous deficiencies—and the oddity of the differing remedial proposals now before the Court—the Court should hear oral argument and, if necessary, take additional testimony. Giving the government an opportunity to explain the omissions in its proposed settlement, and third parties the opportunity to demonstrate the efficacy of the litigating states'' proposal, will afford the Court the necessary basis on which to make its public interest determination in this important and unprecedented case.

B. The Court Should Conduct A Proceeding—Taking Evidence And Hearing Testimony, If Necessary.—To Determine How The PFJ's Provisions Have Functioned Since Some Were Put In Place In 2001.

A second rationale for a hearing is to develop a factual record concerning the point we make in Section II, supra: namely, that the Court can assess the prospects for the likely effectiveness of the PFJ by seeing how those provisions that have been implemented are starting to work—or not-in practice.

Above, we have suggested that the empirical record developed in the PC industry since Microsoft's July 11, 2001 announcement of ''greater OEM flexibility for Windows,'' and since Microsoft began to implement many of the PFJ's remedial provisions on December 16, 2001, should be examined carefully by this Court as it determines whether the PFJ is in the ''public interest.'' We also express the view that these provisions have, in fact, been ineffectual in promoting competition and are showing no signs that they will yield change in the competitive position of non-Microsoft middleware—and as a result, cannot be said to be in the public interest.

At the same time—while we doubt it, seriously—we recognize it is theoretically possible that there may be reasons why these provisions have not yet shown signs of effectiveness, but would be effective over time. At least, that is what Microsoft and the Justice Department are likely to assert. If the Court is inclined to give these assertions any credence, that is all the more reason for the Court to conduct a proceeding—taking evidence and hearing testimony, if necessary—to make a determination on such claims based on empirical evidence, rather than relying upon hypothetical contentions or abstract theories. Such a proceeding is authorized by the Tunney Act, see 15 U.S.C. §16(f), and would be appropriate in this instance.

Evidence and testimony from the OEMs can make clear whether they are taking advantage of the ''new flexibility'' ostensibly being provided under the PFJ—and if not, why not. Given the OEMs'' likely fears of retaliation from testifying in such a proceeding—as reflected by their apparent (and understandable) reluctance to testify in the remedial proceeding—the Court may want to consider appointing a Special Master to take evidence from the OEMs confidentially. Likewise, evidence and testimony from non-Microsoft middleware companies can indicate how the provisions of the PFJ, after they have been in place for several months, are—or are not—enabling them to compete with Microsoft. The same can be said for OS rivals to Microsoft.

The point is that while we firmly believe that the publicly available information and reports all indicate that the PFJ's provisions, as implemented since December 16th (and the browser-related PFJ provisions, as implemented since July 11th), have done little or nothing to promote competition, the Court may wish to base such a conclusion upon a judicially developed record that would allow both proponents and opponents to offer explanations and evidence in support of their views. Such a proceeding could be of a more informal nature, i.e., the Court could solicit comments from the relevant parties and industry experts; or it could be conducted by a Special Master, as we suggest above; or it could be a more formal, trial-type undertaking. All of these approaches are authorized under the Tunney Act, which grants wide discretion to the court to adopt whatever form of proceeding it considers most effective. See 15 U.S.C. §16, passim. But on one point, the Act, or at least its legislative history, is rather firm: ''[T]he court must obtain the necessary information to make [a] determination that the proposed consent decree is in the public interest.'' 1974 U.S.C.C.A.N. 6535, 6538–39 (H.R. Rep. 93–1463, quoting S. Rep. 93–298, at 6–7 (1973)) (emphasis added). Some sort of proceeding to examine these questions is justified in these circumstances, and could be helpful to the Court in its consideration of the practical effects of the PFJ.

C. In Making Its ''Public Interest'' Determination, This Court Should Take Into Account The Evidence That Will Be Adduced In The Upcoming Remedial Proceeding.

Finally, the Court should take advantage of the Tunney Act's broad procedural flexibility to use the record evidence that will be amassed in the upcoming remedial proceeding as it make its ''public interest'' determination in this review. The Court's Tunney Act review of the PFJ in this proceeding can be substantially assisted by the record developed in the forthcoming proceeding on the LSRP. As we have argued, the Court's objectives in both proceedings are the same—namely, to terminate Microsoft's illegal conduct, prevent the recurrence of such conduct, and create a market structure in which competition does not simply exist in theory, but actually yields real alternatives to Microsoft's products. Moreover, the Court's analysis in both proceedings is guided by the same legal principles. See Section I, supra.

Many of the questions the Court must answer in the course of reviewing the PFJ—e.g., What sort of anti-retaliation provisions are needed to empower OEMs and foster real

competition? Must third parties be empowered to promote competition through offering alternatives to the ''Windows bundle'' for a remedy to be effective?—will be addressed, in whole or in part, in the remedial proceeding. To the extent that these questions can only be answered by hearing testimony from some of the same individuals and the same sources in the remedial proceeding, the Court's reliance on that evidence in this proceeding would result in a more comprehensively informed review, streamline the Court's resolution of the issues, and lead to a much more efficient use of judicial resources.

The Tunney Act itself grants the Court wide discretion to undertake any procedures it ''may deem appropriate'' in making its public interest determination. 15 U.S.C. §16(f)(5). This includes using evidence from another proceeding. See American Tel. & Tel. Co., 522 F. Supp. at 136. As the court noted in AT&T, ''[i]n a Tunney Act proceeding the Court is not limited by the rules of evidence but may take into account facts and other considerations from many different sources.'' Id. at 136 n. 7 (emphasis added). In that case, the court relied on a report by the Antitrust Subcommittee of the House Committee on the Judiciary, which had conducted an investigation of the matter, to fill in gaps left in the court record. Id. at 136. If a court can weigh an evidentiary record compiled by the Congress, it surely can weigh an evidentiary record of its own creation in a related proceeding.

The Court is currently overseeing a wide range of discovery, both written and oral, in the remedial proceeding. Testimony will presumably be taken from a host of witnesses that will establish, among other things: how Microsoft deals with OEMs, including how various Microsoft practices limit OEM flexibility in configuring the desktop; how Microsoft has used the commingling of code, and other forms of binding its middleware to the OS, to reinforce the applications barrier to entry; how Microsoft has used discriminatory and anticompetitive licensing agreements to limit the distribution and use of rival products; how Microsoft's illegal conduct has worked to destroy Java; how Microsoft's .Net initiative repeats the illegal monopoly leveraging tactics it successfully used to decimate Netscape; how Microsoft's concealment of APIs degrades the performance of non-Microsoft products and services; and how Microsoft has manipulated industry standards and developed proprietary standards and formats that limit the interoperability of competing products.

This evidence, which will be presented during the Court's remedial hearing later this Spring, will form the basis on which the Court crafts its remedy in the ongoing litigation. It is our view that this evidence will affirmatively demonstrate why the LSRP, and not the PFJ, fulfills the mandate of the Court of Appeals and comports with well settled antitrust law. By the same token, it will also demonstrate why the PFJ fails to redress Microsoft's illegal behavior in a manner consistent with the public interest.

Because many of the questions the Court faces in this proceeding mirror those in the remedial proceeding, the Court should take the record evidence from the remedial proceeding into account in conducting its Tunney Act review of the PFJ. Simply put, by utilizing this evidence, the Court will adduce the information it needs to make its ''public interest'' determination in a manner that encourages greater efficiency and avoids unnecessary delay or duplication.

CONCLUSION

The Court should refuse to find that entry of the PFJ is ''in the public interest.'' The PFJ does not unfetter the market from Microsoft's dominance; it does not terminate the illegal monopoly; it does not deny to Microsoft the fruits of its statutory violations; and it does not end Microsoft's practices that are likely to result in monopolization in the future.

More specifically, the PFJ does not even attempt to address, let alone end, Microsoft's illegal binding and bundling practices that have done so much to fortify its OS monopoly and to harm desktop competition. And its limited provisions are so filled with loopholes and exceptions that they are rendered ineffective.

At the very least, the Court should refuse to approve the PFJ until after it has concluded an extensive review, including an inquiry into whether the PFJ's provisions—as implemented by Microsoft since last year—are showing signs of effectively restoring competition to the marketplace. The Court could conduct an evidentiary hearing, appoint a Special Master, and/or rely upon the record that will be adduced in the trial on the Litigating States'' Remedial Proposal to meet its evidentiary needs.

In the end, it is the proposal of the litigating states—not the PFJ—that meets the public interest standard. The Court should reject the PFJ, and impose a strong, effective and forward-looking remedy that addresses Microsoft's proven anticompetitive conduct in a manner consistent with the mandate of the Court of Appeals and the nation's antitrust laws.

Dated: January 28, 2002

Paul T. Cappuccio
Edward J. Weiss
AOL TIME WARNER, Inc.
75 Rockefeller Plaza
New York, New York 10019
(212) 484–8000
Randall J. Boe
Laura E. Jehl
AOL, Inc.
22000 AOL Way
Dulles, Virginia 20166
(703) 265–1000
Respectfully submitted,
Ronald A. Klain
Benjamin G. Bradshaw
Jessica Davidson Miller
O'MELVENY & MYERS LLP
555 13th Street, NW, Suite 500 West
Washington, DC 20004–1109
(202) 383–5300
ATTORNEYS FOR AOL TIME WARNER, INC.

ATTACHMENT A

Microsoft's Tying Strategies To Maintain Monopoly Power In Its Operating System

(Civil Actions No. 98–1232 and 98–1233 CKK)

Submitted on behalf of AOL Time Warner by

Frank Mathewson and Ralph A. Winter
Charles River Associates Inc.
Suite 1501
80 Bloor Street West
Toronto, Ontario M5S 2V1
Canada

January 28, 2002

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I INTRODUCTION

1. We have been engaged in this case as professional economists to assess the economic incentives and effects of Microsoft's tying practices. Our specific charge is to determine whether Microsoft is tying middleware applications to its operating system (''OS'') in a manner that protects and reinforces its monopoly power in the market for operating systems. Middleware is software that runs on the OS platform, i.e., that calls on the basic operating system through application programming interfaces (''APIs'') of the OS in order to invoke functions of the OS, but which in turn contains its own published APIs that allow higher-level applications to run on the middleware itself. To execute our mandate, we have reviewed the economic incentives at play in this market, conducted interviews with various software developers, and studied the key documents in this case, including the Proposed Final Judgment and the Competitive Impact Statement of the U.S. Department of Justice, the submissions made on behalf of Microsoft, and the Comments Of AOL Time Warner On The Proposed Final Judgment.

2. Based on our analysis, we conclude that Microsoft has tied its middleware applications to its Windows operating system in ways that preserve and reinforce its monopoly power in the market for operating systems on PCs, damaging competition and harming consumers. The anti-competitive use of tying strategies to maintain a monopoly in this manner is, in our understanding, a violation of Section 2 of the Sherman Act. We conclude that market forces alone do not discipline Microsoft to limit the integration of middleware code into its OS or the bundling of middleware products with its OS to efficiency-enhancing levels. Rather, Microsoft has the ability to tie in ways that lack pro-competitive justification, and in any event has incentives to use tying strategies to integrate applications into its OS more aggressively than justified by efficiency.

3. We begin in the next section with a brief description of the tying strategies at Microsoft's disposal. We then demonstrate through economic analysis that Microsoft has substantial incentives to tie its middleware products to its monopoly OS to reinforce and entrench that monopoly. Given these incentives, Microsoft's history, and the evidence in this case, we conclude that Microsoft has engaged, and is engaging, in anti-competitive tying, and is doing so in a way that maintains its OS monopoly, to the detriment of consumers and competition.

II. MICROSOFT HAS MANY TECHNIQUES AT ITS DISPOSAL FOR TYING MIDDLEWARE TO WINDOWS.

4. Microsoft has various means of binding its middleware products to the Windows operating system. Before describing these practices and the ways in which Microsoft uses them to reinforce its OS monopoly, we explain the general concept of middleware and why Microsoft's licensing of middleware with its OS in the Windows package constitutes tying.

5. Middleware is exemplified by products such as Internet browsers, including Microsoft's Internet Explorer (''IE'') and Netscape's Navigator, media players, instant messaging, and middleware applications platforms such as Java. By a strategy of tying middleware to the OS, we mean any constraint that Microsoft's operating system be bought with (or bound to) Microsoft middleware products, or any contractual or financial inducement to this end. Microsoft has argued that various middleware applications, especially IE and Windows Media Player (''WMP''), are essential components of an integrated operating system rather than distinct products, and that tying or bundling these products with the core operating system therefore does not constitute tying. Microsoft's argument is incorrect.

6. Middleware products, such as browsers and media players, are sold in separate markets. Users can obtain Navigator or RealPlayer without purchasing an operating system in the same transaction. Users can also obtain IE or MSN Messenger without obtaining Windows. Until Microsoft bundled WMP into Windows, users could obtain these two products in separate transactions. Moreover, these products are clearly sold by different suppliers. The Court cannot give serious weight to Microsoft's argument that once WMP, for example, is integrated into Windows, the media player ceases to be a separate product: If this argument were accepted, then the mere fact that Microsoft integrates application code into the operating system would itself be a defense for its actions. In other words, tying, as a means of reinforcing a monopoly position, would constitute its own defense. The law, we suggest, cannot intend this.

7. Tying involves contractual arrangements whereby Microsoft puts pressure on original equipment manufacturers (''OEMs'') or end-users to acquire Microsoft applications as a condition of acquiring Windows. It includes requirements that OEMs install Microsoft applications, rather than applications developed by Microsoft's rivals, and prohibitions on removing or uninstalling those applications. It also includes financial inducements to adopt Microsoft applications when Windows is purchased and installed. Each of these requirements is enforced through Microsoft's coercive power to harm non-adhering OEMs.

8. Tying also involves designing the OS so that Microsoft's applications are integrated into the OS code, leaving rival applications unnecessary or even dysfunctional. This type of tying includes: (a) basic integration of code; (b) efforts by Microsoft to hinder disintegration; and (c) efforts to hamper the interoperability of rival applications. Basic integration involves providing, as part of the OS, services previously offered as standalone applications. This could be done in a purely modular fashion without the commingling of application code into the kernel of the operating system. If done in this manner, the products can be easily removed and replaced with competing products in a ''plug and play'' fashion. Technological efforts that hinder disintegration, however, have stronger anti-competitive overtones. These include: commingling code in a manner that hampers, and perhaps even bars, the replacement of the products or default options; designing the OS so that Microsoft's applications are chosen as default applications; making it difficult for OEMs or users to replace the icons or launch sequences; and creating utilities to ''sweep'' the Windows desktop and replace non-Microsoft icons.

9. Note that some of these forms of tying, such as hampering rivals'' performance, entirely lack pro-efficiency rationales, while all of them can be used in inefficient, anticompetitive manners. The remainder of this paper demonstrates that Microsoft has strong incentives to engage in such anti-competitive, inefficient bundling, and that it is doing so in a manner detrimental to competition with the goal of maintaining its extant monopoly in operating systems.

III. ECONOMIC ANALYSIS SHOWS THAT MICROSOFT HAS SUBSTANTIAL INCENTIVES TO USE TYING TO SUSTAIN ITS OPERATING SYSTEM MONOPOLY, HARMING CONSUMERS AND COMPETITION.

10. Microsoft has maintained that its tying is efficient and that it should be allowed to determine the level of integration of applications into its operating system. Microsoft argues that it should be free to tic its products together in any fashion it sees fit, as this type of product integration is efficient and promotes innovation with eventual consumer benefits. These arguments generally claim to defend Microsoft's intellectual property, and are expressed in terms of the general advantages of product integration, rather than defining specific benefits to users from Microsoft's practice of tying particular middleware products, such as IE or WMP, into the Windows package.

11. Microsoft's claim amounts to the belief that market forces alone achieve the optimal degree of product integration and separation without any further regulatory or legal constraints. As a matter of economic theory, this argument fails to take note of Microsoft's position as a dominant producer in a market with substantial barriers to entry. For this general market-forces argument to be valid, Microsoft would need to demonstrate that competitive vigor in the market will discipline Microsoft to engage only in tying that enhances efficiency. But such complete reliance on market forces to achieve efficiency, in turn, requires open entry, while the evidence in this case has shown that there are significant barriers to entry in the OS market. This leaves Microsoft in a position to exploit any strategic and anti-competitive motives to integrate. As a matter of market reality, as we shall explain, the evidence demonstrates that Microsoft has engaged in tying to an excessive degree, with the sole purpose of achieving anti-competitive aims in general and OS monopoly-preserving aims in particular.

12. With respect to the practices of tying middleware, Microsoft's interests are not aligned with those of competition and consumers: Microsoft can benefit without improving its product by using tying strategies to reinforce and strengthen its existing OS dominance.

A. As a general matter, absent legal constraints, Microsoft possesses substantial economic incentives to integrate its products in a manner that reinforces its OS monopoly.

13. Below, we set forth four theories that explain why Microsoft's practice of integrating its applications with the Windows OS helps to maintain its OS monopoly, in a way that is detrimental to consumers and competition. First, tying helps to sustain the applications barrier to entry, and thus serves to enhance Microsoft's OS dominance. Second, tying deters direct challenges to Windows'' position as the dominant platform and thereby maintains or enhances Microsoft's OS dominance. Third, tying involves dynamic leveraging that permits Microsoft to achieve a monopoly in complementary applications as insurance against any possible erosion of the OS monopoly. Put another way, a monopolist, such as Microsoft which produces a pair of perfectly complementary products, aims to protect its full monopoly power by ensuring its future monopoly in at least one of the complementary products. Fourth, tying permits Microsoft to mitigate the competitive constraints on its operating system monopoly provided by previous releases of the OS. These four theories are not mutually exclusive; each of them contributes to a full understanding of Microsoft's anti-competitive conduct. And, to make matters worse, each of these anti-competitive results is mutually reinforcing because of the network effects operating between the applications sector and the operating system market.

(1) Microsoft ties its applications to its operating system as a way of sustaining the applications barrier to entry.

14. Microsoft has a general incentive to engage in anti-competitive tying to protect its dominance in operating systems against the possibility of competitive developments in applications markets. The first means by which it accomplishes this is through enhancing the applications barrier to entry. The dominance of the Windows standard in a wide range of applications, or in a few particularly important applications, makes entry into the operating system market more difficult because an entrant has to offer both a new operating system and a full set of applications, or somehow rely on the chance that applications will quickly develop once the new operating system becomes available. In this way, an entrant faces a ''chicken-and-egg'' problem because of the indirect network effects in the operating system: the entrant could not succeed without a set of applications available to purchasers of its operating system; yet, few software developers would invest in the development of new applications based on an operating system without a large market share. This is referred to as the applications barrier to entry. The dominance of Windows as a standard for applications leads to the applications barrier to entry and growth in the operating system market.

15. Microsoft is able to sustain this barrier by exploiting a collective action problem among buyers. When Microsoft ties by supplying the OS with an application such as IE or WMP, users must incur a series of costs to replace the application. These costs include purchasing or downloading the substitute browser or media player, installing the application, and incurring any uncertainty associated with the possible compromise in the functional integrity of the system. In an application market, buyers would collectively be. better off if each incurred the costs of purchasing from competing suppliers, because doing so would ensure greater competition in the future application market. However, Microsoft's tying practices preclude this result.

16. Buyers'' purchase decisions with respect to either the operating system or applications collectively affect the future market structure because Microsoft will achieve dominance if most buyers choose Microsoft products. Once Microsoft achieves dominance, network externalities sustain this dominance so that the market structure becomes a monopoly as a result of buyers'' previous purchase decisions. The impact of each buyer's purchase decision on the future market structure, however, is negligible. Moreover, buyers do not take into account the impact of their purchase decisions on other buyers. As a result, even a small disadvantage to purchasing a competing product in the operating system or applications markets is enough to make the individual buyer prefer Microsoft's product. The result is that buyers'' decisions make them collectively worse off. The future dominance of Microsoft and the higher prices faced by buyers are a result of their collective decision to purchase Microsoft's applications. Microsoft exploits this collective action problem and pursues dominance in the applications markets through its tying practices.

(2) Microsoft ties applications to its operating system as a way of deterring direct challenges to Windows ''position as the dominant platform for software developers.

17. Microsoft's incentives for anti-competitive tying are particularly strong in the case of applications that might allow for the development of direct substitutes to the monopolized operating system. A clear incentive for Microsoft to tie its IE browser with Windows has been the threat that Netscape, either individually or combined with Java software, could eliminate Microsoft's network advantages in the operating system, by providing middleware (which serves potentially as universal translation support between any application and any operating system) that would provide a competing platform for software developers. This was a particular threat to Microsoft's dominance in operating systems because it potentially represented a platform/programming environment in which software applications could be developed without regard to the underlying operating system. Middleware provides a layer of software between applications and the operating system and can accommodate a new operating system with a change in a single set of code. Without middleware, the success of a new operating system would depend on the development of new code by every application developer. This incentive also explains Microsoft's initiatives to develop a Microsoft version of Java in an attempt to undermine the universal-translator aspect of Java.

18. Some economists have argued that the backwards compatibility of Microsoft's version of Java, i.e., the ability of all general Java applications to run on Microsoft's version, rules out the hypothesis that Microsoft designed its version of Java for the purpose of stifling the potential threat to its dominance in operating systems. This argument is wrong in its static assumption about compatibility. Given the history of the industry, the fact that Microsoft's initial version of Java was universally compatible with Java applications does not lead one to believe that if Microsoft dominated not just browsers but also Java in the future, it would continue to assure both compatibility of applications and free distribution of the pair of middleware products. Were Microsoft to establish dominance in the potential browser-Java bypass of its operating system dominance, why would it allow the bypass to be freely and effectively available? The concerns expressed by Microsoft's executives about the risks of ''commoditization'' of the operating system are well known.

19. Middleware generally has the potential to act to varying degrees as a universal translator between an operating system and specific applications, because (as the name suggests) middleware intermediates between the operating system and applications: it invokes calls through an operating system's APIs and in turn issues its own APIs to applications. To accommodate a new operating system, instead of each application requiring re-coding for compatibility, only the ''bottom half'' of the middleware application must be reprogrammed. If twenty applications run on top of a particular middleware program, for example, compatibility with a new operating system could be achieved by reprogramming the middleware program instead of reprogramming each application. Middleware thus mitigates the indirect network effects of the operating system—and could potentially diminish the dominance of any operating system that these network effects support.

(3) Microsoft has incentives to tie to achieve a monopoly, in complementary applications as insurance against possible future erosion of its OS dominance.

20. A common response to the argument that monopolies can profit through leveraging into a second market is that monopoly profits can be collected only once: a tie into a complementary market with an increase in the price of the tied good by a dollar will reduce the demand price of the first good by a dollar. According to this response, there is no incentive to leverage. In the simplest, static world in which there are no industry dynamics, no uncertainty, and no variation in consumer demand, this ''one-monopoly theory'' is correct. This theory, however, fails when there is uncertainty about the preservation of monopoly. If the initial monopoly is at some risk, then an incentive for leverage arises as insurance against the loss of monopoly profits. In the event that the first monopoly fails and the second succeeds, the monopolist will have preserved a monopoly in at least one of the

markets. Consistent with the common response, having a monopoly in only one of the pair of markets is sufficient to collect the full monopoly profits. If either market's monopoly is uncertain, the monopolist has an incentive to create monopolies in both markets, and thus increase the likelihood of being able to obtain monopoly profits in at least one market.

21. If Microsoft fears for the longevity of its operating system monopoly, or believes that operating systems are in a mature market with limited prospects for growth, it will have strong incentives to make minor sacrifices to Windows functionality in order to obtain dominance in high-growth markets. This is particularly true if the sacrifices (such as damaging relationships with OEMs and consumers by forcing them to accept an inferior browser or media player) have negligible effects on demand for Windows.

22. The greater the threat to its OS dominance in the future, the more incentive Microsoft has to establish a dominant supplier position in an application market, such as the browser or media player market. To take a hypothetical future contingency, if the development of middleware means that the future OS market turns out to be more competitive than the current market, then Microsoft's actions to achieve dominance in the application market will leave it with dominance in one product of a pair of complementary products, rather than dominance in neither. Microsoft's incentive to establish dominance in key applications is thus strengthened by the fact that Microsoft's monopoly in the operating system market is not guaranteed to always be airtight

23. The gains from leveraging are especially strong where network effects are present in applications markets or these markets otherwise promise large potential growth in revenues for any firm that establishes early dominance. Network effects have three implications that make Microsoft's tying practices particularly effective in reinforcing its OS dominance. First, in the early stages of the market's development, purchasers will be on alert for signals of which standard will eventually become dominant, in order to reduce their exposure to later costs of converting to the dominant standard. Tying a new application with the dominant Windows operating system will send strong signals to purchasers that will help to ''tip'' the market toward Microsoft's favored products, particularly given Microsoft's history. Second, a feedback loop will cause both the tying and Microsoft's dominance to steadily accelerate. As Microsoft begins to gain a substantial share in an application market, it will be able to engage in more overt forms of tying, as customers grow to accept even inconvenient results from Microsoft's anticompetitive behaviors (such as poor interoperability with rivals) because of the reinforcing network effects.

This, in turn, will accelerate the tipping toward Microsoft dominance. Third, once Microsoft's dominance is established, proprietary standards and continued tying will lock in this dominance, not just on current production but on future applications in the same functional space. While all of these effects promote Microsoft's dominance in applications, it is the feedback effect of this control over applications to reinforce the OS dominance that is relevant for the matter at hand.

24. It may appear that any preservation-of-monopoly theory must be applied narrowly to Microsoft's monopoly power in operating systems. If this were the case, then the insurance theory of tying just described would not apply, since this theory explains why tying to establish dominance in a new market can be profitable because of the profits that can be captured in that new market, instead of why it is profitable to protect the monopoly in the operating systems market.

25. The standard ''one-monopoly'' theory, however, tells us that when there are two perfectly complementary products A and B, a monopoly over either, or a monopoly on both, allows the identical profits and results in the identical effects. (This theory holds in a static framework that sets aside the other three theories that we discuss.) With respect to an OS with a set of applications that are virtually universally adopted by all PC users, a monopoly over the OS alone is identical in its effect and in its incentives to a monopoly over the set of applications alone or a monopoly over both the OS and the set of applications. That is, there is only one monopoly: the economic role of tying under the monopoly-insurance theory is not creating a new monopoly, but rather preserving the monopoly (the monopoly being at least one monopoly position in the OS-applications pair). The monopoly-insurance theory thus explains the anti-competitive use of tying to preserve a monopoly in violation of Section 2 of the Sherman Act.

26. The monopoly-insurance theory of tying has the effect of reinforcing Microsoft's monopoly position even if the preservation-of-monopoly requirement of Section 2 of the Sherman Act is construed narrowly to apply only to Microsoft's existing monopoly on operating systems for PCs.

The reason (discussed below) is that all of Microsoft's incentives for tying applications to Windows are mutually reinforcing. Even if Microsoft's incentive for tying were primarily to insure a monopoly in the event that the Windows OS monopoly failed in the future (the insurance theory), one effect of the tying is to reduce the chance that the Windows OS monopoly actually does fail, because of the strengthening of the applications barrier to entry. The impact is preservation, though imperfect, of Microsoft's monopoly in the operating system market.

(4) Microsoft's operating system also has durable-goods qualities that create further anti-competitive incentives for tying.

27. Part of Microsoft's argument that it should be free to ''innovate'' rests on the notion that an important source of ''competition'' in selling new versions of Windows is the existing stock of old versions of Windows. While it is true that the durable-goods aspect of the OS market (i.e., the ability of consumers to retain their existing versions of the OS instead of buying a new version) disciplines Microsoft, it only does so in the sense that Microsoft earns fewer profits than it would in a hypothetical world in which it were to lease its OS. The claim that the OS market is, in fact, more competitive than this hypothetical market does not weaken the claim that Microsoft's position in the OS market is dominant and that its activities are illegal.

28. Moreover, this ''durable good monopolist'' feature of the market contains an incentive for Microsoft to engage in illegal bundling. The strategy of leasing as a means of escaping the durable monopolist's dilemma is well established and has been thoroughly analyzed by economists. Rather than selling the product into the market in each period, if the monopolist seller of a durable good can lease the product on a period-by-period basis, it can retain complete control over the supply of the good into the market in each period. This allows the monopolist to set monopoly prices in each period instead of being constrained by the consumers'' option to continue using the already-purchased stock (or version) of the product. The monopolist who leases for a period can lease both previous and current production together to achieve monopoly profits; doing so eliminates the competitive discipline that would otherwise occur as past sales re-enter current and future markets. If Microsoft could move to a business plan of leasing rather than selling software, it would completely eliminate competition from old versions of the software: as Microsoft leases new versions of software, it could retire leases on old versions.

This would serve to protect the monopoly power that Microsoft enjoys from its OS. Tying can allow Microsoft to implement this leasing strategy so as to avoid the durable good discipline. Specifically, tying the use of the OS to some complementary transaction that can be leased, or priced on a per-use basis—rather than sold—provides Microsoft with the opportunity to collect a revenue stream that is immune to the competitive discipline imposed by previous versions of the OS.

29. The escape from the durable monopolist's dilemma via leasing thus creates another incentive for tying. Tying allows Microsoft to move closer to the leasing outcome by facilitating the collection of transaction fees based on current usage. The set of middleware products that potentially puts Microsoft in the position of collecting a fee on Internet transactions serves this role. These products are IE, WMP, Microsoft's Digital Rights Management (''DRM'') software, as well as the .Net My Services initiative. The Digital Rights Management software, with WMP, will initially support a market for music and video products. The combination of these middleware applications, enabling the Microsoft e-commerce network, will then support the transition to Internet sales transactions of a broad variety of products. As Microsoft begins to shift its revenue structure from Windows sales to Internet transaction fees, it will seek to control the key Internet access choke points such as browsers, media players, and digital rights management. Tying facilitates this control. Moreover, Microsoft can directly charge usage fees for its media player software that it cannot

charge for the OS. While the durable-goods monopoly theory of Microsoft's tying incentives can be seen most directly as a theory of the incentive to dominate applications that facilitate a leasing business plan, one important impact of dominating these applications is to preserve Microsoft's dominance in the market for operating systems. The impact, in other words, is a preservation of Microsoft's OS monopoly.

30. As an empirical matter, versions of Windows are converging in their substitutability. This convergence of versions strengthens the durable-good monopolist incentive to tie in two ways. First, it increases Microsoft's incentive to escape the durable-good monopolist discipline on prices, since the easier it is to substitute the current version of Windows with existing versions, the stronger this discipline is. Second, there are, in principle, two ways of leasing to escape the durable-good monopoly discipline. Microsoft could rent the OS or tie it to an application and collect the corresponding stream of revenues each time the application is used. The converging substitutability of Windows'' versions renders the former more difficult, increasing the incentive to escape the durable-good discipline by tying applications. Thus, the increasing substitutability among sequential versions of Windows, even if later versions are superior, reinforces Microsoft's incentives to extend its monopoly to dimensions, such as Internet sales, in which it can charge a vig or rent the application.

(5) Microsoft's anti-competitive tying incentives are mutually reinforcing and are manifest in strategies that lack any competitive justification.

31. The incentives for anti-competitive tying that we discuss are mutually reinforcing because of the network effects operating between the applications sector and the operating system market. Achieving dominance in applications (through tying) strengthens the dominance of the OS, because buyers in the OS market are more assured of available applications; the greater dominance in the OS market in turn feeds back into greater dominance in applications, since the tying strategies take the form of imposing an artificial advantage relative to applications of the dominant OS supplier. The greater Microsoft's share across all applications markets, the greater the applications barrier to entry. Greater shares in applications markets create a feedback effect of even greater dominance in the OS market. The source of this feedback effect is an ''indirect network effect'': the greater the penetration of any operating system, the more applications will be written to it, and consequently, the more valuable the operating system will be to any user. Since the OS monopoly is not perfect, Microsoft will therefore take advantage of anti-competitive opportunities to generally strengthen the applications barrier to entry. As a general principle, therefore, any extension of Microsoft's monopoly to a set of important applications reinforces its monopoly in operating systems.

32. Microsoft has a clear incentive to engage in tying in the form of hampering rival applications and coding its own applications to be defaults to the detriment of consumer choice. This type of tying has a negligible negative effect on the demand for Windows, and by tipping high-growth markets, could provide Microsoft with long-term profits.

33. Given that the Windows source code is both complex and proprietary, Microsoft can engage in this type of tying surreptitiously. For example, Microsoft can alter the algorithms that set ''favorites'' in folders and task bars so that Microsoft-preferred applications and web sites are used more frequently. In addition, Microsoft can cause subtle performance problems for rival applications in Windows environments. This type of tying, however, is consistent only with anti-competitive behavior-no efficiency benefits result from harming rivals or setting Microsoft options as defaults.

B. Microsoft's anti-competitive incentives are particularly powerful in the markets for browsers and streaming media, as well as the adjacent markets for content-encoding, digital rights management, e-commerce, and convergence.

34. In markets with network effects and perceived similarity in product functions, directional changes in market shares can ''tip'' the market toward a dominant outcome because consumer expectations as to which format will dominate are self-realizing. In other words, the expectation on the part of consumers that a particular format will dominate leads each consumer to choose that format because of the rational concern that other formats will not be supported—accelerating the dominance and confirming the expectations of consumers. Consider the browser and the media player as examples.

35. In the browser market, Microsoft has achieved the dominance that it sought, and its monopoly power in the OS continues. These are related: browser dominance reinforces OS monopoly power. The connection is that browser dominance increases the applications barrier to entry and simultaneously removes the direct middleware threat posed by Netscape.

Both of these effects in turn serve to increase the demand for the Windows OS through network effects as buyers anticipate continued dominance of Microsoft formats in both the operating system and applications markets; the two effects thus reinforce the dominance of Windows OS.

36. Now that Microsoft has effectively achieved dominance in browsers, and through this reinforced its dominance in operating systems, the stage is set for applying the same tactics to markets for other applications. The media player market represents an important current market in which Microsoft's anti-competitive strategies are at play. In the media player market, Microsoft's first incentive for tying is to protect its dominance in the market for operating systems by deterring the development of new middleware platforms. Streaming media players will be essential for Internet browsing in the future because of their ability to enhance Internet content rendering under bandwidth constraints. If Microsoft achieves dominance in the media player market (and as noted above, the ''tipping point'' argument suggests that a trend to dominance can quickly translate into a highly dominant market share), any entrant into the operating system market would also have to provide a media player compatible with the WMP format.

37. For this reason, the applications barrier to entry incentive is especially powerful for streaming media players. Rival operating systems will be unable to provide a functional (i.e., Windows Media Audio-compatible) media player since the Windows Media Audio format is proprietary and Microsoft refuses to universally license it. Because compatibility with streaming media is vital to future operating systems, Microsoft's dominance over operating systems will be ensured. The observation that Microsoft licenses the software for playing downloaded media, but not the software for streaming media, suggests that Microsoft is strategically aware of the profit-enhancing power of retaining exclusive property rights on media streaming software.

38. To elaborate: with respect to other applications, an entrant into the OS market could—at least in theory—provide an OS plus a set of applications. However, even this potential entry strategy is not available in the case of the media player application, because the use of a media player by a user depends not just on products that could be provided by the new entrant, but on the proprietary formats chosen by Internet sites using media player software. In this sense, the provider selection of Microsoft's proprietary format creates a content-encoding barrier to entry for streaming media players. Again, this reinforces Microsoft's monopoly power over the OS market.

39. An additional anti-competitive incentive for dominating an application market is to secure a monopoly position in at least one product in the application/OS pair in order to achieve monopoly profits even in the event that the OS dominance is not sustained. This is discussed above in Section III.A.3. The possibility that the OS dominance is not sustained means that the joint monopolist could not necessarily collect the maximum profits through the OS price alone.

Dominance of the application market would secure, or at least increase the likelihood of, monopoly profits.

40. This incentive is particularly relevant to streaming media markets. For example, the OS dominance could be at risk as consumers move to handheld devices for computing and accessing the Internet that do not require Windows OS. Presumably, however, these customers will still wish to play music and see videos on such devices. To the extent that WMP and its accompanying format achieve dominance for streaming media, Microsoft will maintain monopoly power in the pair of products consisting of the OS plus the media player. (Recall that the essential measure of monopoly in the markets for a pair of complementary products is dominance in at least one of the products.) Thus, streaming media players and formats hold the potential for Microsoft to maintain its original monopoly.

41. Additionally, significant gain accrues to Microsoft if its DRM technology dominates the related market for audio and video files.

Using encryption technology, DRM technology permits only users with licenses to play the packaged file. The license has a key to unlock the encryption.

Should a user without a license attempt to play the file, the application initializes with an application that permits the user to acquire the license. Applications with DRM technology and Windows Media Device Manager enable the use of WMP on devices other than conventional desktop computers. Since market participants will tend to limit their investments to the likely dominant standard, Microsoft can easily become the sole provider of DRM solutions. Moreover, this will be a critical market for Microsoft, since users will require licenses for downloading, and content providers require certificates for encryption. The alternatives of mutual interoperability or even open standards are equally plausible conceptually, but not in Microsoft's interests.

Microsoft thus has incentives to use tying to ensure that its DRM solution remains proprietary and becomes dominant. Microsoft can ensure this outcome by making its media player format the format of choice for both users and content providers, and tying WMP to Windows ensures this choice. Once again, this creates a content-encoding barrier to entry that permits Microsoft to maintain its monopoly power in the pair: OS plus WMP as an application.

42. Because of the durable-goods nature of Microsoft's OS monopoly, as described in Section III.A.4 above, Microsoft has additional incentives to tie streaming media technologies to the OS. Indeed, the greatest value for locking in the dominant streaming media and DRM formats may be the vig that Microsoft hopes to collect from Internet transactions.

43. Dominating the media player format so as to collect a vig on transactions would position Microsoft to collect transactions revenue that may well exceed revenues available from Windows software licenses alone—even if Microsoft's dominance of the OS market is secure. As we discussed in Section III.A.4, monopolists of durable goods recognize that past sales constitute future competition (here, older versions of Windows compete with current and future versions of Windows). The monopolists face a competitive constraint against increasing prices even in the absence of any significant rivals. Such monopolies naturally seek ways to circumvent the constraint. In the case of Windows, the constraint is potentially circumvented by the collection of the vig on transactions.

44. What is the link between dominance in operating systems, streaming media, digital rights management, e-commerce, and convergence? Microsoft will attempt to use its dominance in any of these markets to increase the use of Microsoft-favored products in all of these markets. In contrast to the potential situation where different players are strong in each market, Microsoft will leverage its dominance in any market to strengthen its position in all of them. Microsoft's incentive to do this lies in the many revenue streams that it currently forgoes. For example, Microsoft does not currently charge web sites for the use of Windows media formats. If Microsoft establishes dominance in the media player market, as it translates to dominance in e-commerce hosting, Microsoft will no longer have any constraint on fully exploiting this revenue stream. Once again, this links back to the original dominance in Microsoft's OS. All of these applications are mutually reinforcing and serve to preserve the monopoly power that accrues from packaging Microsoft's OS with complementary applications.

C. The theorized benefits of product integration that may exist in some cases do not apply to the markets at issue in this case.

45. As a theoretical matter, of course, in many transactions, purchasers would prefer to buy bundles of products and services. Purchasers of glass prefer to have borates included, drivers prefer to have steering wheels with their cars, and purchasers of shoes typically prefer to have laces included. The relevant question here is whether computer applications are similar to those examples—i.e., whether browsers and other middleware such as streaming media players are ''mere inputs'' into the overall ''Windows experience.''

(1) The economics of software markets cast doubt on Microsoft's efficiency arguments for integration of its own browser and media player with the OS.

46. As discussed above, many forms of tying have no efficiency justification. Contractual provisions limiting the acceptance of rival technologies, or efforts to redesign code to harm rivals'' performance, create economic loss. As further discussed above, Microsoft has these forms of tying at its disposal, incentives to use them, and a historical record of using them.

47. Microsoft's claims regarding the efficiencies of its contractual tying- i.e., that it reduces consumer time costs and confusion to have a set of default options provided with a personal computer ''out of the box''—confuse the benefit to consumers of having a browser and its media player bundled along with the OS, with the benefit of having Microsoft's choice of applications bundled with the OS. The efficiencies that come with providing an integrated package of an OS and various applications are not specific to Microsoft's applications. In a market where OEMs were free to offer whichever packages of software consumers desired (e.g., Microsoft Windows with RealPlayer and IE, or Microsoft Windows with WMP and Netscape), the market would provide those varieties of packages preferred by consumers. The market would respond fully to the efficiencies associated with the purchase of a full package of hardware, OS, and software applications, and in addition, the market would be free to offer the variety that consumers demanded.

48. Our analysis supports the hypothesis that Microsoft's tying of IE and WMP and its efforts to gain DRM dominance are not driven by efficiency concerns. Although selection of some defaults is necessary on each PC, there appear to be no engineering efficiencies to the integration of the choice of default into the OS. To the contrary, choice and market competition (and consequently, efficiency) suffer when knowledgeable OEMs (who act as informed agents of consumers) face artificial barriers to playing that role, such as when Microsoft commingles code or makes Microsoft applications difficult to permanently remove as default settings. By designing system software to hamper the installation or operation of rival software suppliers, Microsoft reinforces the applications barrier to entry; the impact is a strategic reduction in competition and a reinforcement of Microsoft's OS monopoly.

49. Additionally, the usual arguments made to justify integration in other markets are largely inapplicable to software application markets. It is often argued that integration occurs (i) to reduce transaction, distribution or production costs, or (ii) to increase the value of the final product.

50. The argument that transaction and assembly costs justify integration does not apply to major software applications. For example, consumers want to purchase some integrated packages of complementary products such as functioning automobiles because separate purchases of steering wheels, engines, dashboards, seats, etc. would impose enormous transaction and assembly costs.

By contrast, software markets allow assembly at low cost even without integration, provided that monopolists are legally prohibited from impairing interoperability. With OEMs acting as purchasing and assembly agents for end-users, it is no more efficient for Microsoft to create OS-and-application bundles than for multiple OEMs (or third-parties who can then license such bundles to OEMs) to create those OS-and-application bundles desired by end-users.

51. Forced integration of particular software brands does not increase value. Instead, it causes an efficiency cost to the extent that end-users value the product variety entailed in the variety of inputs. The value of variety is lost with integration. Steering wheels in cars are typically undifferentiated commodities that comprise a trivial portion of the value of the final product.

Thus, even though a consumer could replace the steering wheel with limited effort, there is little reason to do so because a different steering wheel is unlikely to improve the performance of the overall product. By contrast, technological development in software applications markets means that different applications can differ substantially in what they deliver to consumers. Loss of product variety as a result of integration can be costly.

(2) Contrary to Microsoft's claims, issues of pricing and innovation provide further evidence that Microsoft's tying harms the marketplace and consumers.

52. Microsoft has argued that the extension of monopoly power across a set of complementary products may produce consumer benefits if the monopolist charges lower prices than would be charged if independent monopolists were to separately produce two or more complementary products. In the latter case, each independent monopolist would raise prices higher than the level that would maximize the combined profits of all the monopolists. Thus,

according to this theory, consumers benefit from Microsoft's monopoly leveraging through lower prices.

53. This theory imagines a static world in which innovation and entry are non-existent, and firms simply set prices to maximize profits, given unchanging demand and unchanging technology. The practical implications of the theory for the real world of rapidly changing technology and potential dynamic competition (as opposed to monopoly positions that are airtight) are minimal.

In an economic theory that incorporates industry dynamics, strategies taken by a dominant firm to eliminate a firm in a complementary market remove a potential rival or entrant in the primary market. In the reality of software markets, this anti-competitive effect clearly overwhelms any theoretical, static price effect: innovation and dynamic competition thus are, and should be, the focus of the Microsoft case. The driver of consumer benefit in these markets is innovation: over the past ten years, while prices of applications have fluctuated only moderately, the performance of applications has grown dramatically. New applications, such as browsers and media players, have become important sources of consumer benefit, while improvements in existing applications such as financial software have yielded strong consumer benefits. In any analysis on the impact of tying, the most important question is the impact on innovation, not price. Tying harms innovation by preserving Microsoft's monopoly position, protecting it against dynamic competition to the detriment of consumers.

54. Microsoft argues that a single monopolist over two products has greater incentives to innovate than two separate monopolists. If two complementary products are monopolized separately, the argument goes, each monopolist ignores the positive benefits that accrue to the other firm from an increase in its own pace of innovation. In the matter at hand, this theoretical efficiency would argue that if Microsoft had a monopoly in operating systems, while Novell had a monopoly in browsers, Novell would not innovate as much as possible because it would not take into consideration the positive effects of browser innovation on operating system demand.

This reasoning also suggests that innovation in the industry would be enhanced if Microsoft's OS dominance were to be extended further into still more applications markets. The key point missed in this theory is that any extension of Microsoft's OS monopoly power would dampen innovation into substitutes for Microsoft's OS. Enhancing the applications barriers only reduces the incentive for any firm to engage in OS or applications innovation. If an application could be open to competition—i.e., if it could be characterized by some rivalry or competition, as an alternative to Microsoft's integration—then unrestrained competition would strengthen rather than weaken innovation. While Microsoft's dominance in the browser market today may be a fait accompli, untying the OS and media player will lead to such greater competition in media player innovation.

55. Significantly for this case, untying would also increase competition in the operating system market. As discussed earlier in Section III.A, tying protects Microsoft's operating system dominance by maintaining the applications barrier to entry and weakening or deterring direct platform challenges. If there are separate monopolists in adjacent markets, each will have the incentive to enter or sponsor entry into the other's market, leading to competitive pressure in both markets.

A. Microsoft's options, incentives, and history, create a strong presumption that Microsoft's Wing harms OS competition and consumers.

56. The District Court's Findings of Fact confirm that it is Microsoft's ''corporate practice to pressure other firms to halt software development that either shows the potential to weaken Microsoft's applications barrier to entry or competes directly with Microsoft's most cherished software products.'' As a historical matter, Microsoft has clearly engaged in anti-competitive, inefficient tying with other applications. For example, Microsoft has forbidden OEMs from changing system defaults so as to make non-Microsoft products the ''default application'' in ''out of the box'' packages. While Microsoft allows the ''installation icons'' of competing applications to be installed on desktops ''out of the box,'' installation icons disappear if they are not invoked. In an even more subtle form of contractual tying, Microsoft requires applications that run with Windows to obtain a certification from Microsoft. This permits Microsoft to monitor and perhaps discipline its applications rivals. While some of these practices differ in form from strict tying (a certification requirement for software is not the same as a contractual requirement that OEMs use Microsoft products), the effect is similar in that Microsoft is signaling to all other market participants that applications may only run with Windows by Microsoft's permission.

57. Microsoft's profit incentives dictate that Microsoft would tie its products together much more aggressively than efficiency alone would suggest. With regard to the question of the nature of competition in the media player market, one of the current objects of Microsoft's tying, and, in particular its tying of WMP, is clear: as the District Court determined, the ''multimedia stream [represents] strategic grounds that Microsoft [needs] to capture.'' That—and not efficiency—is the driving force behind Microsoft's conduct.

B. The evidence indicates that Microsoft is anti-competitively Wing the browser and the media player with its operating system.

58. In the absence of tying, Microsoft would provide an operating system and applications such as the browser and media player that were developed and offered in a modular, plug-replaceable fashion. The applications codes for the browser and the media player would not be commingled with the OS code, but would instead communicate with the OS through a set of well defined APIs. Publishing the APIs and interface protocols in this non-tying world would enhance the value of Microsoft's operating system by encouraging competition in the innovation of the complementary good—the browser and the media player. Greater competition and functional value in the market for a complementary good always benefit a firm by increasing the demand for its product. In the absence of anti-competitive incentives to reinforce barriers to entry, this strategy would maximize the profits that Microsoft obtains from its operating system. The fact that Microsoft does not engage in such a business strategy demonstrates, in the absence of evidence that tying is efficient, that Microsoft is motivated by anti-competitive incentives.

59. Microsoft openly engages in contractual tying and basic technological integration. By developing and marketing Windows XP as an integrated package of operating system and popular applications, Microsoft directly ignored the findings of fact and law by U.S. courts.Microsoft's history makes it likely that Microsoft is also engaging in various forms of OEM coercion to raise rivals''distribution costs and encourage the distribution of its own middleware products. Consistent with our analysis, this tying generally serves the purpose of Microsoft profitability and reinforcement of its OS dominance, rather than consumer benefit. Microsoft directly engages in anti-competitive tying when it prevents OEMs and end-users from removing or uninstalling IE and WMP. Microsoft does this through code commingling between the media player and the operating system that renders substitution for WMP difficult, or even impossible.

60. Another example of anti-competitive tying is that Microsoft renders its own DRM technology software non-interoperable with other media players because of DRM's interaction with Window XP's own ''secure audio path'' software. While this is not tying in the sense of designing the operating system to be incompatible with rival applications, it does involve designing an application—DRM—that limits the compatibility of rival applications in a closely related market, the market for media players.

61. More generally, Microsoft anti-competitively undermines the functionality and utility of rival streaming media players and formats. For example, Microsoft denies a license for playing files streamed in Windows content encoding formats to its principal competitor, RealNetworks, thereby reducing the utility to consumers of RealNetworks'' products. Microsoft also disadvantages rival content-encoding formats by designing WMP to record only in Windows media formats. These actions have, in the past, served to reduce consumers'' perceptions of rivals'' performance—for example by deliberately making consumers'' use of Netscape ''a jolting experience'' or damaging MP3 quality and functionality.

62. In general, OEMs perform a screening function, as agents of consumers, by ensuring that the software products provided out of the box are compatible with each other and with the operating system. Consumers are aware that OEMs perform this function. Consumers are also aware that OEMs'' reputations are based partly on packaging

high-quality software products, so that OEMs have the incentive to choose the best software products for the price. Consumers are in general not aware of the contractual restrictions imposed in various contractual arrangements that might explain the choice of media player, including, for example, any threat not to license the Windows OS to the OEM unless all Windows applications are included as defaults. Nor are consumers aware of any financial incentives offered to OEMs by Microsoft to include only Microsoft applications as default options. Contractual tying alone will thus cause consumers to infer, for reasons unrelated to merit, that Microsoft's applications are the optimal products for them.

63. As suggested above, the interaction of all these effects, combined with rational expectations, can easily lead to the rapid foreclosure of competition. The force of self-realizing expectations is especially strong when one firm or one format is a natural focal point for consumer expectations. In markets where any number of formats could be sustained as dominant because of self-realizing expectations (economists term this ''the multiplicity of rational expectations equilibria''), a focal point property of any one equilibrium can be important in predicting which equilibrium will be sustained. There could hardly be a stronger focal point than the Microsoft/Windows format for predicting the likely dominant (and perhaps sole) format. The history of the PC software industry is one of the dominance of Microsoft standards. The prediction that the Microsoft standard will predominate in the media player market is natural, perhaps inescapable, for a consumer—uninformed about the media player market specifically—debating about which format to adopt. While it is arguable that strong network effects might yield dominance by a single firm in a good or service and its complements, it is uncertain whether a monopoly outcome is inevitable absent tying. In this context, tying assures OS dominance and is therefore anti-competitive.

64. Thus, Microsoft's coercion of OEMs to select WMP for the ''out-of-the-box'' experience, and to obscure the differences in capabilities between WMP and rival products, could weaken consumer awareness of the various functionalities available in the open market. This would increase expectations of a single dominant format, which in turn would accelerate that dominance. The dominance in the media player market, to emphasize the applications-OS interaction once more, reinforces Microsoft's dominance in operating systems.

V. CONCLUSION

65. We show in this report that Microsoft has substantial incentives to engage in anticompetitive tying of its middleware products with Windows. It has incentives to use contractual inducements to OEMs to bundle Windows with its own middleware instead of rival products; commingle applications code into the kernel of the operating system; and hamper the interoperability of rival applications. We also show that Microsoft's tying—in all of its forms—reinforces Microsoft's monopoly in operating systems.

66. Microsoft's incentives to anti-competitively bundle fall into four mutually reinforcing categories. First, by tying its middleware applications to the Windows operating system, Microsoft can strengthen the applications barrier to entry against its OS competitors. This reinforces Microsoft's OS monopoly. In order for entrants in the operating system market to succeed, they must have a wide variety of applications available for consumers to purchase. But software developers will invest in the creation of new applications only for operating systems that have widespread distribution. If Microsoft attains dominance with both the operating system and key middleware applications, it can ensure that its OS rivals will be unable to meet consumer demands for the most popular applications. With a dominant position in applications markets, Microsoft may choose not to write those applications to interoperate with rival operating systems, thus enhancing the already significant applications barrier to entry.

67. Second, tying reinforces Microsoft's OS monopoly by deterring direct challenges to the OS position as the platform of choice for software developers. Since programmers can write calls to middleware products, Microsoft's dominance in these products reduces the possibility that a universal translator (middleware) between operating systems and applications would threaten the Windows monopoly. Just as with the browser, Microsoft weakens this competitive threat to operating systems by integrating the potential substitutes directly into the OS.

68. Third, tying can provide a method of dynamic leveraging to ensure a future monopoly. This involves a direct counterargument to the familiar ''one-monopoly theory,'' which states that a monopolist cannot collect more profits through a monopoly on a pair of complementary products (an operating system and an application) than through a monopoly on either product alone. Where the future entry into each product is uncertain, establishing a monopoly on both products in the pair increases the chance that the monopolist will retain a monopoly on at least one product in the future and therefore is positioned to collect full monopoly profits. In our context, the fact that the Windows monopoly over operating systems is not airtight creates an incentive for Microsoft to leverage its dominance so as to increase the likelihood of future dominance in at least one class of products—the operating system or applications. Dominance in applications provides (partial) insurance against the loss of monopoly power in operating systems, but the key is the preservation of monopoly in at least one of the pair of products: the OS and one or more important middleware applications.

69. Finally, tying IE and WMP into the OS and locking in Microsoft's streaming media and DRM formats put Microsoft in a position to potentially collect a tax on e-commerce transactions. Tying thus facilitates the move by Microsoft to a business strategy of collecting revenues from per-transaction royalty of its software, rather than outright sale of its software. This business strategy lessens the competition that Microsoft, as a durable-good monopolist, faces from the sales of its own previous versions of Windows. In this sense, the strategy, and its facilitation through tying, reinforce Microsoft's dominance in operating systems.

70. Product integration can theoretically be beneficial in some markets. Purchasers prefer to purchase some bundles of inputs, such as steering wheels with cars or laces with shoes. These efficiencies do not apply to the bundling of middleware with Windows. Purchasing a personal computer with a full set of applications and default options ''out of the box'' is valuable for many consumers. But the efficiencies that come with an integrated package of an OS and various applications are not specific to Microsoft's applications. In a market where OEMs were free to offer whichever packages of software consumers desired, without integration of applications into the operating system, and without Microsoft's tying constraints or inducements, the market would provide the variety of packages preferred by consumers. Moreover, the engineering efficiencies claimed for the integration of middleware code into the operating system appear to be negligible, and are therefore more than offset by the anti-competitive effects of tying. In fact, a software design organized around modular programming of the operating system and middleware applications would achieve the efficiencies associated with modular programming and would allow for plug-and-play replacement of the software.

71. In the absence of tying, Microsoft would offer an operating system and middleware applications that were distinct in the sense of modular programming. For example, neither browser nor media player code would be commingled with OS code: instead, both would communicate with the OS only through a set of published APIs. Microsoft would enhance the value of its operating system by encouraging competition in the innovation of the complementary good—i.e., the browser and the media player. This strategy would maximize value to consumers and the profits that Microsoft obtains from its operating system. The fact that Microsoft does not engage in such a business strategy demonstrates, in the absence of evidence that its tying is efficient, that Microsoft is motivated by anti-competitive incentives that maintain its OS monopoly.

VI. APPENDIX: CURRICULUM VITAE OF FRANK MATHEWSON

G. FRANKLIN MATHEWSON—Professor of Economics, Director of the Institute for Poficy Analysis, University of Toronto

Ph.D. Stanford University

B. Com. University of Toronto

ACADEMIC POSITIONS

1996–present Director, Institute for Policy Analysis, University of Toronto.

1969–present Professor of Economics, Department of Economics, University of Toronto.

1969–present Research Associate, Institute for Policy Analysis, University of Toronto.

1995–1996 Acting Chair, Department of Economics, University of Toronto.

1985 Visiting Professor, Center for the Study of the Economy and the State, University of Chicago, Spring Quarter.

1984 Visiting Scholar, Graduate School of Business, University of Chicago, Spring Quarter.

1978–1983 Associate Chairman and Director of Graduate Studies, Department of Economics, University of Toronto.

1970–1982 Professor of Economics, Faculty of Management Studies, University of Toronto.

1978–1979 Senior Research Associate, Ontario Economic Council.

1976–1977 Visiting Research Fellow, Department of Political Economy, University College, University of London.

HONORS AND FELLOWSHIPS

—Social Science and Humanities Research Council Research Fellowship: 1994, 1991, 1989, 1987, 1986, 1985

—Social Science and Humanities Research Council Leave Fellowship: 1983–1984

—Canadian Council Leave Fellowship: 1976–1977

—Canada Council Doctoral Fellowship: 1966–1969

—Woodrow Wilson Fellowship: 1965

PROFESSIONAL AFFILIATIONS

—Editorial Board, Journal of Economics of Business, 1992-present.

—Editorial Board, Managerial and Decision Economics, 1994-present.

—Editorial Board, Economic Inquiry, 1987–1997.

—Editorial Board, Journal of Industrial Economics, 1990–1995.

—Associate Editor, International Journal of Industrial Organization, 1982–1988.

—Co-editor with M. Trebilcock and M. Walker. The Law and Economics of Competition Policy, Vancouver: The Fraser Institute, 1990.

—Co-editor with J. Stiglitz. New Developments in the Analysis of Market Structures, Cambridge: MIT Press, 1985.

—Program Committee, European Association for Research in Industrial Economics, 19831991.

—Program Committee, Conference on Industrial Organization, International Economics Association, 1982.

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''The Analysis of Efficiencies in Superior Propane: Correct Criterion Incorrectly Applied.'' With Ralph Winter. Canadian Competition Record, Fall 2000, 20(2): 88–97.

''Professional Corporations and Limited Liability.'' With Michael Smart, in Peter Newman (ed.) Palgrave Dictionary in Economics and the Law, 140–143 London: MacMillan Reference Limited, 1999.

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''A Consumer Theory of Demand for the Media.'' Journal of Business 45:2, 212–224, April 1972.

VII. APPENDIX: CURRICULUM VITAE OF RALPH WINTER

RALPH A. WINTER—Professor of Economics and Finance, University of Toronto

Ph.D. Economics, University of California at Berkeley

M.A. Statistics, University of California at Berkeley

B.Sc. Mathematics and Economics (with honors), University of British Columbia

ACADEMIC POSITIONS

1988-present Professor of Economics and Finance, University of Toronto

1985–1988 Associate Professor, Department of Economics and Faculty of Management Studies, University of Toronto

1979–1985 Assistant Professor, Department of Economics and Faculty of Management Studies, University of Toronto

HONORS AND FELLOWSHIPS

—Olin Senior Research Fellowship, Yale Law School, 1988

—National Fellowship, Hoover Institution, Stanford University, 1986–1987

Harry Johnson Prize (with M. Peters), for best article in the Canadian Journal of Economics, 1983

Canada Council Doctoral Fellowship, 1975–1979

John H. Wheeler Scholarship, University of California at Berkeley, 1974–1975

Dean's Honors List, University of British Columbia, 1974

RESEARCH GRANTS

Social Sciences and Humanities Research Council Research Grant: 1983–1985, 1986–1987, 1988–1989, 1990, 1991–1993

Social Sciences and Humanities Research Council Post-Doctoral Research Fellowship: 1981–1982 and 1982–1983

PROFESSIONAL AFFILIATIONS

International Editorial Board, Assurances

Editorial Board, Journal of Industrial Economics

PROFESSIONAL APPEARANCES

British Columbia Utilities Commission, regarding capital structure and equity risk premium for Pacific Northern Gas, 1998

Canadian Radio-Television and Telecommunications Commission, regarding price cap regulation for telephone companies, 1996

Alberta Energy and Utilities Board, regarding fair rate of return for TransAlta Utilities Corporation and Alberta Power Limited, 1996

Expert witness, Nielsen case, before the Canadian Competition Tribunal, 1994

Ontario Energy Board (EBRO 483,484), regarding fair rate of return for Centra Gas, 1993 (written submission)

Ontario Energy Board (EBRO 4790), regarding fair rate of return for Consumers Gas, 1992

Expert witness, Chrysler case, before the Canadian Competition Tribunal, 1988

PUBLICATIONS

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ATTACHMENT B

A DETAILED CRITIQUE OF THE PROPOSED FINAL JUDGMENT IN U.S. v. MICROSOFT

Ronald A. Klain
Benjamin G. Bradshaw
Jessica Davidson Miller
O'Melveny & Myers LLP
555 13th Street, NW
Washington, DC 20004

January 2002

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INTRODUCTION

This Court may approve the parties'' Proposed Final Judgment (''PFJ''), but only if it first determines that the proposed decree is ''in the public interest.'' In reviewing the PFJ, we acknowledge that there are some beneficial and important restrictions put on Microsoft's unlawful conduct. In too many instances, however, these restraints are inevitably swallowed up by broad exceptions and grants of power to Microsoft. The result is that the proposed settlement will do little, if anything, to eliminate Microsoft's illegal practices, prevent recurrence of those acts, and promote competition in the marketplace. The public interest requires more, and the Court should thus reject the proposed settlement.

The purpose of this document is to expose—on a point-by-point, provision-by-provision basis—the many loopholes, ''trap doors,'' and other critical deficiencies in the PFJ. We present the issues in an order that tracks the proposed decree itself so that they may be easily followed. We also provide ''real world'' examples where helpful.

In general, the PFJ suffers from several global, overarching flaws. First, in critical places, the language used in the PFJ to define the protections for competition are not broad enough to cover behavior the Court of Appeals held to be unlawful. Rather, only specific rights are granted, only specific competitive products are protected, and only specific anticompetitive practices are banned. In many cases, the rights and limitations are further clawed-back through carefully crafted carve-outs that benefit Microsoft.

Second, the proposed decree relies too heavily on the personal computer (''PC'') manufacturers (original equipment manufacturers or ''OEMs'') to implement design changes—particularly in the critical area of middleware—without sufficiently ensuring their independence from Microsoft's tight clasp. The PFJ also follows timelines that are too loose and too generous to a company with the engineering resources and product-update capabilities of Microsoft.

Third, in too many places, the constraints on Microsoft (once the exceptions are taken into account) devolve into a mandate that Microsoft act ''reasonably.'' Aside from the obvious concern about Microsoft's willingness to do so given its track record, this formulation is problematic for other reasons. It does little more than restate existing antitrust law (such provisions cannot be said to be ''remedial'' if they, in essence, are merely directives to refrain from future illegal acts).

And, in terms of enforcement, alleged violations of such ''be reasonable'' provisions can only be arrested through proceedings that will become, in essence, mini-retrials of U.S. v. Microsoft itself.

In sum, a consent decree that causes little or no change in the defendant's behavior cannot be found to advance the public interest, especially when the defendant's conduct has been found by both the district and appellate courts to be in violation of the law. As such, based on the numerous shortcomings outlined below, the Court should disapprove the PFJ.

SECTION-BY-SECTION CRITIQUE OF THE PFJ

Section Ill of the PFJ: Prohibited Conduct

A. Retaliation

?? The Scope Of The Protection Is Narrow: Section III.A of the PFJ appears to be directed at preventing Microsoft from retaliating against OEMs that attempt to compete with Microsoft products, but Microsoft is constrained only from specified forms of retaliation. If it retaliates against an OEM for any non-specified reason, that retaliation is not prohibited. This formulation is particularly problematic because the protected OEM activities are narrowly and specifically defined. Retaliation against an OEM for installing a non-Microsoft application that does not meet the middleware definition is not prohibited; nor is retaliation against an OEM for removing a Microsoft application that does not meet the middleware definition.

For example:

?? MSN and MSN Messenger do not appear to be middleware under the PFJ's highly specific definition of a ''Microsoft Middleware Product.'' Given this uncertainty, an OEM cannot know with confidence that it is protected from retaliation if it removes the icon and start menu promotion for MSN and/or MSN Messenger.

?? If client software to support Sun's Liberty Alliance (a competitor to Microsoft's Passport) were developed, it would probably not be middleware under the PFJ definition. Thus, Microsoft can retaliate if an OEM adds that software.

More generally, it is odd to have a formulation that de facto approves of Microsoft's retaliation against OEMs, except where that retaliation is forbidden. That is, given that competitors to Passport, .Net My Services (formerly known as Hailstorm), Windows Movie Maker, Microsoft Money, gaming programs, and Microsoft Digital Photography programs—even when shipped through the OEM channel—may not be included in the scope of protected competition, Microsoft would be free to retaliate against OEMs that promote those competitors.

Finally, the provision is substantially weakened in that only certain types of retaliation (i.e., retaliation by changing contractual relations and retaliation by changing promotional arrangements) are forbidden, as opposed to prohibiting any form of retaliation whatsoever. In order to

eliminate Microsoft's ability to unlawfully protect its OS monopoly, it is essential that Microsoft be prohibited from taking any action that directly or indirectly adversely affects OEMs or other licensees who in any way support or promote non-Microsoft products or services.

?? Non-Monetary Compensation Provision: Microsoft is free to retaliate against OEMs that promote competition by withholding any existing form of ''non-monetary Compensation''—only ''newly introduced forms of non-monetary Consideration'' may not be withheld.

?? OEM Termination Clause Will Intimidate OEMs: Microsoft can terminate, without notice, an OEM's Windows license, after sending the OEM two notices that it believes the licensee is violating its license. There need not be any adjudication or determination by any independent tribunal that Microsoft's two predicate claims are correct; after just two notices to any OEM of a putative violation, Microsoft may terminate without even giving notice. This provision means that the OEMs are, at any time, just two registered letters away from an unannounced economic calamity. Obviously, that danger will severely limit the willingness of the OEMs to promote products that compete with Microsoft.

?? Pricing Schemes Will Allow Microsoft to Avoid Effects of the Decree: Microsoft can price Windows at a high price, and then put economic pressure on the OEMs to use only Microsoft applications through the provision that Microsoft can provide unlimited consideration to OEMs for distributing or promoting Microsoft's services or products. The limitation that these payments must be ''commensurate with the absolute level or amount of'' OEM expenditures is hollow—given that it is not clear how an OEM's costs will be accounted for, for this purpose.

B. Pricing

?? Microsoft Can Use Rebates To Eviscerate Competition. Under Section III.B of the PFJ, Microsoft can provide unlimited ''market development allowances, programs, or other discounts in connection with Windows Operating System Products.'' This provision severely weakens the protection for OEM choice, functioning the same way as the rebate provision discussed above, but without any tether or limiting principle whatsoever. Arguably, Microsoft can charge $150 per copy of Windows, but then provide a $99 ''market development allowance'' for OEMs that install WMP.

Presumably, this is intended to be circumscribed by Section III.B.3.c, which provides that ''discounts or their award'' shall not be ''based on or impose any criterion or requirement that is otherwise inconsistent with.., this Final Judgment,'' but this circular and self-referential provision does not ensure that the practice identified above is prohibited. While Microsoft should be allowed to engage in legitimate pricing decisions, those decisions should be limited to volume-based discounts offered on a non-discriminatory basis.

C. OEM Licenses

?? Microsoft Retains Control Of Desktop Innovation: Under Section III.C of the PFJ, Microsoft would retain control of desktop innovation by being able to prohibit OEMs from installing or displaying icons or other shortcuts to non-Microsoft software/products/services, if Microsoft does not provide the same software/product/service. For example, if Microsoft does not include a media player shortcut inside its ''My Music'' folder, it can forbid the OEMs from doing the same.

This turns the premise that OEMs be given flexibility to differentiate their products on its head.

For example:

?? Sony—as a PC OEM and a major force in the music and photography industries—would be uniquely positioned to differentiate the ''My Music'' and ''My Photos'' folder. And yet, Sony's ability to do so turns solely on the extent to which Microsoft chooses to unleash competition in these areas.

?? Microsoft Retains Control Of Desktop Promotion.'' Microsoft also, very oddly, can control the extent to which non-Microsoft middleware is promoted on the desktop, by virtue of a limitation that OEMs can promote such software at the conclusion of a boot sequence or an Internet hook-up, via a user interface that is ''of similar size and shape to the user interface provided by the corresponding Microsoft middleware.'' Thus, Microsoft sets the parameters for competition and user interface.

?? Promotional Flexibility For IAPs Only, And Only For The OEM's ''Own ''IAP: OEMs are allowed to offer IAP promotions at the end of the boot sequence, but not promotions for other products. Also, OEMs are allowed to offer IAPs at the end of a boot sequence, but only their ''own'' IAP offers. Given that this phrase is ambiguous, Microsoft may attempt to read this provision as limiting an OEM's right to offer an IAP product to those IAPs marketed under the OEM's brand. Helpfully, the Competitive Impact Statement suggests otherwise, but whatever this phrase means, it is a needless restriction on an OEM's flexibility.

D. API Disclosure

?? APIs Defined Too Narrowly: Microsoft can evade the disclosure obligation provided under Section III.D of the PFJ by ''hard-wiring'' links to its applications, and through other predatory coding schemes. Additionally, the disclosure is limited to ''APIs and related Documentation.'' This is too narrow and can be evaded. Moreover, the provision for the disclosure of ''Technical Information'' found in Judge Jackson's interim conduct remedies has been eliminated. These disclosures are necessary to provide effective interoperability.

G. Anticompetitive Agreements

?? Joint Development Agreements Can Subvert Protections Of The Settlement. The protection against anticompetitive agreements is substantially undermined by the exception in Section III.G of the PFJ that allows Microsoft to launch ''joint development or joint services arrangements'' with OEMs and others. Under this provision, Microsoft can ''invite'' OEMs, ISVs, and other industry players to enter into ''joint development'' agreements and then resort to an array of exclusionary practices.

For example:

?? Microsoft invites OEM X to form a ''joint development'' project to create ''Windows for X,'' a ''new product'' to be installed on the OEM's PCs. As long as Microsoft's activities are cloaked under this rubric, it is exempt from the ban on requiring the OEM to ship a fixed percentage of its units loaded with Microsoft's applications, and other protections designed to promote competition.

H. Desktop Customization

?? Add/Remove Is For Icons Only, Not The Middleware Itself.'' The add/remove provisions in Section III.H in the PFJ only allow for removal of end-user access to Microsoft middleware—not removal of the middleware itself. This position is inconsistent with the language in the Court of Appeals'' opinion on commingling or the ''add/remove'' issue.

If Microsoft's middleware remains on PCs (even with the end-user access masked), then applications developers will continue to write applications that run on that middleware—reinforcing the applications barrier to entry that was at the heart of this case. Allowing Microsoft to forbid the OEMs from removing its middleware, and allowing Microsoft to configure Windows to make it impossible for end-users to do the same, allows Microsoft to reinforce the applications barrier to entry, irremediably.

As we have seen with the implementation of this approach (i.e., icon removal only) with regard to Internet Explorer in Windows XP, Microsoft can use the presentation of this option in the utility to make it less desirable to end-users.

Moreover, limiting the required ''add/remove'' provision to icons only is actually a step backward from the current state of affairs in Windows XP, where code is removable for several pieces of Microsoft middleware.

?? Why Are Non-MS Icons Subject To Add/Remove?: The PFJ gives Microsoft an added benefit: it can demand that OEMs include icons for non-MS middleware in the add/remove utility. Why this should be required, in the absence of any finding that assuring the permanence of non-Microsoft middleware on the desktop is anticompetitive, is bizarre. This essentially treats the victims of Microsoft's anticompetitive behavior as if they were equally guilty of wrongdoing.

?? Microsoft Can Embed Middleware And Evade Restrictions: Under Section III.H.2, end-users and OEMs are allowed to substitute the launch of a non-Microsoft Middleware product for the launch of Microsoft middleware only where that Microsoft middleware would be launched in a separate Top-Level Window and would display a complete end-user interface or a trademark. This, in essence, allows Microsoft to determine which middleware components will or will not be subject to effective competition. By embedding its middleware components in other middleware (and thereby not displaying it in a Top Level Window with all user interface elements), or by simply not branding the middleware with a trademark, Microsoft can essentially stop rivals from launching their products in lieu of the Microsoft products.

?? Harder For Consumers To Choose Non-Microsoft Products Than Microsoft Products: In the same provision (III.H.2), Microsoft may

require an end-user to confirm his/her choice of a non-Microsoft product, but there is no similar ''double consent'' requirement for Microsoft Middleware. There is no reason why it should be harder for users to select non-Microsoft products than Microsoft products.

?? Microsoft Can ''Sweep'' The Desktop, Eliminating Rival Icons: Additionally, the OEM flexibility provisions are substantially undermined by a provision that allows Microsoft to exploit its ''desktop sweeper'' to eliminate OEM-installed icons by asking an end-user if he/she wants the OEM-installed configuration wiped out after 14 days. Thus, the OEM flexibility provisions will only last on the desktop with certainty for 14 days, and after that period, persistent automated queries from Microsoft can reverse the effect of the OEM's installations. The effect of this provision is to severely devalue the ability of OEMs to offer premier desktop space to ISVs—and to undermine the ability of OEMs to differentiate their products and provide consumers with real choices.

?? Desktop ''MFN'' Requirements: Finally, nothing in the decree appears to forbid Microsoft from requiring—especially where non-middleware is concerned- so-called MFN agreements from the OEMs. These agreements tax OEM efforts to promote Microsoft rivals by requiring that equal promotion or placement be given to Microsoft products, often without compensation.

I. Licensing Provisions

?? Licenses Put In Hands Of OEMs Only—They May Not Be Able To Use Them Without Help:

The OEM licensing provision is limited in its effectiveness because the OEMs are prevented in Section 111.1.3 from ''assigning, transferring, or sublicensing'' their rights. This may severely limit their ability to partner with software companies to develop innovative software packages to be pre-installed on PCs. This provision is especially harmful when contrasted with the broad partnering opportunities afforded to Microsoft under Section III.G. In addition, the OEMs'' willingness to use these provisions—even if they have the financial and technical wherewithal to do so—may be limited by the weakness of the retaliation provisions discussed above.

?? Reciprocal License? ''Equal Treatment'' For Law Abiders And Law Breakers Is Not Equal:

Under Section III.I.5, the PFJ requires ISVs, OEMs, and other licensees to license back to Microsoft any intellectual property they develop in the course of exercising their rights under the settlement. But that simply rewards Microsoft for having created the circumstances (i.e., having acted illegally) that necessitated the settlement in the first place. Microsoft should not be able to obtain the intellectual property rights of others simply because those law abiding entities have been required to work with a lawbreaker.

In addition, this provision may inadvertently work as a ''poison pill'' to discourage 1SVs, et al., from taking advantage of the licensing rights ostensibly provided to them in Section III.I. The risk that an ISV would have to license its rights to Microsoft will be a substantial deterrent for that ISV from exercising its rights under Section III.I.

J. ''Security and Anti-Piracy'' Exception to API Disclosure

?? The Settlement Exempts The Software And Services That Are The Future Of Computing: One of the most seemingly innocuous provisions in the PFJ is, in fact, one of the biggest loopholes: the provision found in Section III.J.1 that allows Microsoft to withhold from API, documentation or communication protocol disclosure any information that would ''compromise the security of .... digital rights management, encryption or authentication systems.'' This provision raises several critical concerns:

?? Digital Rights Management Exception ''Swallows'' Media Player Rule.'' Since the most prevalent use of media players in the years ahead will be in playing content that is protected by digital rights management (''DRM'') (i.e., copyrighted content licensed to users on a ''pay-for-play'' basis), allowing Microsoft to render its DRM solution non-interoperable with non-Microsoft Media Players and DRM solutions essentially means that non-Microsoft media players will be virtually useless when loaded on Windows computers.

?? Authentication Exception Allows Microsoft To Control Internet Gateways, Server-Based Services: Most experts agree that the future of computing lies with server-based applications that consumers will access from a variety of devices. Indeed, Microsoft's ''.Net'' and ''.Net My Services'' (formerly known as Hailstorm) are evidence that Microsoft certainly holds this belief. These services, when linked with Microsoft's ''Passport,'' are Microsoft's self-declared effort to migrate its franchise from the desktop to the Internet.

By exempting authentication APIs and protocols from the PFJ's disclosure/licensure requirement, the settlement exempts the most important applications and services that will drive the computer industry over the next few years. If Microsoft can wall off Passport, .Net, and .Net My Services with impunity—and link these Internet/server-based applications and services to its desktop monopoly—then Microsoft will be in a commanding position to dominate the future of computing.

Additional Problems Raised By Numerous Provisions in Section III

?? No Ban On Commingling Of Code: Nothing in the agreement prohibits Microsoft from commingling code or binding its middleware to the OS. This was a major issue in the case; the Court of Appeals specifically found Microsoft's commingling of browser and OS code to be anticompetitive; it rejected a petition for reheating that centered on this issue. And yet, the PFJ would permit this activity to continue.

?? The danger of the absence of this provision is reinforced by what is found in the definition of the Windows Operating System Product (''Definition U''), which states that the software code that comprises the Windows Operating System Product ''shall be determined by Microsoft in its sole discretion.'' Thus, Microsoft can, over time, render all the protections for middleware meaningless, by binding and commingling code, and redefining the OS to include the bound/commingled applications.

?? Too Many Of The Provisions Require A Mini-Retrial To Be Enforced: In numerous places throughout Section III, the limitations on Microsoft's conduct are basically rephrased versions of the Rule of Reason. For example, in Section III.F.2, Microsoft may enter into restrictive agreements with ISVs as long as those agreements are ''reasonably necessary;'' likewise, the Joint Venture provisions found in Section III.G also employ a rule-of-reason test. As such, they simply restate textbook antitrust law, and alleged violations of these provisions could only be resolved through mini-trials.

Server Interoperability Issues (Found in Sections III.E, III.H and III.J)

?? Only Full Interoperability Can Reduce Microsoft's Barriers To Desktop Competition: The PFJ's proposed server remedy will fail to provide meaningful, competitive interoperability between Microsoft desktops and non-Microsoft servers because:

?? The applications barrier to entry is central to this case and to Microsoft's desktop monopoly. A remedy that provides true server interoperability can be a powerful tool to reduce the applications barrier to entry. The server has the same potential to provide an alternative platform as did the browser or Java. In that sense, it is directly analogous to middleware products.

?? Microsoft has plainly recognized the threat that non-Microsoft servers pose as an alternative applications platform and has acted to exclude those products from full interoperation with the desktop and to advantage its own server products. It is able to do so because it controls the means by which servers may interoperate with the functions and features of the Windows desktop. In order to succeed in establishing non-Microsoft servers as an effective alternative application platform, both consumers and application developers have to be convinced that such servers: (1) can overcome the interoperability barriers that Microsoft has erected, and (2) have become viable alternatives to Microsoft's own servers, insofar as they can fully interoperate with the desktop. An incomplete interoperability remedy fails to meet this test. Neither consumers (professional IT managers) nor server application developers will be attracted to non-Microsoft servers that lack any important interoperability functionality. If important interoperability barriers are left in place, IT managers simply will not buy the product and the remedy will fail to achieve its intended purpose. This is an important guiding principle.

The proposed decree allows Microsoft to continue to exploit dependencies between its desktop applications or its desktop middleware and its servers or handheld devices to exclude server and handheld competition.

?? Section III.I Excludes Competing Server Vendors From The Benefits Of Section III. E's

Disclosures: Section III.I limits Microsoft's obligation to license its desktop-server Communications Protocols to ISVs, IHVs, IAP, ICPs, and OEMs; thus, server

competitors are excluded from the group of companies that Microsoft must license information to under section III.E.

?? The Failure To Define ''Interoperate'' Is A Mistake: Neither Section III.E nor any other provision of the PFJ defines the meaning of ''interoperate.'' The failure to define ''interoperate'' is tantamount to the Department of Justice's (''DOJ'') prior failure to define ''integrate'' in the 1995 consent decree, and will form the basis for unending disputes over the scope of Microsoft's disclosure obligations.

?? ''Communications Protocol'' Is Defined Too Narrowly And Too Ambiguously: The definition of ''Communications Protocol,'' which determines the scope of server information to be disclosed by Microsoft, is highly ambiguous and potentially very narrow in scope:

?? It appears to be limited to the Windows 2000 server, and thus may exclude Microsoft's Advanced Windows 2000 server and Datacenter server.

?? It is unclear whether ''rules for information exchange'' that ''govern the format, semantics, timing sequencing, and error control of messages exchanged over a network'' mean the rules for transmitting information packets over a network, or the rules for formatting and interpreting information within such packets.

?? It appears to be limited to information exchanged via LANs and WANs, and therefore may exclude information exchanged over the Internet. In other words, having illegally seized dominance over browsers, Microsoft will be allowed to use that power to establish de facto proprietary protocols for Internet communication and keep them entirely to itself. Even in its broadest possible meaning, the term ''Communications Protocols'' is insufficiently broad or comprehensive to require disclosure of the information needed to permit interoperability between non-Microsoft servers and the full features and functions of Windows desktops.

?? Section III.J's Carve-Out Eliminates the Most Important Disclosures: What little Section III.E provides, Section III.J takes away by permitting Microsoft to refuse to disclose the very protocols and technical dependencies it is currently using to prevent non-Microsoft servers from interoperating with Microsoft desktops and servers.

Section IV Of The PFJ: Compliance and Enforcement

A. Enforcement Authority

?? Enforcement Authority Is Too Difficult To Employ: Clearly, what is missing from the agreement is a quick, meaningful, and empowered mechanism for preventing and rectifying Microsoft's inevitable violations of the agreement. Thus, while the provision allowing Microsoft to cure any violations of Sections III.C, D, E, and H before an enforcement action may be brought is not itself objectionable, it is but one of a number of provisions that make enforcing the agreement cumbersome, expensive and time-consuming.

B. Technical Committee / D. Voluntary Dispute Resolution

?? Source Code Access Is Not Enough: While it is helpful that the Technical Committee (''TC'') will have access to Microsoft's source code and can resolve disputes involving that issue, the TC is otherwise powerless to compel Microsoft's compliance with the agreement in any other respect. The prospects that Microsoft will accept the decisions of the TC in a voluntary dispute resolution process are near zero. And the entire mechanism seems designed to extend disputes indefinitely: no time limits or time-lines are specified for dispute resolution.

As it stands now, a party injured by Microsoft's violation of the decree can complain to the TC, which will then conduct an investigation:

?? Once the investigation is complete, the TC will presumably issue some decision; while the investigation is ongoing, the TC is supposed to consult with Microsoft's Compliance Officer, for an indefinite period;

?? If the TC concludes that Microsoft violated the agreement, and Microsoft does not agree to change its behavior or rectify the wrong, then the TC must decide whether to recommend the matter to the DOJ for further action;

?? Once recommended, the DOJ—after some review period—may decide to take action, and apply to the court for a remedy, or it may not;

?? And once the DOJ applies for action, the process in court to obtain relief or remedy may extend for an indefinite period.

This is obviously a lengthy and ineffective process for ensuring that Microsoft complies with its obligations under the decree. In an industry where time is of the essence and delays can be fatal, the built-in delays that allow Microsoft to drag its feet are wholly unacceptable.

?? Technical Committee's Investigation Has Only Limited Use: The work of the Technical Committee cannot ''be admitted in any enforcement proceeding before the Court for any purpose,'' and the members of the TC are forbidden to appear. Thus, under the terms of the decree, the substantial time, effort and expense that can go into a TC process may need to be duplicated in an enforcement action adding to the complexity and expense that the process will pose for victims of Microsoft violations.

Section V Of The PFJ: Termination

A. Five-Year Limit

?? Five-Year Coverage Is Inadequate: Given the scope of Microsoft's violations, the time period required to restore effective competition, and the pattern of willful lawbreaking on Microsoft's part, a five-year consent decree is inadequate.

B. Two-Year Extension

?? Penalty For Knowing Violations Is Too Lenient: Amazingly, the PFJ provides that no matter how many knowing and willful violations Microsoft engages in, the restrictions found in the settlement may be extended only for a single two-year period. Thus, if Microsoft is adjudged to have engaged in such a pattern of violations, it essentially has a ''free reign'' to repeat those violations with impunity.

Section VI Of The PFJ: Definitions

A. APIs

?? API Definition Too Narrow: This is discussed above.

I. ISV

?? Definition Is Not Forward-Looking: The definition of ISV is drafted too narrowly and should more clearly encompass developers of software products designed to run on new versions of the Windows operating system and next generation computing devices.

K. Microsoft Middleware Product

?? Definition Exempts Too Much Middleware: Much of the decree is based on this definition—the OEMs'' flexibility turns on what is included or excluded from this category of application. And yet the definition, which is different from the definition used by the District Court (affirmed and employed by the Court of Appeals) is fatally flawed.

?? First, there are only five existing products that can be known with certainty to be ''Microsoft Middleware Products.'' That means that highly similar items, such as MSN, MSN Messenger, MSN Explorer, Passport, Outlook, and Office may be excluded from the definition of middleware. Why Windows Messenger would be covered by the PFJ, but MSN Messenger would be exempt; or why Internet Explorer would be covered, while MSN Explorer would be exempt—if this is, in fact, how the provision operates—is a mystery. Why ambiguity would be accepted in such a critical area is an even greater mystery.

Given the uncertainty, Microsoft may attempt to retaliate against OEMs that remove even the icons for its applications; it may also attempt to prohibit end-users from removing these applications (or even their icons). This is a step backward from the status quo (even in Windows XP); the ambiguity is a gaping hole.

?? Second, the generic middleware definition, which applies only to new products, and therefore does not capture any product now in existence, allows Microsoft to define which products are included or not, by virtue of Microsoft's trademark and branding choices. Thus, as long as Microsoft buries these products inside other applications, they are not independently considered middleware.

?? Third, as suggested in the points above, the definition misses the future platform challenges to Microsoft's Windows monopoly: web-based services. These services should be specifically defined and included in the class of protected middleware.

N. Non-Microsoft Middleware Product

?? Only Developers With Substantial Resources Will Be Protected: The competitive offerings protected by the decree are narrowly limited to offerings that fall within the definition of ''Non-Microsoft Middleware Products.'' Again, as noted above, the guarantees of OEM flexibility, promotion, and end-user choice apply only to these specified products—not to any other software applications.

And yet, sadly, this narrow definition extends protection only to applications ''of which at least one million copies were distributed in the United States within the previous year.'' Thus, ''an innovator in his garage,'' creating a new form of middleware to revolutionize the computer industry, has no protection from Microsoft's rapacious

ways until he can achieve the distribution of 1 million copies of his software.

Also, as noted above, ''web-based services'' are not captured in this definition, notwithstanding their importance to future competition to the Windows OS.

R. Timely Manner

?? Netscape, All Over Again: Microsoft's obligation to disclose APIs and other materials needed to make applications interoperable with Windows in a ''timely manner'' is keyed off the definition of that term in Section R. But Microsoft retains complete control over this timeline because the definition provides that Microsoft is under no obligation to engage in these disclosures until it distributes a version of the Windows OS to 150,000 beta testers. Thus, as long as Microsoft restricts its beta testing program to 149,999 individuals until very late in the development process, it can effectively eviscerate the disclosure requirements. Our review of the available documentation shows, for example, that Microsoft had no more than 20,000 beta testers for Windows XP until very late in the release cycle; thus, had this provision been in place during the Windows XP release cycle, Microsoft would have been under no obligation to release APIs until the eve of product shipping.

Slow disclosure of APIs is precisely how Microsoft defeated Netscape's timely interoperability with Windows 95. Thus, in this way, not only is the decree inadequate to prevent future wrongdoing, it does not even redress proven illegal acts in the past.

U. Windows Operating System Product

The scope of Microsoft's disclosure obligations under the agreement are determined in large part by the meaning of ''Windows Operating System Product.'' The definition of Windows Operating System Product leaves Microsoft free to determine in ''its sole discretion'' what software code comprises a ''Windows Operating System Product.'' In other words, Microsoft's disclosure obligation is subject entirely to its discretion.

Added Definitions—Bind, Interoperate, Technical Information and Web-Based Service

?? Missing Definitions From Remedial Order: As discussed above, the PFJ omits the definitions for ''Bind,'' ''Interoperate'' and ''Technical Information,'' which are critical for ensuring that this agreement provides real constraints on Microsoft's illegal activities.

?? Exclusion Of Web-Based Services: In addition, the exclusion of web-based services from the category of protected competitive threats to the Windows OS is a grave omission. The definition of middleware should include a proviso that stipulates that web-based services be considered as if they were middleware (whether or not they technically fit in the category).

MTC–00030616

PATRICIA G. BUTLER
DANIELLE R. ODDO
Howrey Simon Arnold & White, LLP
1299 Pennsylvania Avenue, NW
Washington, DC 20004
(202) 783–0800
KENNETH M. FRANKEL
Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.
1300 1 Street, NW
Washington, DC 20005
(202) 408–4000
Attorneys for non-party Red Hat, Inc.

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA, Plaintiff, V. MICROSOFT CORPORATION,, Defendant.

Civil Action No. 98–1232 (CKK)

STATE OF NEW YORK ex. rel. Attorney General ELIOT SPITZER, et al., Plaintiffs, V. MICROSOFT CORPORATION, Defendant.

Civil Action No. 98–1233 (CKK)

COMMENTS OF RED HAT, INC. TO REVISED PROPOSED FINAL JUDGMENT AND COMPETITIVE IMPACT STATEMENT IN UNITED STATES V. MICROSOFT CORP., CIVIL NO. 98–1232, IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

I. INTRODUCTION

Pursuant to the Antitrust Procedures and Penalties Act, 15 U.S.C. 16, Red Hat, Inc. (''Red Hat'') files comments to the revised Proposed Final Judgment, filed November 6, 2001, and the Competitive Impact Statement, filed November 15, 2001, in United States v. Microsoft Corp., Civil No. 98–1232, in the United States District Court for the District of Columbia. Red Hat files these comments because the Proposed Final Judgment will not remedy the anti-competitive effects of Microsoft's antitrust violations that were upheld by the United States Court of Appeals for the District of Columbia Circuit in its June 23, 2001 decision. As a result, the market for PC-compatible operating systems—in which Microsoft unlawfully maintained its monopoly—will not return to a competitive environment, and the mandate of the District of Columbia Court of Appeals will be thwarted.

The Litigating States have filed their own Proposed Final Judgment and, to the extent it contains additional modifications to DOJ's revised proposed Final Judgment. Red Hat supports those modifications.

II. BACKGROUND

It is no exaggeration to say that Linux is the operating system that provides the most serious and fastest growing competition to the Microsoft operating system. Linux is the PC-compatible open source operating system based on the kernel developed by Mr. Linus Torvalds in the early 1990s, and in the short amount of time that it has been in the marketplace, the Linux operating system has become a viable competitor to other operating systems. Red Hat, which began in 1994, offers the Red Hat version of the Linux operating system with support and software applications and is the largest distributor of open source Linux. In order for the Proposed Final Judgment to have an effect in restoring the competitive nature of the PC-compatible operating system market, Red Hat believes that each and every provision must be viewed with the overall perspective of whether the provision provides a level playing field for companies such as Red Hat, which offer direct competition in the injured market, or whether the provision directly or indirectly will enable Microsoft to perpetuate the monopoly it has been found to have maintained illegally. In order to provide a background for these comments to the Proposed Final Judgment, a brief overview of open source, and Red Hat Linux follows.

Open source and free software is distinct from traditional (proprietary) software in that it is produced by a generally voluntary, collaborative process, and accompanied by a license that pants users the right to:

1) have the source code,

2) freely copy the software,

3) modify and make derivative works of the software, and

4) transfer or distribute the software in its original form or as a derivative work, without paying copyright license fees.

Many open source and free software licenses also embody the concept known as copyleft. Simply put, this is the condition that all versions of the product, including derivative works, be distributed along with, and subject to, the conditions and rights in the license under which they were received. This concept is central to the ability of a licensor to ensure that its product remains open source or free software.

The underlying principle is that improvements to a product are given back to the open source and free software community. In this way, open source and free software is continually improved, with the modifications being made available to all. Without the ability to impose this condition on further distribution, a copy, or a derivative work made pursuant to the authorization granted in the license, could be distributed without the right to copy, modify, distribute or have the source code—in effect it would be transformed into a proprietary work. It would cease to be ''free.'' The benefits of open source and free software are numerous. In practical and commercial terms, open source and free software is stable, high quality software, which users are free to tailor to their own purposes. As the source code is available to all, a user is free to remedy any bugs it may find, maintain the software itself, or hire a third party to do so. The availability of the source code also allows the creation of complementary and interoperable programs by anyone and everyone, with no need to reverse engineer the product. As an element in the competitive environment, open source software provides an almost pure form of competition in the software (and, of course, operating system) competitive environment. Improvements are quickly available and users are able to make product-quality based choices, unfettered by many of the considerations that occur in other competitive markets. Moreover, because of the size of the community that participates in the open source arena, products are quickly debugged, refined and improved; greatly benefiting the ultimate end user.

From a company with only $482,000 in revenue in 1995, Red Hat has grown to over $100 million in revenue in 2001. The vast majority of Red Hat's revenues are derived from the services it offers around its well-known Linux distribution, not from license fees or royalties. Despite its rapid growth, however, until last year Red Hat Linux was not considered an effective competitor with either Sun Microsystems or Microsoft in the

server market. With increasing success, Red Hat has now penetrated that market, demonstrating that it can be an effective competitor where no illegal monopoly exists. The same cannot be said for the desktop operating system market, the subject of many of the claims and findings against Microsoft in this matter. Because of Microsoft's stranglehold on that market, with over a 94% marketshare—a stranglehold unlawfully maintained—Red Hat has elected not to attempt to compete until a level playing field can be established. Any efforts by Red Hat toward competing would be utterly fruitless and an unjustified use of corporate resources.

Microsoft has made no secret of the fact that it considers companies such as Red Hat to be potential competitive threats in the marketplace. According to Microsoft's own executives, Microsoft has contacted ''U.S. lawmakers'' in an effort to curtail the spread of the Linux operating system. Microsoft Executive says Linux Threatens Innovation, Feb. 14, 2001, Bloomberg News, at http://news.cnet.com/investor/news/newsitem/0–99001028–4825719-RHAT.html. (Ex. A attached hereto.) Microsoft's CEO, Steve Ballmer has described Linux as a ''cancer that attaches itself in an intellectual property sense to everything it touches.'' Microsoft CEO takes lunch break with the Sun-Times, Chicago Sun Times, June 1, 2001, at http://www.suntimes.com/output/tech/cst-fin-micro01.html (Ex. B attached hereto.); see also Joe Wilcox & Stephen Shankland, Why, Microsoft is wary of open source, CNET News.com, June 18,2001, at http://news.com.corn/21001001–268520.html (Ex. C attached hereto.); Stephen Shankland, Microsoft license spurns open source, CNET News.com, June 22, 2001, at http://news.com.com/2100–1001268889.html (Ex. D attached hereto.); Mike Ricciuti, Microsoft memo touts Linux, CNET News.com, Nov. 5, 1998, at http://news.com.com/2100–1001–217563.html (Ex. E attached hereto.); Joe Wilcox & David Becker, Microsoft sues Linux start-up over name, CNET News.com, Dec. 20, 200l, at http://news.com.com/2100–1001–277314.html (Ex. F attached hereto.). From these comments, it is clear, that, unless the Proposed Final Judgment protects the ability of non-Microsoft operating systems such as Red Hat Linux to gain access to, and compete for, software developers and users, and to compete, the remedies aspect of this lawsuit will be a failure. Therefore, in order for the Department of Justice to effect a remedy scheme that will address the findings of the Court of Appeals, the Department of Justice must ensure the ability of companies such as Red Hat to compete. A review of the Proposed Final Judgment, however, shows little to no attention paid to the very companies that directly compete in the market in which Microsoft unlawfully has maintained its monopoly. Unfortunately, this is despite the clear intent of the Competitive Impact Statement, in which the Department of Justice states:

Appropriate injunctive relief in an antitrust case should: (1) end the unlawful conduct; (2) ''avoid a recurrence of the violation'' and others like it; and (3) undo its anticompetitive consequences. See Nat'l Soc'y of Prof'l Eng'rs v. United States, 435 U.S. 679, 697 (1978); United States v. E.I du Pont de Nemours & Co., 366 U.S. 316, 326 (1961); Int'l Salt Co. v. United States, 332 U.S. 392,401 (1947); United States v/ Microsoft Corp., 253 F.3d 34, 103, 107 (DC Cir. 2001) Restoring competition is the ''key to the whole question of an antitrust remedy,'' du Pont, 366 U.S. at 326. Competition was injured in this case principally because Microsoft's illegal conduct maintained the applications barrier to entry into the personal computer operating system market by thwarting the success of middleware that would have assisted competing operating systems in gaining access to applications and other needed complements. Thus, the key to the proper remedy in this case is to end Microsoft's restrictions on potentially threatening middleware, prevent it from hampering similar nascent threats in the future and restore the competitive conditions created by similar middleware threats. The Proposed Final Judgment imposes a series of prohibitions on Microsoft's conduct that are designed to accomplish these critical goals of an antitrust remedy.

Competitive Impact Statement filed in U.S. v. Microsoft (D.DC Nov. 15, 2001) at 9. It is with consideration being given to the findings of the Court of Appeals and the realistic impact of the Proposed Final Judgment that Red Hat files these comments.

III. COMMENTS ON INTELLECTUAL PROPERTY ISSUES ASSOCIATED WITH THE FINAL JUDGMENT

A. The Proposed Final Judgment Would Neither Remedy Microsoft's Monopolization of, Nor Restore Competitive Conditions to, the Market for PC-Compatible Operating Systems, Because Microsoft Would Remain Free to Shut Down Competitive Operating Systems and Middleware Through Assertion of Microsoft's Intellectual Property Portfolio

For intellectual property reasons, the Proposed Final Judgment would fail to remedy Microsoft's monopolization of the operating systems market and fail to accomplish the goal to restore competitive conditions to the market. It would fail because it would permit Microsoft to block software and hardware developers, users, and vendors from developing, using, distributing, or promoting competitive operating systems by threatening or bringing suits for infringement of Microsoft's extensive intellectual property portfolio. To provide an effective remedy and accomplish that goal, the narrow scope of licenses to Microsoft's intellectual property fights required by the Proposed Final Judgment must, at a minimum, be expanded to allow those persons to engage in that competitive conduct without the threat of an infringement suit by Microsoft.

More specifically, the Proposed Final Judgment would prohibit Microsoft from retaliating against software and hardware developers, users, and vendors if they were to develop, use, distribute, or promote operating systems or middleware that competes with Microsoft's Windows operating system or middleware. But giving with its right hand and taking with its left, the Proposed Final Judgment would exempt from prohibited retaliation—and expressly allow—Microsoft to sue those persons for infringement of Microsoft's intellectual property fights if they engage in that conduct.

Two primary effects would flow from this exemption. First, Microsoft would remain free to assert its intellectual property fights to stop developers and vendors of competitive operating systems and middleware from developing, using, distributing, or promoting their software. In that event, the downstream software and hardware developers, users, and vendors who want to use and work with competitive operating systems and middleware would not have any competitive operating systems or middleware to use, distribute, or promote. Second, Microsoft would remain free to assert the same intellectual property rights to stop those downstream developers, users, and vendors from using, distributing, or promoting such competitive operating systems and middleware.

If no competitive operating systems and middleware were available or if the downstream developers, users, and vendors could not use, distribute, or promote competitive operating systems or middleware because Microsoft threatens or brings intellectual property infringement suits, the Proposed Final Judgment cannot accomplish its purpose: to remedy Microsoft's unlawfully maintenance of its monopoly and restore competitive conditions to the market Microsoft in which Microsoft's monopoly was unlawfully maintained.

The antitrust remedy should at least remove this exemption and define retaliation to include threatening or bringing suit for infringement of Microsoft's intellectual property portfolio. Such a remedy would be proper and consistent with both Supreme Court and Justice Department precedent.

1. Microsoft Illegally Maintained a Monopoly in the Market for Intel-Compatible Operating Systems

The district court held, and the court of appeals affirmed, that Microsoft had illegally ''maintained a monopoly in the market for Intel-compatible PC operating systems in violation of [Sherman Act] ''2.'' United States v. Microsoft Corp., 253 F.3d 34, 45, 50 (DC Cir. 2001). The remedy in this case should at the very least restore competition to that market, because that was the only district court holding that the court of appeals affirmed. See id. at 46. Unless the remedy restores competition within that market, the courts'' holdings, and the Justice Department's and States'' efforts in proving that antitrust violation, will be nullities.

2. The Purpose of an Antitrust Remedy Is to Terminate the Monopoly and Restore Competition to the Monopolized Market

Controlling case law and the Justice Department both recognize that the purpose of the remedy in a Section 2 case is to end the monopoly and restore competition to the market that the defendant monopolized. As the Supreme Court explained, and as the Court of Appeals recognized in Microsoft, in a monopolization case ''it is the duty of the court to prescribe relief which will terminate the illegal monopoly, deny to the defendant the fruits of its statutory violation, and ensure that there remain no practices likely to result in monopolization in the future.''

United States v. United Shoe Mach. Corp., 391 U.S. 244, 250 (1968); see Microsoft, 346 F.3d at 103 (quoting United Shoe). Indeed, the goal of relief is to make sure that competition results, not just to end a lawsuit. As the Supreme Court instructed:

In an equity suit, the end to be served is not punishment of past transgression, nor is it merely to end specific illegal practices. A public interest served by such civil suits is that they effectively pry open to competition a market that has been closed by defendants'' illegal restraints. If this proposed Final Judgment accomplishes less than that, the Government has won a lawsuit and lost a cause.

International Salt Co. v. United States, 332 U.S. 392, 401 (1947).

In accordance, the Justice Department explained that its purpose in entering into the Proposed Final Judgment was to ''restore competitive conditions to the market.'' Competitive Impact Statement at 2. Likewise, the Justice Department told the public in its press release that the ''settlement will bring effective relief to the market and ensure that consumers will have more choices in meeting their computer needs.'' Press Release, U.S. Justice Department, Department of Justice and Microsoft Corporation Reach Effective Settlement on Antitrust Lawsuit, Nov. 2, 2001, at http://www.usdoj.gov/opa/pr/2001/November/01 at 569.htm (Ex. G attached hereto.). 3. Intellectual Property Restrictions Would Prevent the Proposed Final Judgment From Restoring Competitive Conditions to the Monopolized Market for Operating Systems

a. The Proposed Final Judgment Would Ban Microsoft from Retaliating Against Certain Groups if They Work with Operating Systems or Middleware that Compete with Microsoft's Windows or Middleware

The Proposed Final Judgment would protect certain groups of software or hardware developers, users, and vendors (OEMs, ISVs, and IHVs)[2] from undefined ''retaliation'' by Microsoft if the groups were to work with operating systems or middleware that compete with Microsoft's Windows or middleware. It would provide that Microsoft shall not ''retaliate'' against those groups if they engage in certain conduct with any ''software that competes with Microsoft Platform Software,'' which the Proposed Final Judgment defines to include Microsoft's Windows operating system ''and/or a Microsoft Middleware Product.''[3] For example, the Proposed Final Judgment would provide that Microsoft ''shall not retaliate'' against an:

2. Under the Proposed Final Judgment: OEM is an ''original equipment manufacturer of Personal Computers that is a licensee of a Windows Operating System Product''; ISV is an ''entity other than Microsoft that is engaged in the development or marketing of software products''; and IHV is an ''independent hardware vendor that develops hardware to be included in or used with a Personal Computer running a Windows Operating System Product.'' See Proposed Final Judgment, Sections VI.O, I, II.

3. ''Microsoft Platform Software'' is defined as including ''a Windows Operating System Product'' (either alone or with a middleware product), which in turn is defined as ''the software code.., distributed commercially by Microsoft for use with Personal Computers as Windows 2000 Professional .... ''Proposed Final Judgment, Section VI.L, U. An Operating System is defined as ''the software code that, inter alia, (i) controls the allocation and usage of hardware resources ... of a Personal Computer, (ii) provides a platform for developing applications by exposing functionality to ISVs through APIs, and (iii) supplies a user interface that enables users to access functionality of the operating system and in which they can run applications.'' Id., Section VI?

I. OEM for ''developing, distributing, promoting, using, selling, or licensing any software that competes with'' Microsoft's Windows operating system or middleware. Proposed Final Judgment Section III.A. 1.

II. ISV or IHV for ''developing, using, distributing, promoting or supporting any software that competes with'' Microsoft's Windows operating system or middleware. Proposed Final Judgment Section III.F. 1 .a.

b. The Ban on Retaliation Would Not Ban Infringement Suits

While the term ''retaliate'' is undefined, the Proposed Final Judgment contradictorily exempts from the scope of prohibited retaliation—and therefore expressly permits—suits for infringement of Microsoft's intellectual property rights. More specifically, the provisions banning retaliation against OEMs, ISVs, and IHVs are followed by an exemption:

Nothing in this provision shall prohibit Microsoft from enforcing.., any intellectual property right that is not inconsistent with this Final Judgment.

Proposed Final Judgment Section III.A; see Section III.F.3. While the term ''inconsistent'' also is undefined, it is clear from a later section that a suit to enforce intellectual property rights against conduct that is protected from Microsoft's retaliation nevertheless is ''not inconsistent with'' the Proposed Final Judgment.

The later section, Section III.I, provides that Microsoft must offer to license its intellectual property rights to the groups if those rights are required to exercise an option expressly provided under the Proposed Final Judgment. If it stopped there, the provision would be fine. But an exemption to that license provision emphasizes that the required license is very narrow, and that Microsoft could still bring infringement suits if the groups engage in the very conduct that is protected from Micros0ft's retaliation:

I. Microsoft shall offer to license to ISVs, IHVs,... and OEMs any intellectual property rights owned or licensable by Microsoft that are required to exercise any of the options or alternatives expressly provided to them under this Final Judgment, provided that

2. the scope of any such license (and the intellectual property rights licensed thereunder) need be no broader than is necessary to ensure that an ISV, IHV,... or OEM is able to exercise the options or alternatives expressly provided under this Final Judgment (e.g., an ISV's, IHV's ... and OEM's option to promote Non-Microsoft Middleware shall not confer any rights to any Microsoft intellectual property rights infringed by that Non-Microsoft Middleware);

Beyond the express terms of any license granted by Microsoft pursuant to this section, this Final Judgment does not, directly or by implication, estoppel or otherwise, confer any fights, licenses, covenants or immunities with regard to any Microsoft intellectual property to anyone. Proposed Final Judgment, Section III.I (emphasis added). In accordance, the Justice Department's November 15, 2001 Competitive Impact Statement explains that a purpose of this provision is to ''[permit] Microsoft to take legitimate steps to prevent unauthorized use of its intellectual property.'' Competitive Impact Statement at 49.

''Unauthorized use'' would include infringement. A patent, for example, provides the patent owner the exclusive fights to make, use, sell, and offer to sell the patented subject matter. 35 U.S.C. §271(a). Those exclusive fights cover developing, distributing, promoting, using, and selling. Thus, while earlier sections of the Proposed Final Judgment say Microsoft could not ''retaliate'' against that conduct (Proposed Final Judgment Sections III.A.1, III.F.1.a), this later section contradictorily provides that Microsoft could retaliate against the conduct—by lawsuits (Proposed Final Judgment Section III.1.2).

To illustrate the problem, apply the specific example quoted above, from Section III.I.2 of the Proposed Final Judgment, to an ISV that promotes an operating system that competes with Windows, and assume that Microsoft has patents that arguably cover that competitive operating system. Under the Proposed Final Judgment, Microsoft would be prohibited from ''retaliat[ing]'' if the ISV were ''promoting'' the competitive operating system, such as by offering it for sale. Proposed Final Judgment Section III.F.1.a. But the exemption provides that the option to promote the software without retaliation ''shall not confer any rights to any Microsoft intellectual property rights [e.g., patents] infringed by that'' competitive operating system. Proposed Final Judgment Section III.I.2. Thus, Microsoft could sue the ISV for infringing its patents by promoting the competitive software.

Consequently, the Proposed Final Judgment would prohibit Microsoft from ''retaliating'' against an ISV or IHV for ''developing, using, distributing, [or] promoting'' the competitive operating system—but Microsoft could sue the ISV or IHV for patent infringement for the same acts: making (developing), using, selling (distributing), or offering to sell (promoting) that system. Likewise, it would prohibit Microsoft from ''retaliating'' against an OEM for ''developing, distributing, promoting, using, or selling'' a competitive operating system—but Microsoft nonetheless could sue the OEM for patent infringement for that conduct.

Thus, while Microsoft could not ''retaliate,'' it could sue for infringement, thereby completely eviscerating the ban on retaliation.

B. Infringement Suits by Microsoft Based on Its Massive Intellectual Property Portfolio Could Stop Competitive Operating Systems or Middleware

These intellectual property exemptions could permit Microsoft to completely prevent any competition from other operating systems or middleware, both at the development level and downstream throughout the development and distribution chain. ISVs, i.e., non-Microsoft entities that develop or market software products, would include developers and vendors of competitive operating systems. See Proposed Final Judgment Section VI.I. 4 A patent suit against such a developer or vendor for infringement of Microsoft's patents covering competitive operating systems could result in an injunction against making, using, selling, or offering to sell the competitive system, as well as damages (which could be trebled) and attorney fees for any sales. See 35 U.S.C. §§283–285. If that occurred, downstream ISVs, IHVs, and OEMs would not have any competitive operating systems with which they could work.

4. See. also, discussion in Parts IV.B. and V, infra, concerning the definition of ISVs. ISVs also would include downstream developers and vendors of middleware or applications software. A patent suit against them for infringement of Microsoft's patents would prevent them from, e.g., using a competitive operating systems to develop their software. Downstream IHVs and OEMs would include developers and vendors of personal computers. A patent suit against them for infringement of those Microsoft patents would prevent them from, e.g., making or selling any computers using competitive operating systems.

The same would apply to competitive middleware. A patent suit against an ISV that develops competitive middleware would preclude the availability of competitive middleware. A patent suit against downstream developers or vendors of applications software would preclude them from using competitive middleware to develop their software. And a patent suit against downstream IHVs and OEMs would preclude them from making or selling computers using competitive middleware.

Microsoft has amassed a large portfolio of numerous patents and other intellectual property that potentially covers competitive operating systems and middleware. While any infringement analysis must be specific to a particular software, it is clear that Microsoft has numerous patents that potentially could be asserted against that competitive software. The chart attached as Exhibit H lists over 1400 patents owned by Microsoft in December 2001 that are in Patent and Trademark Office classes that include operating systems and middleware software. Additional Microsoft patents covering operating systems and middleware may be in other classes. If Microsoft were to bring suit on multiple patents, the accused infringer would have to win against every patent to avoid an injunction and damages. The odds of losing are so great that only the most well financed competitive operating system or middleware developer or vendor could consider fighting that battle. The result would be the same downstream. If the competitive operating system or middleware developer or vendor indemnified its downstream customers (ISVs, IHVs, OEMs, and ultimate consumers), it would face the same problem. If it did not indemnify the downstream customers, those customers would face the problem directly. As a result, a threat of suit by Microsoft could be enough to stop the making, using, selling, or offering to sell competitive operating systems and middleware at all levels in the development-distribution chain.

1. Microsoft Intends to Enforce Its Intellectual Property

Microsoft clearly declared its intent to enforce its intellectual property rights against competitors by including the exemption for infringement suits in Section III.I of the Proposed Final Judgment and by arguing that the non-settling states were seeking to confiscate its intellectual property. See, Defendant Microsoft Corporation's Remedial Proposal at 2. (Dec. 12, 2001) (''Microsoft Remedial Proposal''). Similarly, Craig Mundie, Microsoft's Senior Vice President of Advanced Strategies, reportedly told the audience at an Open Source convention last July:

Well, at the end of the day, if you have a patent, you enforce the patent if it's valuable to you. And so I think that Microsoft and other people who have patents will ultimately decide to enforce those patents.

Shared Source v. Open Source: Panel Discussion, O'Reilly Network, Aug. 9, 2001, at http://linux.oreillynet.com/pub/a/linux/2001/08/09/oscon panel.html (Ex. I attached hereto.). The threat of Microsoft's patent enforcement has caused concern among the open-source community, as reported last August. Galli, Peter, ''Microsoft Patents a Threat to Open Source,'' eWEEK, Aug. 28, 2001, at http://techupdate.zdnet.com/techupdate/stories/main/0,14179,2808548.00.html (''Members of the open-source community are becoming increasingly concerned by ongoing moves from Microsoft Corp. to acquire a range of software patents that the company can potentially use down the line to attack and try to restrict the development and distribution of open-source software.'') (Ex. J attached hereto.).

2. The Intellectual Property Problem Can Be Fixed by Defining Retaliation to Include Infringement Suits and Eliminating the Exemptions

The Proposed Final Judgment should define ''retaliate'' in Section VI of the Proposed Final Judgment. While the term should remain broad to bar any type of retaliation, it can specifically include bringing infringement suits:

''Retaliate'' means any type of retaliation and is intended to be construed broadly. It specifically includes threatening or bringing a suit for infringement of any intellectual property rights owned or licensable by Microsoft.

In addition, the exemption sections should be modified to prevent infringement suits against the protected groups for engaging in conduct that the Proposed Final Judgment would prohibit Microsoft from retaliating against:

For OEMs, Section III.A should be modified as follows—after the sentence ''Nothing in this provision shall prohibit Microsoft from enforcing any provision of any license with any OEM or any intellectual property right that is not inconsistent with this Final Judgment,'' add the following:

Acts that would be inconsistent with this Final Judgment include, but are not limited to, threatening or bringing suit for infringement of any intellectual property rights that would restrict the OEM from developing, distributing, promoting, using, selling, or licensing any software that competes with Microsoft Platform Software or any product or service that distributes or promotes any Non-Microsoft Middleware.

For ISVs and IHVs, Section III.F.3 should be modified as follows—after the sentence ''Nothing in this section shall prohibit Microsoft from enforcing any provision of any agreement with any ISV or IHV, or any intellectual property right, that is not inconsistent with this Final Judgment,'' add the following:

Acts that would be inconsistent with this Final Judgment include, but are not limited to, threatening or bringing suit for infringement of any intellectual property rights that would restrict the ISV or IHV from developing, using, distributing, promoting, or supporting any software that competes with Microsoft Platform Software or any software that runs on any software that competes with Microsoft Platform Software, or exercising any of the options or alternatives provided for under this Final Judgment.

Also, Section II1.1.2. should be deleted and replaced as follows—the scope of any such license (and the intellectual property rights licensed thereunder) need be no broader than is necessary to ensure that an ISV, IHV, IAP, ICP or OEM is able to exercise the options or alternatives expressly provided under this Final Judgment, and to engage in conduct against which this Final Judgment prohibits Microsoft from retaliating; To enable those third parties to obtain those licenses, Section VIII of the Proposed Final Judgment should be modified as follows:

Nothing in this Final Judgment is intended to confer upon any other persons any rights or remedies of any nature whatsoever hereunder or by reason of this Final Judgment, except as provided in Section III.I.

3. The Proposed Relief Requiring Licensing of Microsoft's Intellectual Property Is Proper and Consistent with Precedent

The proposed modifications would require Microsoft to license certain of its intellectual property: that which potentially covers competitive operating systems, middleware, or other software or hardware and is necessary to ensure that the protected groups are free to engage in the conduct against which the Proposed Final Judgment would prohibit Microsoft from retaliating. Compulsory licensing of intellectual property to remedy monopolization is consistent with Supreme Court and Justice Department precedent, including the Proposed Final Judgment as it now stands, even though abuse of intellectual property rights was not found to be predatory conduct.

To achieve the goal of restoring competitive conditions to the marketplace discussed above, the court has ''large discretion'' to fit the decree to the special needs of the individual case.'' Ford Motor Co. v. United States, 405 U.S. 562, 573 (1972)

(quoting International Salt Co. v. United States, 332 U.S. 392, 401 (1947)). That discretion includes prohibiting acts that may otherwise be valid, if necessary to correct the effects of the violation. ''Equity has power to eradicate the evils of a condemned scheme by prohibition of the use of admittedly valid parts of an invalid whole.'' United States v. Bausch & Lomb Optical Co., 321 U.S. 707, 814 (1944). As the Court similarly instructed in United States v. Paramount Pictures, Inc., 334 U.S. 131,148 (1948), to achieve effective relief a court can include restrictions on otherwise lawful conduct: ''[E]quity has the power to uproot all parts of an illegal scheme—the valid as well as the invalid—in order to rid the trade or commerce of all taint of the conspiracy.''

Compulsory licensing of patents was ordered to remedy monopolization in, for example, United States v. United Shoe Mach. Corp., 110 F. Supp. 295 (D. Mass. 1953), aff'd, 347 U.S. 521 (1954), even though enforcement of the patents was not an alleged predatory act. The court concluded that the defendant had not improperly asserted its patents, but they were a barrier to entry into the monopolized market. See 110 F. Supp. at 297,332–33. In determining the remedy, the court's goals were not only to eliminate specific predatory practices that had caused or would cause monopolization, but also ''to restore workable competition in the market.'' Id. at 346–47. The court explained that licensing of patents was proper as part of the remedy to reduce the effects of the defendant's monopolization caused by non-patent predatory business practices: Defendant is not being punished for abusive practices respecting patents, for it engaged in none .... It is being required to reduce the monopoly power it has, not as a result of patents, but as a result of business practices. And compulsory licensing, on a reasonable royalty basis, is in effect a partial dissolution, on a non-confiscatory basis. Id. at 351. Fifteen years later, the Supreme Court again concluded that the relief granted was within the proper scope of relief for an antitrust violation. United States v. United Shoe Mach. Corp., 391 U.S. 244, 251 (1968).

Similarly, the Justice Department has required compulsory licensing of intellectual property as part of the remedy in proposed final judgments in antitrust cases. One of the latest examples, and perhaps the most pertinent, is this Proposed Final Judgment's requirement that ''Microsoft shall offer to license to ISVs, IHVs .... and OEMs any intellectual property rights owned or licensable by Microsoft that are required to exercise any of the options or alternatives expressly provided to them under this Final Judgment .... ''(Proposed Final Judgment Section III.I.) Indeed, the Competitive Impact Statement provides that some of those provisions ''are designed specifically to prevent Microsoft from using its intellectual property rights to frustrate the intended effectiveness of the Proposed Final Judgment's disclosure provisions.'' Competitive Impact Statement at 49. The exemption from retaliation by infringement suits, however, allows that frustration. The issue, therefore, is not whether the remedy can properly include compulsory licensing of Microsoft's intellectual property. Instead, the issue is the scope of the licensing required. As shown above, the scope of the proposed modifications to the intellectual property provisions is reasonable and required to remedy the monopolization and restore competition to the market. The proposed modifications would not ''result in... wholesale confiscation of Microsoft's intellectual property,'' a criticism that Microsoft wrongly asserted against the non-settling states'' proposed remedy. Microsoft Remedial Proposal at 2. It would require only licensing that is necessary to prevent frustration of the anti-retaliation provisions. Moreover, the licenses could include royalties or other consideration on a reasonable and non-discriminatory basis, as provided in Section III.I. 1.

Nor would the proposed modifications be a significant disincentive to innovation by Microsoft. Since the Proposed Final Judgment would expire in five years (see Proposed Final Judgment, Section V), the obligation to license would exist only for that limited time period. Any future innovation by Microsoft also would be free of this obligation after those five years. Any arguable effect on Microsoft's incentives to innovate during those five years would be limited and only to the extent necessary to provide effective relief from Microsoft's monopolization.

In opposing the non-settling states'' proposed relief, Microsoft pointed to the Court of Appeals'' comment that the relief in this case '''should be tailored to fit the wrong creating the occasion for the remedy.''' Microsoft Remedial Proposal at 5 (quoting Microsoft, 253 F.3d at 107). Microsoft also relied upon this Court's statement that the ''scope of any proposed remedy must be carefully crafted so as to ensure that the enjoin[ed] conduct falls within the penumbra of behavior which was found to be anticompetitive.'' Microsoft Remedial Proposal at 6 (quoting Sept. 8, 2001 Tr. at 8). Removing the infringement suit exemption and defining retaliation to include threatening or bringing suit for infringement of Microsoft's intellectual property portfolio would fall well within that scope.

C. Conclusion Regarding Intellectual Property

The scope of the required intellectual property licensing under the Proposed Final Judgment is far too narrow to remedy the monopolization of, and restore competitive conditions to, the market the courts held Microsoft monopolized—Intel-compatible operating systems. The modifications to the scope proposed above would be no broader than that which is necessary to allow the groups protected under the Proposed Final Judgment to engage in the specific conduct that the Proposed Final Judgment allows them to engage in without fear of retaliation from Microsoft. As shown above, unless the scope of the licensing is expanded, and the exemptions for infringement suits removed, ''the Government has won a lawsuit and lost a cause.'' International Salt, 332 U.S. at 401.

IV. COMMENTS TO SECTION III—PROHIBITED CONDUCT

A focus of any final judgment in this litigation must be to put in place safeguards and protections against future actions by Microsoft that may not fit the known pattern, but that will obtain a familiar result—unlawful continuation of the Microsoft monopoly. An important aspect of this focus is to make sure that the participants in the marketplace are given a chance at viability in a competitive marketplace. As worded, Section III does not provide the safeguards and protections that are necessary. Prohibiting actual retaliatory conduct by Microsoft is simply insufficient to obtain the goals of the final judgment.

A. Section III.A

The Department of Justice set forth a clear intent for the impact of Section III.A. As stated in the Competitive Impact Statement, the perceived effect of Section III.A is to ''ensure[] that OEMs have the contractual and economic freedom to make decisions about distributing and supporting non-Microsoft software products that have the potential to weaken Microsoft's personal computer operating system monopoly without fear of coercion or retaliation by Microsoft.'' Competitive Impact Statement at 9.

Unfortunately, Section III.A fails to protect the ability of OEMs to make business choices in a non-coercive atmosphere, for reasons in addition to those discussed above concerning intellectual property.

The conduct that is prohibited in Section III.A is actual retaliatory action by Microsoft against OEMs for, inter alia, dual booting personal computers with other operating systems. More specifically, Section III.A provides that ''Microsoft shall not retaliate against an OEM by altering Microsoft's commercial relations with that OEM, or by withholding newly introduced forms of non-monetary Consideration (including but not limited to new versions of existing forms of non-monetary Consideration) from that OEM, because it is known to Microsoft that the OEM is or is contemplating .... ''Proposed Final Judgment, Section III.A. As worded, the only point at which injunctive relief is available is after an OEM can show actual retaliation.

The problem with prohibiting only action ''after the fact,'' is that it provides for enforcement only after Microsoft has taken negative action against an OEM. It is no secret that Microsoft is an important business partner to may OEMs and even the potential or implication of the change in an OEMs business relationship with an OEM can be sufficient to prevent action. Section III.A does not remove the business threat that will prevent OEMs from ''crossing'' Microsoft.

Therefore, the parameters of the prohibitions on Microsoft's conduct need to be extended so that enforcement is not triggered only after an OEM has been harmed. By then, it may be too late and an OEM may find itself competitively or financially crippled by an impairment in its relationship with Microsoft. Moreover, by the time the retaliation is remedied, the OEM may even be out of the market. Ideally, Microsoft must be prohibited from maintaining the intimidating business environment that it has created—an environment that inhibits OEMs from the free exercise of competitive decision making. The language of the Proposed Final Judgment

ignores what the Competitive Impact Statement and the Court of Appeals have acknowledged.

Thus, the actions prohibited under Section III.A must encompass a range of activities and not just after the fact retaliation in order to ensure that Microsoft does not continue to maintain unlawfully its monopoly. A possible modification of Section III.A is as follows: A. Microsoft shall not retaliate against an OEM by threatening to or altering Microsoft's commercial relations with that OEM, or by threatening to or withholding newly introduced forms of non-monetary Consideration (including but not limited to new versions of existing forms of non-monetary Consideration) from that OEM, because it is known to Microsoft that the OEM is or is contemplating: ....

B. Section III.D

An underlying premise of the Proposed Final Judgment is that if middleware software developers are able to develop and market middleware that can be used on either Microsoft or non-Microsoft operating systems or ''that would have assisted competing operating systems in gaining access to applications and other needed complements'' (Competitive Impact Statement at 9), then the competitive harm to the operating system market caused by Microsoft's unlawful maintenance of its monopoly will be remedied.

With respect to Section III.D, the Competitive Impact Statement indicates an intent by the Department of Justice to: ensure[ ] that developers of competing middleware—software that over time could begin to erode Microsoft's Operating System monopoly—will have full access to the same interfaces and related information as Microsoft Middleware has to interoperate with Windows Operating Products. Microsoft will not be able to hamper the development or operation of potentially threatening software by withholding interface information or permitting its own products to use hidden or undisclosed interfaces.

Competitive Impact Statement at 12.

The Proposed Final Judgment makes an effort to provide the interface and related technical information ''transparency'' to the entities that the Department of Justice believes will need access to Microsoft software in order to develop software compatible with Microsoft and non-Microsoft operating systems. While the named entities include ISVs, however, they do not specifically include entities that provide non-Microsoft Operating Systems. An argument can be made that the definition for ''ISVs'' appears to be broad enough to include providers of non-Microsoft operating systems because under the definition ''ISV'' means an entity other than Microsoft engaged in the development or marketing of software products.'' Proposed Final Judgment, Section VI.I. The question and possible loophole remains, however, that Microsoft might argue that the transparency extends only to entities that develop middleware, but not to entities such as Red Hat—entities that provide non-Microsoft operating systems. In order to ensure that the protections are as inclusive as possible, the definition of ''Independent Software Vendor'' can be supplemented to include specifically entities that compete in the operating system market. Thus, under the Section VI—Definitions—''ISV'' would be modified to mean an entity other than Microsoft that is engaged in the development, marketing or providing of software products or services, including Operating System Providers.

C. Section III.F

According to the Competitive Impact Statement, Section III.F ''redresses conduct by Microsoft specifically found unlawful by the District Court and the Court of Appeals.'' By addressing only actual retaliatory conduct, however, Section III.F suffers from the same infirmity as Section III.A, and may provide injunctive relief only after Microsoft has taken action that will harm a business entity. Microsoft must not be prohibited only from actual retaliation, but must also be prohibited from intimidating, threatening to withhold business from, coercing or retaliating against any ISV or IHV because of activities that will further competing middleware or operating systems. See comment on Section III.A, supra.

D. Section III.J

As worded, Section III.J provides exceptions to Microsoft's disclosure obligations that have a serious potential to defeat the intent of the Proposed Final Judgment. The Competitive Impact Statement makes it clear that the exception to Microsoft's disclosure obligations is meant to be a ''narrow exception limited to specific end-user implementations of security items such as actual keys, authorization tokens or enforcement criteria, the disclosure of which would compromise the security of a 'particular installation or group of installations'' of the listed security features.'' Competitive Impact Statement at 18. The nature of security, however, requires that Section III.J should be modified so that there is a detailed specification of what Microsoft must provide under the mandates of the Proposed Final Judgment, rather than what it is excluded from providing within the context of security. Because of the potentially wide-ranging negative impact of this Section, Red Hat believes some background on the nature of security is required.

All security experts agree that there is no such thing as perfect security, and indeed this pessimistic view extends to the field of computer security. In his book ''Secrets and Lies: Digital Security in a Networked World'', noted security expert Bruce Schneier explains ''modem systems have so many components and connections—some of them not even known by the systems'' designers, implementers, or users—that insecurities always remain. No system is perfect.'' If no computer system can be made perfectly secure, then any computer system can potentially suffer a security compromise. Moreover, it is not knowable whether the security compromise will be a result of people having access to information about a security weakness (which they can exploit) or people not having access to such information (which allows others to exploit something one might otherwise be able to defend against). Thus, on the one hand, one could argue that divulging any information whatsoever could lead to a security compromise, but on the other hand, that not divulging any information of any kind could also lead to a security compromise. Such is the nature of computer security (indeed, all security).

One of the main issues in the antitrust case against Microsoft is the fact that Microsoft has controlled information about and permission to use system APIs, Documentation, licenses, and Communications Protocols to discriminate against or retaliate against one or more parties (or classes of parties), and has done so strategically to protect, extend, and indeed abuse its monopoly powers. Certainly any valid remedy for this anti-trust case would enjoin Microsoft from such conduct in the future.

While the Proposed Final Judgment attempts to set guidelines under which Microsoft would be required to document, disclose, or license to third parties portions of APIs or Documentation or portions or layers of Communications Protocols, Section III.J(1) carves out a specific exemption: the case where the disclosure of such would compromise the security of anti-piracy, anti-virus, software licensing, digital fights management, encryption or authentication systems, including without limitation, keys, authorization tokens or enforcement criteria. While this may sound like a fair and reasonable exemption, it is not because Microsoft could legitimately argue that any requirement to document, disclose, or license anything to third parties could, in theory, result in a security compromise of one or more of these systems. Such is the nature of computer security.

Thus, Section III.J(1) grants Microsoft legal protection for the very behavior that this Proposed Final Judgment was designed to remedy.

As noted, the Competitive Impact Statement interprets Section III.J(1) as being an extremely limited exemption, essentially only extending to specific keys and security tokens, not to technologies, interfaces or interoperability. This interpretation, however, is not carried over to the language of the Proposed Final Judgment, which gives almost blanket permission to Microsoft to invoke the exemption. An appropriate modification of Section III.J(1)—other than removing it entirely—is as follows:

No provision of this Final Judgment shall:

1. Require Microsoft to disclose to any specific end-user implementations of security items such as actual end-user keys, authorization tokens, or enforcement criteria, the disclosure of which would compromise the security of a particular installation or group of installations of the security item. Notwithstanding the foregoing, if any such implementation of a security item requires a specific end-user key, authorization token, enforcement criteria, or analogous information to fully and equitably interoperate with Microsoft Platform Software, Microsoft Middleware, APIs, Communication Protocols, Microsoft applications software, or Microsoft network services (such as e-commerce or internet services), then Microsoft must either (a) disclose such specific end-user key, authorization token, enforcement criteria, or

analogous information, (b) provide alternative end-user keys, authorization tokens, enforcement criteria, or analogous information that enable third parties to fully and equitably interoperate with those software, products, or services, or (c) disclose how to make such end-user keys, authorization tokens, enforcement criteria, or analogous information that will fully and equitably interoperate with such software, products, or services; Microsoft must disclose or provide such keys, authorization tokens, enforcement criteria, or analogous information to third parties upon request and in a nondiscriminatory manner. In no event, however, shall Microsoft reserve to itself any functionality for such keys, authorization tokens, enforcement criteria, or analogous information.

E. Section III.J(2)

Section III.J(2) presents another loophole that Microsoft can manipulate to avoid disclosure of necessary information. Under the provisions of Section III.J(2), Microsoft is permitted to require a certification of the ''authenticity and viability'' of any business seeking a license of ''any API, Documentation or Communications Protocol related to anti-piracy systems, anti-virus technologies, license enforcement mechanisms, authentication/authorization security, or third party intellectual property protection mechanisms of any Microsoft Product.'' Although the certification is required to be pursuant to ''reasonable and objective standards,'' those standards are established by Microsoft and there is no independent third party approval either of the development or of the implementation of those standards. The Competitive Impact Statements indicates that: the requirements of this subsection cannot be used as a pretext for denying disclosure or licensing, but instead are limited to the narrowest scope of what is necessary and reasonable, and are focused on screening out only individuals or firms that should not have access to or use of the specified security-related information either because they have a history of engaging in unlawful conduct related to computer software (e.g., they have been found to have engaged in a series of willful violations of intellectual property rights or of one more violations consisting of conduct such as counterfeiting), do not have any legitimate basis for needing the information, or are using the information in a way that threatens the proper operation and integrity of the systems and mechanisms to which they relate.

Competitive Impact Statement at 19. This will not be the case if there is no safeguard on the development or implementation of the standards. For example, Microsoft may decide to include financial or organizational requirements in order for a (1) an entity to be considered a ''business'' and (2) an entity to be considered an ''authentic and ''viable'' business. Microsoft may decide to require that, in order for an entity to be a ''business,'' it must operate in the market in a currently ''traditional'' manner, such as Microsoft operates, but not as many open source companies operate. Will a company need to undertake its own software development? Will a company need to own and license its software? Unless Microsoft is held to certain independent guidelines or policing, this provision may gut the intent of the Proposed Final Judgment.

The potential for abuse with this provision is particular Feat when considering the open source development community. Most open source software is not developed or owned by a for-profit business entity. It is the result of collaborative development, with software code contributed by its author for the benefit of all. The restrictive language of Section III.J(2) would expressly permit Microsoft to deny access to such open source development projects.

COMMENTS TO VI—DEFINITIONS

A fair reading of the Proposed Final Judgment supports that the protections extend to the direct participants in the market in which Microsoft was found to have unlawfully maintained its monopoly—the providers of competing operating systems. The Proposed Final Judgment, however, needs to ensure that the protections extend to all possible readings. It cannot be ignored that the clear finding Upheld by the Court of Appeals is that Microsoft unlawfully maintained its monopoly in the PC-compatible operating system market. Thus, if there is any possibility that Microsoft can find a loophole, that possible loophole should be closed. It is in this vein that we recommend that the definitions should be expanded to include providers of competing operating systems—the participants in the market in which Microsoft unlawfully has maintained its monopoly. Operating System Providers, then, should be specifically included within the ''ISV'' definition—as recommended, supra. Furthermore, a proposed definition for Operating System Providers follows:

''OSP'' means an operating system provider that provides a non-Microsoft software code that, inter alia, (i) controls the allocation and usage of hardware resources (such as the microprocessor and various peripheral devices) of a Personal Computer, (ii) provides a platform for developing applications by exposing functionality to ISVs through APIs, and (iii) supplies a user interface that enables users to access functionality of the operating system and in which they can run applications.

VI. COMMENTS TO SECTION IV—COMPLIANCE AND ENFORCEMENT PROCEDURES

A. Special Master

By not providing for the appointment of a Special Master to ensure enforcement of the Proposed Final Judgment, the Justice Department has left the injunctive relief toothless. There is absolutely nothing in the Proposed Final Judgment that provides a speedy vehicle for the resolution of complaints from an independent third party, such as Red Hat, that Microsoft has violated the Proposed Final Judgment. As suggested by the Litigating States in their proposed final judgment, the appointment of a Special Master could be made pursuant to Rule 53 of the Federal Rules of Civil Procedure.

B. Section IV.B—Appointment of a Technical Committee

The Technical Committee (''TC'') as constituted and mandated has no real authority or ability to address quickly and thoroughly third-party complaints regarding Microsoft's compliance with the Proposed Final Judgment. Moreover, it is structured as a committee of compromise and not enforcement. One of the members of the TC is to be selected by Microsoft, one of the members is selected by the plaintiffs and the third member is a joint selection. All of the members are to be ''experts in software design and programming.'' This narrowly restricts the scope of the TC to technical interpretations. It takes out of the realm of the TC's expertise issues relating to business practices and acts that may have a competitive impact on the market.

The TC should be supplemented with or assisted by a Special Master with the authority to order compliance with the Proposed Final Judgment. The Special Master will be able to address complaints relating to business practices as well as complaints relating to software disclosure or use.

C. Section IV.D—Voluntary Dispute Resolution

Section D sets forth the actual procedures for the Technical Committee to follow in the event that a third party makes a complaint regarding Microsoft's compliance with the Proposed Final Judgment. The procedures are general and the intent is to resolve complaints, not handle issues of enforcement. The Justice Department states that ''It]his dispute resolution function reflects the recognition that the market will benefit from rapid, consensual resolution of issues, where possible. It complements, but does not supplant, Plaintiffs'' other methods of enforcement. If the TC concludes that a complaint is meritorious, the TC will so advise Plaintiffs and Microsoft and propose a remedy.'' Competitive Impact Statement at 20. Despite this statement, the provision does nothing to ensure a resolution of issues. There is no requirement that Microsoft accept the remedy and no sanctions if Microsoft does not accept the remedy. In effect, there appears to be no ultimate control on Microsoft's conduct except for a separate action or convincing the Justice Department to seek an order to enforce the Proposed Final Judgment. This dispute resolution provision should be removed from the TC. The Special Master should administer the process for resolving third party complaints and have the authority to develop and administer a speedy process for resolving complaints and to order compliance if Microsoft is found to have violated the Proposed Final Judgment.

Respectfully submitted,

PATRICIA G. BUTLER
DANIELLE R. ODDO
Howrey Simon Arnold & White, LLP 1299 Pennsylvania Ave., NW Washington, DC 20004
(202) 783–0800
KENNETH M. FRANKEL
Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.
1300 1 Street, NW
Washington, DC 20005
(202) 408–4000
Attorneys for non-party
Red Hat, Inc.

Exhibit A

Microsoft Executive Says Linux Threatens Innovation (Update1)
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Source: Bloomberg News

Redmond, Washington, Feb. 14 (Bloomberg)—Microsoft Corp.'s Windows operating-system chief, Jim Allchin, says that freely distributed software code such as rival Linux could stifle innovation and that legislators need to understand the threat.

The result will be the demise of both intellectual property rights and the incentive to spend on research and development, he said yesterday, after the company previewed its latest version of Windows. Microsoft has told U.S. lawmakers of its concern while discussing protection of intellectual property rights.

Linux is developed in a so-called open-source environment in which the software code generally isn't owned by any one company. That, as well as programs such as music-sharing software from Napster Inc., means the world's largest software maker has to do a better job of talking to policymakers, he said.

''Open source is an intellectual-property destroyer,'' Allchin said. ''I can't imagine something that could be worse than this for the software business and the intellectual-property business.'' Microsoft distributes some of its programs without charge to customers, although it generally doesn't release its programming code, and it retains the ownership rights to that code. Linux is the most widely known open-source product, though other programs including the popular Apache system for Web server computers also are developed the same way.

$135 million investment in software maker Corel Corp. last October is being reviewed by the U.S. Justice Department. Corel said last month it willl drop efforts to develop the Linux operating system, though it will continue to make Linux applications. Corel said it hadn't consulted with Microsoft before making that decision.

Brian Behlendorf, founder of open-source company CollabNet Inc., said most companies that use the open-source development model do retain the rights to some of their intellectual property. ''I think Microsoft is trying to paint the open-source community as being fascist; that all software have has to be free, or none of it can be,'' said Behlendorf, whose company helps businesses run their own open-source projects.

Allchin said he's concerned that the open-source business model could stifle initiative in the computer industry.

Tin an American, I believe in the American Way,'' he said. ''I worry if the government encourages open source, and I don't think we've done enough education of policy makers to understand the threat.''

Linux Adoption

Some leading computer companies including International Business Machines Corp. and Hewlett-Packard Co. are selling Linux- based products and working on open-source projects, noted Jeremy Allison, a VA Linux Systems Inc. software developer. He's also a leader in a project develop an open-source file and printer server program. Microsoft only began significant lobbying efforts in the last few years. The Redmond, Washington-based company also talks to lawmakers about issues including the need for more visas for people with computer skills and computer privacy and security.

Linux is the fastest-growing operating system program for running server computers, according to research firm IDC. It accounted for 27 percent of unit shipments of server operating systems in 2000. Microsoft's Windows was the most popular on that basis, with 41 percent.

Despite Linux's success in some markets, Allchin says he isn't concerned about sales competition from the product. Microsoft provides support to change and develop products based on its operating system software that Linux companies don't, he said. Companies that use Linux in their products then must pay someone else for support, he said.

''We can build a better product than Linux,'' he said. ''There is always something enamoring about thinking you can get something for free.''

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Exhibit B

Microsoft CEO takes launch break with the Sun-Times

June 1, 2001

It's hard to find a computer that doesn't run a Microsoft product, particularly in Chicago. Microsoft's Chicago-based Midwest district office, which covers Illinois, Indiana and Wisconsin, is the tech giant's biggest moneymaker in the country, with more than 500 customers generating $500 million in revenue annually for Microsoft.

It should come as no surprise, then, that the Seattle-area company sent its No. 2 man, CEO Steve Ballmer, for the official launch of its new Office XP software Thursday at the United Center (yes, Bill Gates went to New York).

Between appointments in a whirlwind visit to Chicago—which included a lunch with 100 local companies and back-to-back-to-back media interviews-Ballmer sat down with Chicago Sun-Times reporter Dave Newbart to discuss the local tech economy, Microsoft's dominance in the market, the federal antitrust case, Microsoft's new licensing requirements and the open-source movement (in effect, free software on the Web, which he called a ''cancer'').

Q: Boeing recently moved to Chicago. Why doesn't Microsoft relocate here?

A: [laughs] We are quite comfortable with our headquarters in Seattle. Chicago is a great city. I'm from Detroit. I like it here. But we have 20,000 people comfortably ensconced in Seattle.

Q: More seriously, in Chicago we do seem to have an inferiority complex about our place in the tech world. Rankings frequently put us toward the bottom among major cities in terms of our tech presence. How do you view the state of our tech economy?

A: I think there is a lot of great stuff going on in Chicago. There are a lot of innovative users in the Chicago area, which is exciting. We have a lot of great partners. I'll be on stage with a company called Genesis [Consulting], which I'm very excited about. We have a local partner named Calypso [Systems].

We literally have dozens of partners doing very innovative work with customers here. I don't know what the national surveys say. Other than Silicon Valley, I think it's hard to point to any one place and say, ''That's where it's all happening.''

Q: Microsoft's market dominance and financial position are stronger than ever, despite the government's antitrust case and the weakening economy. Has the government's case had any impact on the way you do business?

A: There has been no legal ruling put into effect. We have and continue to innovate within the spirit and letter of the law. We continue to do what we have always done, because we think it's 100 percent correct. We add new capabilities to our product, we keep our prices low, we try to offer our customers better and better values. The laws were designed to encourage that and protect that behavior, because it's good for consumers.

Q: Microsoft has expanded to a number of markets, especially with the development of the Xbox and a smart phone. What's next, and is there any area that you don't see yourself entering?

A: We have a lot on our plate. We have a big dream about what XML (a markup language for documents containing structured information, such as words and graphics) can do for the world. The way software gets built will change over the years, which we are pursuing with our .Net platform. But we are hardly trying to do everything. I won't sit here and try to rule out that we might do other things in the future, but we have a few clear priorities.

Q: The new Windows XP software, I've seen a trial version, contains a number of free products—media player, a CD burner, an Internet firewall. Could that bundling hurt smaller competitors who make stand-alone software? Isn't this kind of bundling that you offered with Windows and Internet Explorer?

A: Just as with Internet Explorer, our job is to offer customers what they want. We are trying to provide more functionality at the same or better prices every day. [A]11 the new capabilities of Windows XP are open to software developers to add onto, to build value around. I think Windows XP ought to be a real boon to the kinds of innovations that come from smaller companies. The inclusion of Internet Explorer with Windows has been absolutely great ... for innovation in the software industry. Whether it was great for Netscape is a different question.

Q: Independent analyses of your new licensing policy indicate that unless a

company upgrades its software every two years, it could face costs from one-third to double what they are paying now to upgrade. What do you think of the criticism that says Microsoft is forcing companies to upgrade to Windows XP by October or face much higher costs later?

A: We are trying to simplify our licensing practices in many ways. We are clearly providing some incentive to upgrade more regularly. Your better customers get a better price. An analysis we've done, 80 percent of our customers are going to see the same or lesser prices, and 20 percent are going to see very small to somewhat larger increases.

Q: The new software also allows a user to install it only twice. You have recently cracked down on corporate piracy and large-scale pirating operations. Are home users next?

A: Intellectual property should be protected. That's the only way that a newspaper or a software company or record company or artist can get a fair return on their work. Our goal is to try to educate people on what it means to protect intellectual property and pay for it properly. We are trying to help customers understand when they are crossing the line by putting some bumps in the road so they can't do the wrong thing.

Q: Do you view Linux and the open-source movement as a threat to Microsoft?

A: Yeah. It's good competition. It will force us to be innovative. It will force us to justify the prices and value that we deliver. And that's only healthy. The only thing we have a problem with is when the government funds open-source work. Government funding should be for work that is available to everybody. Open source is not available to commercial companies. The way the license is written, if you use any open-source software, you have to make the rest of your software open source. If the government wants to put something in the public domain, it should. Linux is not in the public domain. Linux is a cancer that attaches itself in an intellectual property sense to everything it touches. That's the way that the license works.

Q: You've been on this job [as CEO] almost 18 months. What has it been like replacing Bill Gates?

A: [I]n a weird and strange way I probably feel more pressure now, no reason I should, but I feel a little more pressure, responsibility. The great thing is we get a chance to do two things. Bill gets a chance to put the highest possible percentage of time into our strategy. My particular capability and focus are really about building a management team, the business processes, etc. Bill and I are going to be around for a lot of years, but we are not going to be around forever. In some senses I'll put a little more time and energy into setting us up so the business is a business that doesn't depend on one guy, even a guy who is as talented as Bill Gates.

Exhibit C

Why Microsoft is wary of open source

By Joe Wilcox and Stephen Shankland

Staff Writers, CNET News.com

June 18, 2001, 11:00 AM PT

There's more to Microsoft's recent attacks on the open-source movement than mere rhetoric: Linux's popularity could hinder the software giant in its quest to gain control of a server market that's crucial to its long-term goals.

Recent public statements by Microsoft executives have cast Linux and the open-source philosophy that underlies it as, at the minimum, bad for competition, and, at worst, a ''cancer'' to everything it touches.

Behind the war of words, analysts say, is evidence that Microsoft is increasingly concerned about Linux and its growing popularity. The Unix-like operating system ''has clearly emerged as the spoiler that will prevent Microsoft from achieving a dominant position'' in the worldwide server operating-system market, IDC analyst AI Gillen concludes in a forthcoming report.

While Microsoft's overall operating-system market leadership is by no means in jeopardy, Linux's continued gains make it harder for Microsoft to further its core plan for the future, Microsoft. Net. The plan is a software-as-a-service initiative similar to plans from competitors including Hewlett-Packard, IBM and Sun Microsystems.

One of the cornerstones of .Net is HailStorm, which is built around the company's Passport authentication service.

Microsoft.Net and HailStorm make use of XML (Extensible Markup Language) to pass information between computers based on Windows and computers using other operating systems. However, many .Net components-such as Passport and server-based software including the company's SQL Server database software and BizTalk e-commerce server-only on Windows. ''The infrastructure to operate XML Web services relies on the Windows operating system and the .Net Enterprise Servers,'' Microsoft's marketing literature states.

Microsoft needs to control the server operating-system market if HailStorm and all the .Net services and subscriptions associated with it are to succeed, analysts say.

''HailStorm itself by definition needs Microsoft-provided or -partnered services, which means Microsoft's or its partners'' servers,'' said Gartner analyst David Smith. ''In that sense, Linux is a threat to .Net.''

Microsoft is expected to spend hundreds of millions of dollars marketing and developing .Net. Virtually every product from the company ties in to the plan at some point.

While Linux hasn't displaced Windows, it has made serious inroads. Linux accounted for 27 percent of new worldwide operating-system licenses in 2000, and Microsoft captured 41 percent of new licenses, according to IDC.

Overall, Gartner estimates Linux runs on nearly 9 percent of U.S. servers shipped in the third quarter of 2000, with worldwide projected Linux server sales of nearly $2.5 billion in 2001 and about $9 billion in 2005.

But Linux continues to gain credibility, particularly because of the massive support provided by IBM, which has pledged to spend $1 billion on Linux development.

In attacking Linux and open source, Microsoft finds itself competing ''not against another company, but against a grassroots movement,'' said Paul Dain, director of application development at Emeryville, Calif.-based Wirestone, a technology services company.

''My guess is that they are now under pressure to defend themselves against the criticism from the open-source and free-software communities—whether it's justified or not—as well as companies like IBM that are aggressively marketing Linux,'' Dain said. ''In order to combat that, they have to use strong language to get their point across.''

Increasing Linux use makes it more difficult to spread the .Net message. That, in turn, has led to a string of comments from Microsoft executives publicly denouncing Linux and open source. ''Linux is a cancer that attaches itself in an intellectual property sense to everything it touches,'' Chief Executive Steve Ballmer said in an interview with the Chicago Sun-Times.

Despite Microsoft's criticism, the company still uses open-source code in some products. Servers for the company's Hotmail e-mail service use FreeBSD for some DNS (domain name server) functions.

''This is a legacy issue that came from Hotmail when we originally got it,'' said Microsoft spokesman Rick Miller. ''We haven't gone out, purchased and put into place FreeBSD. It came when we purchased other companies. We didn't build any of our infrastructure on FreeBSD. We build it on Windows.''

In the mid 1980s, Microsoft licensed its TCP/IP (transmission control protocol/Internet protocol) networking stack from another company that used open-source code. ''You could say it had its genesis in FreeBSD, but it's now absolutely Windows,'' Miller said. The code first appeared in Windows NT and also was used in Windows 2000.

Critical of change

Microsoft has also criticized the General Public License (GPL) that governs the heart of Linux. Under this license, changes to the Linux core, or kernel, must also be governed by the GPL. The license means that if a company changes the kernel, it must publish the changes and can't keep them proprietary if it plans to distribute the code externally.

Other open-source projects, such as FreeBSD, allow changes that are kept proprietary. That provision was one reason FreeBSD proved appealing to Wind River Systems, the dominant seller of operating systems for non-PC ''embedded'' computing devices such as network routers. Microsoft's open-source attacks come at a time when the company has been putting the pricing squeeze on customers. In early May, Microsoft revamped software licensing, raising upgrades between 33 percent and 107 percent, according to Gartner. A large percentage of Microsoft business customers could in fact be compelled to upgrade to Office XP before Oct. 1 or pay a heftier purchase price later on.

The action ''will encourage—'force'' may be a more accurate term—customers to upgrade much sooner than they had otherwise planned,'' Gillen noted in the IDC report. ''Once the honeymoon period runs out in October 2001, the only way to 'upgrade'' from a product that is not considered to be current technology is to buy a brand-new full license.'''

This could make open-source Linux's GPL more attractive to some customers feeling

trapped by the price hike, Gillen said. ''Offering this form of ''upgrade protection'' may motivate some users to seriously consider alternatives to Microsoft technology.''

Ray Bailey, information services manager at The Bergquist Company, said a recent meeting with Microsoft changed the technology direction of his company, which manufactures electronic components and other goods.

''Our IS team agreed that, due to Microsoft's changing of the licensing rules and the manner in which they have given us less-than-adequate time to process those changes, we are seriously looking at other platforms,'' he said. ''Linux is a strong contender for our next server because of the low-cost nature of the licensing.''

Internally, Microsoft seems somewhat torn on how to approach the open-source movement. While the company denounces the move toward free software, it does recognize at least some of the value of open-source development.

''Microsoft views open source as a competitor, but it's hard to treat it as a competitor,'' Gartner's Smith said. ''So they have to attack basic tenets, mentality, way of life and thought processes.'' Since last year, Microsoft has made available to hundreds of its larger customers copies of its closely guarded Windows source code. The company hopes its best customers can help it improve Windows.

Microsoft has been touting plans to broaden Windows source-code access to business partners in an initiative it calls its ''shared-source philosophy.''

In particular, Microsoft wants to emulate the spirit of cooperation that has spawned groups of volunteer Linux programmers. ''Having a sense of community is a good thing. It's one thing we've watched with interest,'' Craig Mundie, senior vice president of advanced strategies at Microsoft, said in a recent interview. ''The more of that we can foster in our community, the better.''

Building a better community

Microsoft hopes to imbue its programmer network with some of this community spirit, Mundie said. ''The Microsoft Developer Network hasn't been one where there was a lot of dialogue between (developers) and with Microsoft developers.''

Though Microsoft will be expanding how it engages directly with those who see its source code, the company isn't going to extend the right granted to many members of the open-source community-the power to change the software. People may submit bug fixes, but ''customers aren't trying to buy the rights to produce derivatives,'' Mundie said. ''In general, we're going to control that reintegration. We worry a lot about uniformity and avoiding fragmentation.''

But how far Microsoft is willing to go with open source appears limited, said Smith, who noted that while attacking Linux, the company promises to support the Unix variant through .Net. It's ''a nice PR story for Microsoft to talk about the possibilities about .Net on Linux,'' he said. ''It is true that Linux can participate in those .Net services, but don't expect Microsoft to provide any incentive or anything else that would make that possible.''

Dain said Microsoft's attacks on Linux and open source may in the long run benefit technology buyers. ''Personally, I think the talk on both sides-Microsoft vs. open source—will end up benefiting consumers in the workplace and at home. There definitely is competition in the marketplace, and this battle simply proves the point.''

And while Microsoft may have the advantage in the consumer market with Windows, it's still the underdog in the large-scale business server market.

''To many people, including myself, implementing a Microsoft solution is a much more cost-effective way to go than a Sun or other high-end Unix/mainframe solution,'' Dain said.

Exhibit D

Microsoft license spurns open source

By Stephen Shankland

Staff Writer, CNET News.com

June 22, 2001, 12:05 PM PT

Microsoft lawyers have joined the company's campaign against open-source software, restricting how developers may use what it terms ''viral software'' in connection with Microsoft programming tools.

The license of the second beta version of Microsoft's Mobile Internet Toolkit—software used so programmers can create server software to connect with handheld computers over the Internet—prohibits customers from using the Microsoft software in conjunction with ''potentially viral software.'' (Read an excerpt here)

In describing this category of software, Microsoft includes the most common licenses used for publishing open-source software, such as the Linux operating system. Licenses specifically excluded by Microsoft include the General Public License, the Lesser General Public License, the Mozilla Public License and the Sun Industry Standards License.

While the provision in Microsoft's license isn't surprising, Fenwick & West intellectual property attorney Dana Hayter said the company could have picked a more neutral term, such as ''open software.''

''The choice of the term says more about Microsoft's view than the rest of it,'' Hayter said. ''I think it's a pejorative and misleading term. To suggest that open-source software is somehow ''vital'' is to confuse harm to your customers'' machines and data with harm to Microsoft's profits.'' Microsoft representatives weren't immediately available for comment.

The license provision, posted Thursday at Linux Today, is the latest step in an increasingly vocal campaign by Microsoft Chairman Bill Gates, Senior Vice President Craig Mundie and Chief Executive Steve Ballmer to disparage open-source software.

The campaign, in which the executives have compared open-source software to viruses and cancer, comes at a time when some observers believe Microsoft is worried that Linux—the best-known open-source project—will undermine the Microsoft. Net strategy for joining desktop computer users with sophisticated Internet services.

Some open-source fans weren't happy with Microsoft's view of the software world and its use of the term ''viral software.''

''The GPL is not a virus, it is a vaccine, an inoculation against later abuse of your code by having someone, such as Microsoft, take your hard work, incorporate it into a proprietary product which is then extended and kept closed, marginalizing your project in the process,'' said one comment at discussion site Slashdot.

The Microsoft license seeks to prevent the possibility that a program that links both to Microsoft and open-source software components could force Microsoft to expose the now-secret source code of its software, Hayter said.

''They're saying you cannot use (Microsoft) software in a way that would create in Microsoft any obligations to do anything with (Microsoft's) code, for example to make the source public,'' Hayter said.

One example of a forbidden move would be to create software that used prepackaged components called libraries from Microsoft as well as a library covered by the GPL, Hayter said. Under the terms of the GPL, software covered by it may be directly incorporated only into other GPL software.

But a legally grayer area is creating software that merely calls upon such libraries rather than incorporating the library code directly. The Free Software Foundation created the LGPL license for precisely such occasions; this license allows links to proprietary software.

One example is the use of a library called ''readline'' that lets people use arrow keys and perform some other tasks when typing information into a computer, said PostgreSQL database developer Bruce Momjian. Because PostgreSQL is released under a BSD-style license that has different terms than the GPL, GPL code may not be freely mixed within PostgreSQL.

''If we required the readline library, then the entire PostgreSQL software would have to be GPL'd,'' Momjian said, noting that programs such as the BSD-licensed libedit software offer an alternative. ''If you use (readline) in any application, your entire application is GPL.'' Regardless of the legalities involved, the provision in the license is significant, Hatyer said. ''This demonstrates they're taking open source seriously.''

Exhibit E

By Mike Ricciuti

Staff Writer, CNET News.com

November 5, 1998, 11:20 AM PT

Microsoft engineers see Linux as a ''best-of-breed'' Unix that outperforms the company's own Windows NT operating system and is a ''credible alternative'' to commercially developed servers, according to an internal memo posted to the Web this week.

The admission, contained in the second so-called Halloween memo posted to the Web this week by programmer Eric Raymond, is counter to the company's public statements downplaying the significance of Linux, and its suggestions that Fortune 1,000 companies have little interest in open source software (OSS).

The new memo also contains a single sentence suggesting that the company may investigate the use of patents and copyrights to combat Linux. Microsoft representatives were not immediately available to comment further on the statement.

In a preface to the memo, Raymond states that the document had been leaked to him by a former Microsoft employee. A Microsoft representative today said the document appears to be authentic, and said it is the second in ''what could be a series'' of similar memos posted to the Web. Yesterday, a Microsoft representative downplayed the significance of the initial memo.

According to the new memo, written by Microsoft engineer Vinod Valloppillil, Linux ''represents a best-of-breed Unix, that is trusted in mission critical applications, and—due to its open source code—has a long term credibility which exceeds many other competitive OS's.''

In what the memo's author considers the ''worst case'' scenario for Microsoft, Linux will ''provide a mechanism for server OEMs to provide integrated, task-specific products and completely bypass Microsoft revenues in this space.''

Another new revelation contained in the new memo is that Microsoft considers Linux to be a threat on both server and client systems. ''Long term, my simple experiments do indicate that Linux has a chance at the desktop market..,'' the memo states. The initial memo only cited the server market as a competitive battleground between Linux and Windows NT, now renamed Windows 2000.

The first memo, posted to the Web over the weekend, showed that Microsoft executives fear that the growing popularity of Linux and other open source software poses a direct threat to the company's revenue stream, and suggests the company could respond by modifying Internet protocols to become proprietary technologies that tie consumers and developers to Microsoft products.

In the new memo, some of the reasons for the company's fears are more clearly defined. The memo states:

. ''Most of the primary apps that people require when they move to Linux are already available for free. This includes Web servers, POP clients, mail servers, text editors, etc.''

. ''An advanced Win32 GUI user would have a short learning cycle to become productive [under Linux].''

. ''I previously had [Internet Explorer and Windows NT] on the same box and by comparison the combination of Linux /[Netscape Navigator] ran at least 30 to 40 percent faster when rendering simple HTML + graphics.''

. ''Linux's (real and perceived) virtues over Windows NT include: Customization. Availability/Reliability. Scalability/ Performance. Interoperability.'' The author of the memo also writes that he believes consumers ''love'' Linux.

Exhibit F

Microsoft sues Linux start-up over name

By Joe Wilcox and David Becker

Staff Writers, CNET News.com

December 20, 2001,3:50 PM PT

Microsoft asked a court on Thursday to stop a Linux start-up from using a name the software giant contends infringes on the Windows trademark.

The Redmond, Wash.-based software giant filed a motion with the U.S. Court for the Western District of Washington against Lindows, which is developing a version of the Linux operating system that will run popular applications written for Microsoft's Windows OS.

Microsoft contends the company, which plans to formally release its product next year, purposely is trying to confuse Lindows with Windows. The suit asks the court to order the start-up to stop using the Lindows name and also seeks unspecified monetary damages.

''We're not asking the court to stop the company from making their products,'' said Microsoft spokesman Jon Murchinson. ''What we're saying is they should not use a name that could confuse the public and infringe on our valuable trademark.''

Lindows is based on the Wine project, an open-source effort to mimic the commands that Windows programs use. The San Diego-based Lindows company was launched earlier this year by Michael Robertson, former CEO of digital music site MP3.com.

Robertson characterized the move as another attempt by Microsoft to thwart a viable threat to its Windows empire.

''If they're alleging that people are going to be confusing Microsoft Corp. with Lindows.com, I think there's zero potential of that happening,'' he said. ''If people are confused, just remember that we're not the convicted monopolist.''

Murchinson said Microsoft considered legal action a last resort.

''Clearly we prefer to work with them to resolve this problem voluntarily. Their product name infringes on our trademark,'' Murchinson said. ''We hope they will work with us to resolve this problem without the need for legal action.'' Robertson said he had heard from nobody at Microsoft regarding the name dispute. ''They

Microsoft has been involved in an increasingly fractious war of words with Linux supporters this year, with Microsoft executives castigating the open-source distribution model behind Linux as a sure road to commercial failure and on blight for software development. Emmett Stanton, an attorney at Palo Alto, Calif.-based Fenwick & West, said Microsoft has not been overzealous in the past about protecting its trademark, allowing spoof sites and others to go unchallenged.

''They're not the type to sue at the drop of a hat,'' he said, concluding that there appears to be solid ground for the Lindows complaint. ''Superficially, you would have to say there's some potential for confusion, and the defendant may be trying to trade on Microsoft's position in the marketplace.''

Robertson said he hoped to have a preview version of Lindows ready for download by next week, with a full version ready early next year. He said the company is targeting small and medium-sized business that might be interested in switching to a less expensive operating system but have invested in Windows applications such as Office. ''We're trying to give consumers a choice, where there's really no choice today,'' he said.

FOR IMMEDIATE RELEASE FRIDAY, NOVEMBER 2, 2001 WWW.USDOJ.GOV AT (202) 514–2007 TDD (202) 514–1888

DEPARTMENT OF JUSTICE AND MICROSOFT CORPORATION REACH EFFECTIVE SETTLEMENT ON ANTITRUST LAWSUIT

Settlement Provides Enforcement Measures To Stop Microsoft's Unlawful Conduct, Prevent Its Recurrence, And Restore Competition

WASHINGTON, DC—The Department of Justice reached a settlement today with Microsoft Corporation that imposes a broad range of restrictions that will stop Microsoft's unlawful conduct, prevent recurrence of similar conduct in the future and restore competition in the software market, achieving prompt, effective and certain relief for consumers and businesses. The settlement reached today accomplishes this by: creating the opportunity for independent software vendors to develop products that will be competitive with Microsoft's middleware products on a function-by-function basis; giving computer manufacturers the flexibility to contract with competing software developers and place their middleware products on Microsoft's operating system; preventing retaliation against computer manufacturers, software developers, and other industry participants who choose to develop or use competing middleware products; and ensuring full compliance with the proposed Final Judgment and providing for swift resolution of technical disputes.

''A vigorously competitive software industry is vital to our economy and effective antitrust enforcement is crucial to preserving competition in this constantly evolving high-tech arena,'' said Attorney General John Ashcroft. ''This historic settlement will bring effective relief to the market and ensure that consumers will have more choices in meeting their computer needs.'' The settlement, which will be filed today in U.S. District Court in the District of Columbia with Judge Colleen Kollar-Kotelly, if approved by the court, would resolve the lawsuit filed by the Department on May 18, 1998.

''This settlement will promote innovation, give consumers more choices, and provide the computer industry as a whole with more certainty in the marketplace,'' said Charles A. James, Assistant Attorney General for the Antitrust Division. ''The goals of the government were to obtain relief that stops Microsoft from engaging in unlawful conduct, prevent any recurrence of that conduct in the future, and restore competition in the software market-we have achieved those goals.''

Today's proposed settlement is modeled on the conduct provisions in the original Final Judgment entered by Judge Jackson, but includes key additions and modifications that take into account the and anticipated changes in the computer industry, including the launch of Microsoft's new Windows XP operating system, and the Court of Appeals decision revising some of the original liability findings.

The proposed Final Judgment includes the following key provisions:

Broad Scope of Middleware Products- The proposed Final Judgment applies a broad definition of middleware products which is wide ranging and will cover all the technologies that have the potential to be middleware threats to Microsoft's operating system monopoly. It includes browser, e-mail clients, media players, instant messaging

software, and future new middleware developments.

Disclosure of Middleware Interfaces- Microsoft will be required to provide software developers with the interfaces used by Microsoft's middleware to interoperate with the operating system.

This will allow developers to create competing products that will emulate Microsoft's integrated functions.

Disclosure of Server Protocols- The Final Judgment also ensures that other non-Microsoft server software can interoperate with Windows on a PC the same way that Microsoft servers do. This is important because it ensures that Microsoft cannot use its PC operating system monopoly to restrict competition among servers. Server support applications, like middleware, could threaten Microsoft's monopoly.

Freedom to Install Middleware Software—Computer manufacturers and consumers will be free to substitute competing middleware software on Microsoft's operating system.

Ban on Retaliation—Microsoft will be prohibited from retaliating against computer manufacturers or software developers for supporting or developing certain competing software. This provision will ensure that computer manufacturers and software developers are able to take full advantage of the options granted to them under the proposed Final Judgment without fear of reprisal. Uniform Licensing Terms- Microsoft will be required to license its operating system to key computer manufacturers on uniform terms for five years. This will further strengthen the ban on retaliation.

Ban on Exclusive Agreements- Microsoft will be prohibited from entering into agreements requiring the exclusive support or development of certain Microsoft software. This will allow software developers and computer manufacturers to contract with Microsoft and still support and develop rival middleware products.

The proposed Final Judgment also includes key additional provisions related to enforcement: Licensing of Intellectual Propert—Microsoft also will be required to license any intellectual property to computer manufacturers and software developers necessary for them to exercise their rights under the proposed Final Judgment, including for example, using the middleware protocols disclosed by Microsoft to interoperate with the operating system. This enforcement measure will ensure that intellectual property rights do not interfere with the rights and obligations under the proposed Final Judgment.

On-Site Enforcement Monitors- The proposed settlement also adds an important enforcement provision that provides for a panel of three independent, on-site, full-time computer experts to assist in enforcing the proposed Final Judgment. These experts will have full access to all of Microsoft's books, records, systems, and personnel, including source code, and will help resolve disputes about Microsoft's compliance with the disclosure provisions in the Final Judgment. The core allegation in the lawsuit, upheld by the Court of Appeals in June 2001, was that Microsoft had unlawfully maintained its monopoly in computer-based operating systems by excluding competing software products known as middleware that posed a nascent threat to the Windows operating system.

Specifically, the Court of Appeals found that Microsoft engaged in unlawful exclusionary conduct by using contractual provisions to prohibit computer manufacturers from supporting competing middleware products on Microsoft's operating system; prohibiting consumers and computer manufacturers from removing Microsoft's middleware products from the operating system; and reaching agreements with software developers and third parties to exclude or disadvantage competing middleware products.

The proposed Final Judgment will be published by the **Federal Register**, along with the Department's Competitive Impact Statement, as required by the Antitrust Procedures and Penalties Act. Any person may submit written comments concerning the proposed consent decree within 60 days of its publication to: Renata Hesse, Trial Attorney, 325 7th Street, NW, Suite 500, Washington, DC 20530, (202–6160944). At the conclusion of the 60-day comment period, the Court may enter the proposed consent decree upon a finding that it serves the public interest. The proposed Final Judgment will be in effect for a five year period and may be extended for an additional two-year period if the Court finds that Microsoft has engaged in multiple violations of the proposed Final Judgment.

6330670 Digital rights management operating system 11-Dec-01

6330589 System and method for using a client database to manage conversation threads generated from email or news messages 11-Dec-01

6330566 Apparatus and method for optimizing client-state data storage 11-Dec-01

6330563 Architecture for automated data analysis 11-Dec-01

6330003 Transformable graphical regions 11-Dec-01

6327705 Method for creating and maintaining user data 04-Dec-01

6327702 Generation a compiled language program for an interpretive runtime environment 04-Dec-01

6327699 Whole program path profiling 04-Dec-01

6327652 Loading and identifying a digital rights management operating system 04-Dec-01

6327617 Method and system for identifying and obtaining computer software fro a remote computer 04-Dec-01

6327608 Server administration tool using remote file browser 04-Dec-01

6327589 Method for searching a file having a format unsupported by a search engine 04-Dec-01

6326964 Method for sorting 3D object geometry among image chunks for rendering in a layered graphics rendering system 04-Dec-01

6326953 Method for converting text corresponding to one keyboard mode to text corresponding to another keyboard more 04-Dec-01

6326947 Ractile character input in computer-based devices 04-Dec-01

6324587 Method, computer program product, and data structure for publishing a data object over a store and forward transport 27-Nov-01

6324571 Floating single master operation 27-Nov-01

6324546 Automatic logging of application program launches 27-Nov-01

6324544 File object synchronization between a desktop computer and a mobile device 27-Nov-01

6324492 Server stress testing using multiple concurrent client simulation 27-Nov-01

6321334 Administering permissions associated with a security zone in a computer system security model 20-Nov-01

6321276 Recoverable methods and systems for processing input/output requests including virtual memory addresses 20-Nov-01

6321275 Interpreted remote procedure calls 20-Nov-01

6321274 Multiple procedure calls in a single request 20-Nov-01

6221243 Laying out a paragraph by defining all the characters as a single text run by substituting, and then positioning the glyphs 20-Nov-01

6321226 Flexible keyboard searching 20-Nov-01

6321225 Abstracting cooked variables from raw variables 20-Nov-01

6321219 Dynamic symbolic links for computer file systems 20-Nov-01

6320978 Stereo reconstruction employing a layered approach and layer refinement techniques 20-Nov-01

6317880 Patch source list management 13-Nov-01

6317818 Pre-fetching of pages prior to a hard page fault sequence 13-Nov-01

6317774 Providing predictable scheduling of programs using a repeating precomputed schedule 13-Nov-01

6317760 Extensible ordered information within a web page 13-Nov-01

6317748 Management information to object mapping and correlator 13-Nov-01

6314562 Method and system for anticipatory optimization of computer programs 06-Nov-01

6314533 System and method for forward custom marshaling event filters 06-Nov-01

6314417 Processing multiple database transactions in the same process to reduce process overhead and redundant retrieval from database servers 06-Nov-01

6313851 User friendly remote system interface 06-Nov-01

6311323 Computer programming language statement building and information tool 30-Oct-01

6311228 Method and architecture for simplified communications with HID devices 30-Oct-01

6311216 Method, computer program product, and system for client-side deterministic routing and URL lookup into a distributed cache of URLS 30-Oct-01

6311209 Methods for performing client-hosted application sessions in distributed processing systems 30-Oct-01

6308274 Least privilege via restricted tokens 23-Oct-01

6308273 Method and system of security location discrimination 23-Oct-01

6308266 System and method for enabling different grades of cryptography strength in a product 23-Oct-01

6308222 Transcoding of audio data 23-Oct-01

6308173 Methods and arrangements for contro??ing resource access in a networked computing environment 23-Oct-01

6307566 Methods and apparatus for performing image rendering and rasterization operations 23-Oct-01

6307547 Method and system for providing enhanced folder racks 23-Oct-01

6307538 EMC enhanced peripheral device 23-Oct-01

6305008 Automatic statement completion 16-Oct-01

6304928 Compressing/decompressing bitmap by performing exclusive- or operation setting differential encoding of first and previous row therewith outputting run-length encoding of row 16-Oct-01

6304918 Object interface control system 16-Oct-01

6304917 Negotiating optimum parameters in a system of interconnected components 16-Oct-01

6304914 Method and apparatus for pre-compression packaging 16-Oct-01

6304879 Dynamic data cache for object-oriented computing environments 16-Oct-01

6304878 Method and system for improved enumeration of tries 16-Oct-01

6304261 Operating system for handheld computing device having program icon auto hide 16-Oct-01

6304258 Method and system for adding application defined properties and application defined property sheet pages 16-Oct-01

6303924 Image sensing operator input device 16-Oct-01

6301616 Pledge-based resource allocation system 09-Oct-01

6301612 Establishing one computer as a replacement for another computer 09-Oct-01

6301601 Disabling and enabling transaction committal in transactional application components 09-Oct-01

6298440 Method and system for providing multiple entry point code resources 02-Oct-01

6298391 Remote procedure calling with marshaling and unmarshaling of arbitrary non-conformant pointer sizes 02-Oct-01

6298373 Local service provider for pull based intelligent caching system 20-Oct-01

6298342 Electronic database operations for perspective transformations on relational tables using pivot and unpivot columns 02-Oct-01

6298321 Trie compression using substates and utilizing pointers to replace or merge identical, reordered states 02-Oct-01

6297837 Method of maintaining characteristics information about a system component either modified by an application program or a user initiated change 02-Oct-01

6295608 Optimized allocation of data elements among cache lines 25-Oct-01

6295556 Method and system for configuring computers to connect to networks using network connection objects 25-Oct-01

6295529 Method and apparatus for indentifying clauses having predetermined characteristics indicative of usefulness in determining relationships between different texts 25-Oct-01

6292934 Method and system for improving the locality of memory references during execution of a computer program 18-Oct-01

6292857 Method and mechanism for coordinating input of asynchronous data 18-Oct-01

6292840 Voice/audio data communication with negotiated compression scheme and data header compressed in predetermined scheme 18-Oct-01

6292834 Dynamic bandwidth selection for efficient transmission of multimedia streams in a computer network 18-Sep-01

6292822 Dynamic load balancing among processors in a parallel computer 18-Sep-01

6292194 Image compression method to reduce pixel and texture memory requirements in graphics applications 18-Sep-01

6289464 Receiving wireless information on a mobile device with reduced power consumption 11-Sep-01

6289458 Perproperty access control mechanism 11-Sep-01

6289390 System and method for performing remote requests with an on-line service network 11-Sep-01

6288726 Method for rendering glyphs using a layout services library 11-Sep-01

6288720 Method and system for adding application defined properties and application defined property sheet pages 11-Sep-01

6286131 Debugging tool for linguistic applications 04-Sep-01

6286013 Method and system for providing a common name space for long and short file names in an operating system 04-Sep-01

6285998 System and method for generating reusable database queries 04-Sep-01

6285374 Blunt input device cursor 04-Sep-01

6285363 Method and system for sharing applications between computer systems 04-Sep-01

6282712 Automatic software installation on heterogeneous networked computer systems 28-Aug-01

6282621 Method and apparatus for reclaiming memory 28-Aug-01

6282561 Method and system for resource management with independent real-time applications on a common set of machines 28-Aug-01

6282327 Maintaining advance widths of existing characters that have been resolution enhanced 28-Aug-01

6282294 System for broadcasting to, and programming, a motor device in a protocol, device, and network independent fashion 28-Aug-01

6281881 System and method of adjusting display characteristics of a displayable data file using an ergonomic computer input device 28-Aug-01

6281879 Timing and velocity control for displaying graphical information 28-Aug-01

6279111 Security model using restricted tokens 21-Aug-01

6279032 Method and system for quorum resource arbitration in a server cluster 21-Aug-01

6279016 Standardized filtering control techniques 21-Aug-01

6279007 Architecture for managing query friendly hierarchical values 21-Aug-01

6278989 Histogram construction using adaptive random sampling with cross-validation for database systems 21-Aug-01

6278462 Flexible schemes for applying properties to information in a medium 21-Aug-01

6278450 System and method for customizing controls on a toolbar 21-Aug-01

6278448 Composite Web page built from any web content 21-Aug-01

6278434 Non-square scaling of image data to be mapped to pixel sub-components 21-Aug-01

6275957 Using query language for provider and subscriber registrations 14-Aug-01

6275938 Security enhancement for untrusted executable code 14-Aug-01

6275912 Method and system for storing data items to a storage device 14-Aug-01

6275868 Script Engine interface for multiple languages 14-Aug-01

6275857 System and method for freeing shared resources in a computer system 14-Aug-01

6275829 Representing a graphic image on a web page with a thumbnail-sized image 14-Aug-01

6275496 Content provider for pull based intelligent caching system 14-Aug-01

6272631 Protected storage of core data secrets 07-Aug-01

6272593 Dynamic network cache directories 07-Aug-01

6272581 System and method for encapsulating legacy data transport protocols for IEEE 1394 serial bus 07-Aug-01

6272545 System and method for interaction between one or more mobile devices 07-Aug-01

6271858 Incremental update for dynamic/animated textures on three-dimensional models 07-Aug-01

6271855 Interactive construction of 3D models from panoramic images employing hard and soft constraint characterization and decomposing techniques 07-Aug-01

6271847 Inverse texture mapping using weighted pyramid blending and view-dependent weight maps 07-Aug-01

6271839 Method and system for sharing applications between computer systems 07-Aug-01

6269477 Method and system for improving the layout of a program image using clustering 31-Jul-01

6269403 Browser and publisher for multimedia object storage, retrieval and transfer 31-Jul-01

6269382 Systems and methods for migration and recall of data from local and remote storage 31-Jul-01

6269377 System and method for managing locations of software components via a source list 31-Jul-01

6368855 Method and system for sharing applications between computer systems 31-Jul-01

6268852 System and method for facilitating generation and editing of event handlers 31-Jul-01

6266729 Computer for encapsulating legacy data transport protocol for IEEE 1394 serial bus 24-Jul-01

6266665 Indexing and searching across multiple sorted arrays 24-Jul-01

6266658 Index tuner for given workload 24-Jul-01

6266064 Coherent visibility sorting and occlusion cycle detection for dynamic aggregate geometry 24-Jul-01

6266059 User interface for switching between application modes 24-Jul-01

6266054 Automated removal of narrow, elongated distortions from a digital image 24-Jul-01

6266043 Apparatus and method for automatically positioning a cursor on a control 24-Jul-01

6263492 Run time object layout model with object type that differs from the derived object type in the class structure at design time and the ability to store the optimized run time object layout model 17-Jul-01

6263491 Heavyweight and lightweight instrumentation 17-Jul-01

6263379 Method and system for referring to and binding to objects using identifier objects 17-Jul-01

6263367 Server-determined client refresh periods for dynamic directory services 17-Jul-01

6263352 Automated web site creation using template driven generation of active server page applications 17-Jul-01

6263337 Scalable system for expectation maximization clustering of large detabases 17-Jul-01

6263334 Density-based indexing method for efficient execution of high dimensional nearest-neighbor queries on large databases 17-Jul-01

6262733 Method of storing and providing icons according to application program calls and user-prompted system metric changes 17-Jul-01

6262730 Intelligent user assistance facility 17-Jul-01

6262712 Handle sensor with fade-in 17-Jul-01

6260148 Methods and systems for message forwarding and property notifications using electronic subscriptions 10-Jul-01

6260043 Automatic file format converter 10-Jul-01

6256780 Method and system for assembling software components 03-Jul-01

6256668 Method for identifying and obtaining computer software from a network computer using a tag 03-Jul-01

6256650 Method and system for automatically causing editable text to substantially occupy a text frame 03-Jul-01

6256642 Method and system for file system management using a flash-erasable, programmable, read-only memory 03-Jul-01

6256634 Method and system for purging tombstones for deleted data items in a replicated database 03-Jul-01

6256623 Network search access construct for accessing web-based search services 03-Jul-01

6256069 Generation of progressive video from interlaced video 03-Jul-01

6256031 Integration of physical and virtual namespace 03-Jul-01

6256028 Dyanmic site browser 03-Jul-01

6256013 Computer pointing device 03-Jul-01

6256009 Method for automatically and intelligently scrolling handwritten input 03-Jul-01

6253374 Method for validating a signed program prior to execution time or an unsigned program at execution time 26-Jun-01

6253324 Server verification of requesting clients 26-Jun-01

6253255 System and method for batching data between transport and link layers in a protocol stack 26-Jun-01

6253241 Selecting a cost-effective bandwidth for transmitting information to an end user in a computer network 26-Jun-01

6253195 Optimized query tree 26-Jun-01

6253194 System and method for performing database queries using a stack machine 26-Jun-01

6252608 Method and system for improving shadowing in a graphics rendering system 26-Jun-01

6252593 Assisting controls in a windowing environment 26-Jun-01

6252589 Multilingual user interface for an operating system 26-Jun-01

6249908 System and method for representing graphical font data and for converting the font data to font instructions 19-Jun-01

6249866 Encrypting file system and method 19-Jun-01

6249826 System and method for media status notification 19-Jun-01

6249822 Remote procedure call method 19-Jun-01

6249792 On-line dynamic file shrink facility 19-Jun-01

6249284 Directional navigation system in layout managers 19-Jun-01

6249274 Computer input device with inclination sensors 19-Jun-01

6247061 Method and computer program product for scheduling network communication packets originating from different flows having unique service requirements 12-Jun-01

6247057 Network server supporting multiple instance of services to operate concurrently by having endpoint mapping subsystem for mapping virtual network names to virtual endpoint IDs 12-Jun-01

6247042 Method and system for restoring the state of physical memory as the focus changes among application programs in a computer 12-Jun-01

6246977 Information retrieval utilizing semantic representation of text and based on constrained expansion of query words 12-Jun-01

6246412 Interactive construction and refinement of 3D models from multiple panoramic images 12-Jun-01

6246409 Method and system for connecting to, browsing, and accessing computer network resources 12-Jun-01

6246404 Automatically generating code for integrating context-sensitive help functions into a computer software application 12-Jun-01

6243825 Method and system for transparently failing over a computer name in a server cluster 05-Jun-01

6243821 System and method for managing power consumption in a computer system 05-Jun-01

6243766 Method and system for updating software with smaller patch files

6243764 Method and system for aggregating objects 05-Jun-01

6243753 Method, system, and computer program product for creating a raw data channel form an integrating component to a series of kernel mode filters 05-Jun-01

6243721 Method and apparatus for providing automatic layout capabilities for computer forms 05-Jun-01

6243701 System and method for sorting character strings containing accented and unaccented characters 05-Jun-01

6243093 Methods, apparatus and data structures for providing a user interface, which exploits spatial memory in three-dimensions, to objects and which visually groups matching objects 05-Jun-01

6243070 Method and apparatus for detecting and reducing color artifacts in images 05-June-01

6240472 Method and system for sharing a communications port 29-May-01

6240465 Method and system for aggregating objects 29-May-01

6240456 System and method for collecting printer administration information 29-May-01

6239814 Method for indicating the existence of a control object 29-May-01

6239783 Weighted mapping of image data samples to pixel sub-components on a display device 29-May-01

6237144 Use of relational databases for software installation 22-May-01

6236390 Methods and apparatus for positioning displayed characters 22-May-01

6233731 Program-interface converter for multiple-platform computer systems 15-May-01

6233624 System and method for layering drivers 15-May-01

6233606 Automatic cache synchronization 15-May-01

6233570 Intelligent user assistance facility for a software program 15-May-01

6232976 Optimizing dynamic/animating textures for use in three-dimensional models 15-May-01

6232974 Decision-theoretic regulation for allocating computational resources among components of multimedia content to improve fidelity 15-May-01

6232972 Method for dynamically displaying controls in a toolbar display based on control usage 15-May-01

6232966 Method and system for generating comic panels 15-May-01

6232958 Input device with multiplexed switches 15-May-01

6232957 Technique for implementing an on-demand tool glass for use in a desktop user interface 15-May-01

6230318 Application programs constructed entirely from autonomous component objects 08-May-01

6230312 Automatic detection of per-unit location constraints 08-May-01

6230269 Distributed authentication system and method 08-May-01

6230212 Method and system for the link tracking of objects 08-May-01
6230173 Method for creating structured documents in a publishing system 08-May-01
6230172 Production of a video stream with synchronized annotations over a computer network 08-May-01
6230159 Method for creating object inheritance 08-May-01
6230156 Electronic mail interface for a network server 08-May-01
6229539 Method for merging items of containers of separate program modules 08-May-01
6229537 Hosting windowed objects in a non-windowing environment 08-May-01
6226747 Method for preventing software piracy during installation from a read only storage medium 01-May-01
6226742 ciphertext message through use of a message authentication code formed through cipher block chaining of the plaintext message 01-May-01
6226689 Method and mechanism for interprocess communication using client and server listening threads 01-May-01
6226665 Application execution environment for a small device with partial program loading by a resident operating system 01-May-01
6226635 Layered query management 01-May-01
6226628 Cross-file pattern-matching compression 01-May-01
6226407 Method and apparatus for analyzing computer screens 01-May-01
6226017 Methods and apparatus for improving read/modify/write operations 01-May-01
6225973 Mapping samples of foreground/background color image data to pixel sub-components 01-May-01
6223292 Authorization systems, methods, and computer program products 24-Apr-01
6223212 Method and system for sharing negotiating capabilities when sharing an application with multiple systems 24-Apr-01
6223207 Input/output completion port queue data structures and methods for using same 24-Apr-01
6223171 What-if index analysis utility for database systems 24-Apr-01
6222937 Method and system for tracking vantage points from which pictures of an object have been taken 24-Apr-01
6222182 Apparatus and method for sampling a phototransistor 24-Apr-01
6219782 Multiple user software debugging system 17-Apr-01
6219675 Distribution of a centralized database 17-Apr-01
6219025 Mapping image data samples to pixel sub-components on a striped display device 17-Apr-01
6216177 Method for transmitting text data for shared application between first and second computer asynchronously upon initiation of a session without solicitation from first computer 10-Apr-01
6216175 Method for upgrading copies of an original file with same update data after normalizing differences between copies created during respective original installations 10-Apr-01
6216154 Methods and apparatus for entering and evaluating time dependence hypotheses and for forecasting based on the time dependence hypotheses entered 10-Apr-01
6216141 System and method for integrating a document into a desktop window on a client computer 10-Apr-01
6216134 Method and System for visualization of clusters and classifications 10-Apr-01
6215503 Image generator and method for resolving non-binary cyclic occlusions with image composting operations 10-Apr-01
6215496 Sprites with depth 10-Apr-01
6212676 Event architecture for system management in an operating system 03-Apr-01
6212617 Parallel processing method and system using a lazy parallel data type to reduce inter-processor communication 03-Apr-01
6212574 User mode proxy of kernel mode operations in a computer operating system 03-Apr-01
6212553 Method for sending and receiving flags and associated data in e-mail transmissions 03-Apr-01
6212541 System and method for switching between software applications in multi-window operating system 03-Apr-01
6212526 Method for apparatus for efficient mining of classification models from databases 03-Apr-01
6212436 Dynamic inheritance of software object services 03-Apr-01
6209093 Technique for producing a privately authenticatable product copy indicia and for authenticating such an indicia 27-Mar-01
6209089 Correcting for changed client machine hardware using a server-based operating system 27-Mar-01
6209088 Computer hibernation implemented by a computer operating system 27-Mar-01
6209041 Method and computer program product for reducing inter-buffer data transfers between separate processing components 27-Mar-01
6209040 Method and system for interfacing to a type library 27-Mar-01
6209011 Handheld computing device with external notification system 27-Mar-01
6208996 Mobile device having notification database in which only those notifications that are to be presented in a limited predetermined time period 27-Mar-01
6208952 Method and system for delayed registration of protocols 27-Mar-01
6208337 Method and system for adding application defined properties and application defined property sheet pages 27-Mar-01
6205561 Tracking and managing failure-susceptible operations in a computer system 27-Mar-01
6205498 Method and system for message transfer session management 20-Mar-01
6205492 Method and computer program product for interconnecting software drivers in kernel mode 20-Mar-01
6202202 Pointer analysis by type inference for programs with structured memory objects nd potetially inconsistent memory object accesses 13-Mar-01
6202121 System and method for improved program launch time 13-Mar-01
6202089 Method for configuring at runtime, identifying and using a plurality of remote procedure call endpoints on a single server process 13-Mar-01
6202085 System and method for incremental change synchronization between multiple copies of data 13-Mar-01
6201549 System and method for drawing and painting with bitmap brushes 13-Mar-01
6201540 Graphical interface components for in-dasn automotive accessories 13-Mar-01
6199166 Method and system for managing data while sharing application programs 06-Mar-01
6199107 Partial file caching and read range resume system and method 06-Mar-01
6199082 Method for delivering separate design and content in a multimedia publishing system 06-Mar-01
6199081 Automatic tagging of documents and exclusion by content 06-Mar-01
6199061 Method and apparatus for providing dynamic help topic titles to a user 27-Mar-01
6198852 View synthesis from plural images using a trifocal tensor data structure in a multi-view parallax geometry 06-Feb-01
6195655 Automatically associating archived multimedia content with 27-Feb-01
6195622 Methods and apparatus for building attribute transition probability models for use in pre-fetching resources 27-Feb-01
6192487 Method and system for remapping physical memory 20-Feb-01
6192432 Caching uncompressed data on a compressed drive 20-Feb-01
6192360 Methods and apparatus for class fying text and for building a text classifier 20-Feb-01
6191790 Inheritable property shading system for three-dimensional rendering of user interface controls 20-Feb-01
6189146 System and method for software licensing 13-Feb-01
6189143 Method and system for reducing an intentional program tree represented by high-level computational constructs 13-Feb-01
6189100 Ensuring the integrity of remote boot client data 13-Feb-01
6189069 Optimized logging of data elements to a data storage device 13-Feb-01
6189019 Computer system and computer-implemented process for presenting document connectivity 13-Feb-01
6189016 Journaling ordered changes in a storage volume 13-Feb-01
6189000 System and method for accessing user properties from multiple storage mechanisms 13-Feb-01
6188405 Methods, apparatus and data structures for providing a user interface, which exploits spatial memory, to objects 13-Feb-01
6188401 Script-based user interface implementation defining components using a text markup language 13-Feb-01
6188387 Computer input peripheral 13-Feb-01
6188358 Method and apparatus for displaying images such as text 13-Feb-01
6185579 Method and system for expanding a buried stack frame 06-Feb-01
6185569 Linked data structure integrity verification system which verifies actual

node information with expected node information stored in a table 06-Feb-01

6185568 Classifying data packets processed by drivers included in a stack 06-Feb-01

6185564 Generation and validation of reference handles in a multithreading environment 06-Feb-01

6184891 Fog simulation for partially transparent objects 06-Feb-01

6182286 Dynamic versioning system for multiple users of multi-module software systems 30-Jan-01

6182160 Method and system for using editor objects to connect components 30-Jan-01

6182133 Method and apparatus for display of information prefetching and cache status having variable visual indication based on a period of time since prefetching 30-Jan-01

6182108 method and system for multi-threaded processing 30-Jan-01

6182029 Method and system for converting between structured language elements and objects embeddable in a document 30-Jan-01

6182086 Client-server computer system with application recovery of server applications and client applications 30-Jan-01

6181351 Synchronizing the moveable mouths of animated characters with recorded speech 30-Jan-01

6178529 Method and system for resource monitoring of disparate resources in a server cluster 23-Jan-01

6178423 System and method for recycling numerical values in a computer system 23-Jan-01

6177945 Advanced graphics controls 23-Jan-01

6175916 Common-thread inter-process function calls invoked by jumps to invalid addresses 16-Jan-01

6175900 Hierarchical bitmap-based memory manager 16-Jan-01

6175879 Method and system for migrating connections between receive-any and receive-direct threads 16-Jan-01

6175878 Integration of systems management services with an underlying system object model 16-Jan-01

6175863 Storage of sitemaps at server sites for holding information regarding content 16-Jan-01

6175834 Consistency checker for documents containing Japanese text 16-Jan-01

6175833 System and method for interactive live online voting with tallies for updating voting results 16-Jan-01

6173421 Centrally handling runtime errors 09-Jan-01

6173406 Authentication systems, methods, computer program products 09-Jan-01

6173404 Software object security mechanism 09-Jan-01

6173325 Method computer program product, and system for assessing the performance of a packet schedule 09-Jan-01

6173317 Streaming and displaying a video stream with synchronized annotations over a computer network 09-Jan-01

6172354 Operator input device 09-Jan-01

6169993 Method, data structure, and computer program product for object state storage 02-Jan-01

6169984 Global incremental type search navigation directly from printable keyboard character input 02-Jan-01

6169983 Index merging for database systems 02-Jan-01

6169546 Global viewer scrolling system 02-Jan-01

6167565 Method and system of custom marshaling of inter-language parameters 26-Dec-00

6167423 Concurrency control of state machines in a computer system using cliques 26-Dec-00

6166738 methods, apparatus and data structures for providing a user interface, which exploits spatial memory in three-dimensions, to objects 26-Dec-00

6166732 Distributed object oriented multi-user domain with multimedia presentations 26-Dec-00

6163855 method and system for replicated and consistent modifications in a server cluster 19-Dec-00

6163841 Technique for producing privately authenticatable cryptographic signatures and for authenticating such signatures 19-Dec-00

6163809 System and method for preserving delivery status notification when moving from a native network to a foreign network 19-Dec-00

616377 System and method for reducing location conflicts in a database 19-Dec-00

6163324 Median calculation using SIMD operations 19-Dec-00

6161176 System and method for storing configuration settings for transfer from a first system to a second system 12-Dec-00

6161130 Technique which utilizes a probabilistic classifier to detect ''junk'' e-mail by automatically updating a training and re-training the classifier based on the updated training set 12-Dec-00

6161084 Information retrieval utilizing semantic representation of text by identify hyponyms and indexing multiple tokenized semantic structures to a same passage of text 12-Dec-00

6160553 Methods, apparatus and data structures for providing a user interface, which exploits spatial memory in three-dimensions, to objects and in which object occlusion is avoided 12-Dec-00

6160550 Shell extensions for an operating system 12-Dec-00

6157942 Imprecise caching of directory download responses for dynamic directory services 05-Dec-00

6157905 Identifying language and character set of data representing text 05-Dec-00

6157747 3-dimensional image rotation method and apparatus for producing image mosaics 05-Dec-00

6157618 Distributed internet user experience monitoring system 05-Dec-00

6157383 Control polyhedra for a three-dimensional (3D) user interface 05-Dec-00

6154843 Secure remote access computing system 28-Nov-00

6154767 Methods and apparatus for using attribute transition probability models for pre-fetching resources 28-Nov-00

6154220 Rectilinear layout 28-Nov-00

6154219 System and method for optimally placing labels on a map 28-Nov-00

6154205 Navigating web-based content in a television-based system 28-Nov-00

6151708 Determining program update availability via set intersection over a sub-optical pathway 21-Nov-00

6151632 Method and apparatus for distributed transmission of real-time multimedia information 21-Nov-00

6151618 Safe general purpose virtual machine computing system 21-Nov-00

6151607 Database computer system with application recovery and dependency handling write cache 21-Nov-00

6151022 Method and apparatus for statically testing visual resources 21-Nov-00

6148325 Method and system for protecting shared code and data in a multitasking operating system 14-Nov-00

6148304 Navigating multimedia content using a graphical user interface with multiple display regions 14-Nov-00

6148296 Automatic generation of database queries 14-Nov-00

6147685 System and method for editing group information 14-Nov-00

6145003 Method of web crawling utilizing address'' mapping 07-Nov-00

6144964 Methods and apparatus for tuning a match between entities having attributes 07-Nov-00

6144378 Symbol entry system and methods 07-Nov-00

6144377 Providing access to user interface elements of legacy application programs 07-Nov-00

6141722 Method and apparatus for reclaiming memory 31-Oct-00

6141705 System for querying a peripheral device to determine its processing capabilities and then offloading specific processing tasks from a host to the peripheral device when needed 31-Oct-00

6141696 Secure decentralized object exporter 31-Oct-00

6141018 Method and system for displaying hypertext documents with visual effects 31-Oct-00

6141003 Channel bar user interface for an entertainment System 31-Oct-00

6138128 Sharing and organizing world wide web references using distinctive characters 24-Oct-00

6138112 Test generator for database management systems 24-Oct-00

6137492 Method and system for adaptive refinement of progressive meshes 24-Oct-00

6137491 Method and apparatus for reconstructing geometry using geometrically constrained structure from motion with points on planes 24-Oct-00

6134658 Multi-server location-independent authentication certificate management system 17-Oct-00

6134602 Application programming interface enabling application programs to group code and data to control allocation of physical memory in a virtual memory system 17-Oct-00

6134596 Continuous media file server system and method for scheduling network resources to play multiple files having different data transmission rates 17-Oct-00

6134594 Multi-user, multiple tier distributed application architecture with

single-user access control of middle tier objects 17-Oct-00

6134582 System and method for managing electronic mail messages using a client-based database 17-Oct-00

6134577 Method and apparatus for enabling address lines to access the high memory area 17-Oct-00

6134566 Method for controlling an electronic mail preview pane to avoid system disruption 17-Oct-00

6133925 Automated system and method for annotation using callouts 17-Oct-00

6133917 Tracking changes to a computer software application when creating context-sensitive help functions 17-Oct-00

6133915 System and method for customizing controls on a toolbar 17-Oct-00

6131192 Software installation 10-Oct-00

6131102 Method and system for cost computation of spelling suggestions and automatic replacement 10-Oct-00

6131051 Interface between a base module and a detachable faceplate in an in-dash automotive accessory 10-Oct-00

6128737 Method and apparatus for producing a message authentication code in a cipher block chaining operation by using linear combinations of an encryption key 10-Oct-00

6128713 Application programming interface enabling application programs to control allocation of physical memory in a virtual memory system 03-Oct-00

6128661 Integrated communications architecture on a mobile device 03-Oct-00

6128653 Method and apparatus for communication media commands and media data using the HTTP protocol 03-Oct-00

6128633 Method and system for manipulating page-breaks in an electronic document 03-Oct-00

6128629 Method and apparatus, for automatically updating data files in a slide presentation program 03Oct-O0

6128012 User interface for a portable data management device with limited size and processing capability 03-Oct-00

6125373 Identifying a driver that is an owner of an active mount point 26-Sep-00

6125369 Continuous object sychronization between object stores on different computers 26-Sep-00

6125366 Implicit session context system with object state cache 26-Sep-00

6125352 System and method for conducting commerce over a distributed network 26-Sep-00

6122658 Custom localized information in a networked server for display to art end user 19-Sep-00

6122649 Method and system for user defined and linked properties 19-Sep-00

6122644 System for halloween protection in a database system 19-Sep-00

6121981 Method and system for generating arbitrary-shaped animation in the user interface of a computer 19-Sep-00

6121968 Adaptive menus 19-Sep-00

6121964 Method and system for automatic persistence of controls in a windowing environment 19-Sep-00

6119153 Accessing content via installable data sources 12-Sep-00

6119131 Persistent volume mount points 12-Sep-00

6119120 Computer implemented methods for constructing a compressed data structure from a data string and for using the data structure to find data patterns in the data string 12-Sep-00

6119115 Method and computer program product for reducing lock contention in a multiple instruction execution stream processing environment 12-Sep-00

6115708 Method for refining the initial conditions for clustering with applications to small and large database clustering 05-Sep-00

6115705 Relational database system and method for query processing using early aggregation 05-Sep-00

6112216 Method and system for editing a table in a document 29-Aug-00

6112214 Method and system for the direct manipulation of cells in an electronic spreadsheet program or the like 29-Aug-00

6111574 Method and system for visually indicating a selection query 29-Aug-00

63111567 Seamless multimedia branching 29-Aug-00

6110227 systems and methods for pre-processing variable initializers 29-Aug-00

6108784 Encryption of applications to ensure authenticity 22-Aug-00

6108715 Method and system for invoking remote procedure calls 22-Aug-00

6108706 Transmission announcement system and method for announcing upcoming data transmissions over a broadcast network 22-Aug-00

6108661 system for instance customization 22-Aug-00

6108006 Method and system for view-dependent refinement of progressive meshes 22-Aug-00

6106575 Nested parallel language preprocessor for converting parallel language programs into sequential code 22-Aug-00

6105041 Using three-state references to manage garbage collection of referenced objects 15-Aug-00

6105039 Generation and validation of reference, handles 15-Aug-00

6105038 Hysteresis System and method for achieving a mean constant cost per action in a computer system 15-Aug-00

6105024 System for memory management during run formation for external sorting in database system 15-Aug-00

6104377 Method and system for displaying an image at a desired level of opacity 15-Aug-00

6104359 Allocating display information 15-Aug-00

6102967 Testing a help system of a computer software application without executing the computer software application 15-Aug-00

6101546 Method and system for providing data files that are partitioned by delivery time and data type 08-Aug-00

6101513 Method and apparatus for displaying database information according to a specified print layout and page for mat 08-Aug-00

6101510 Web browser control for incorporating web browser functionality into application programs 08-Aug-00

6101499 Method and computer program product for automatically generating an internet protocol (IP) address 08-Aug-00

6101325 Parameterized packaging system for programming languages 08-Aug-00

6098081 Hypermedia navigation using soft hyperlinks 01-Aug-00

6097888 Method and system for reducing an intentional program tree represented by high-level computational constructs 01-Aug-00

6097854 Image mosaic construction system and apparatus with patch-based alignment, global block adjustment and pair-wise motion-based local warping 01-Aug-00

6097392 Method and system of altering an attribute of a graphic, object in a pen environment 01-Aug-00

6097380 Continuous media stream control 01-Aug-00

6097371 System and method of adjusting display characteristics of a displayable data file using an ergonomic computer input device 01-Aug-00

6096095 Producing persistent representations of complex data structures 01-Aug-00

6094680 system and method for managing distributed resources networks 25-Jul-00

6094679 Distribution of software in a computer network environment 25-Jul-00

6092208 System and method for waking a computer having a plurality of power resources from a system state using a data structure 18-Jul-00

6092144 Method and system for interrupt-responsive execution of communications protocols 18-Jul-00

6092067 Desktop information manager for recording and viewing important events data structure 18-Jul-00

6091411 Dynamically updating themes for an operating system shell 18-Jul-00

6091409 Automatically activating a browser with internet shortcuts on the desktop 18-Jut-00

6088739 Method and system for dynamic, object clustering 11-Jul-00

6088718 Meth0ds and apparatus for using resource transition probability models for pre-fetching resources 11-Jul-00

6088711 Method and system for defining and applying a style to a paragraph 11-Jul-00

6088708 System and method for creating an online table from a layout of objects 11-Jul-00

6088511 Nested Parallel 2D Delaunay triangulation method 11-Jul-00

6088041 Method of dropout control for scan conversion of a glyph comprising a plurality of discrete segments 11-Jul-00

6086618 Method and computer program product for estimating total resource usage requirements of a server application in a hypothetical user configuration 11-Jul-00

6085247 Server operating system for supporting multiple client-server sessions and dynamic reconnection of users to previous sessions using different, computers 04-Jul-00

608522 Method and apparatus for utility-directed prefetching of web pages into local cache using continual computation and user models 04-Jul-00

6085206 Method and system for verifying accuracy of spelling and grammatical composition of a document 04-Jul-00

6084592 Interactive construction of 3D models from panoramic images 04-Jul-00

6084582 Method and apparatus for recording a voice narration to accompany a slide show 04-Jul-00

6083282 Cross-project namespace compiler and method 04-Jul-00

6081898 Unification of directory service with file system service 27-Jun-00

6081846 Method and computer program product for reducing intra-system data copying during network packet processing 27-Jul-00

6081816 Method for placing text around Polygons and other constraints 27-Jun-00

6081802 System and method for accessing compactly stored map element information from memory 27-Jun-00

6081775 Bootstrapping sense, characterizations of occurrences of polysemous words in dictionaries 27-Jun-00

6081598 Cryptographic system and method with fast decryption 27-Jun-00

6071264 optimal frame rate selection user interface 27-Jun-00

6078999 Recovering from a failure using a transaction table in connection with shadow copy transaction processing 20-Jun-00

6078942 Resource management for multimedia devices in a computer 20-Jun-00

6078746 Method and system for reducing an intentional program tree represented by high-level computational constructs 20-Jun-00

6077313 Type partitioned dataflow analyses 20-Jun-00

6076100 Server-side chat monitor 13-Jun-00 6976051 Information retrieval utilizing semantic representation of text 13-Jun-00

6075545 Methods and apparatus for storing, accessing and processing images through the use of row and column Pointers 13-JUn-00

6075540 Storage of appearance attributes in association with wedges in a mesh data model for computer graphics 13-Jun-00

6075532 Efficient redrawing of animated windows 13-Jun-00

6073226 system and method for minimizing page tattles in virtual memory systems 06-Jun-00

6073214 Method and system for identifying and obtaining, computer software from a remote computer 06-Jun-00

6073137 Method for updating and displaying the hierarchy of a data store 06-Jun-00

6072950 Pointer analysis by type inference combined with a non-pointer analysis 06-Jun-00

6072496 Method and system for capturing and representing 3D geometry, color and shading of facial expressions and other animated objects 06-Jun-00

6072486 System and method for creating and customizing a deskbar 06-Jun-00

6072485 Navigating with direction keys in an environment that permits navigating with tab keys 06-Jun-00

6072480 Method and apparatus for controlling composition and performance of soundtracks to accompany a slide show 06-Jun-00

6070007 Method and system for reducing an intentional program tree represented by high-level computational constructs 30-May-00

6069622 Method and system for generating comic panels 30-May-00

6067639 Method for integrating automated software testing with software development 23-May-00

6067578 Container independent control architecture 23-May-00

606756 Fast-forwarding and filtering of network packets in a computer system 23-May-00

6067565 Technique for prefetching a web page of potential future interest in lieu of continuing a current information download 23-May-00

6067559 Server architecture for segregation of dynamic content generation applications into separate process spaces 23-May-00

6067551 Computer implemented method for simultaneous multi-user editing of a document 23-May-00

6067550 Database computer system with application recovery and dependency handling, write cache 23-May-00

6067547 Hash table expansion and contraction for use with internal searching 23-May-00

6067541 Monitoring document changes in a file system of documents with the document change information stored in a persistent log 23-May-00

6067412 Automatic bottleneck detection by means of workload reconstruction from performance measurements 23-May-00

6067095 Method for generating mouth features of an animated or physical character 23-May-00

6067087 Method for building menus during idle times 23-May-00

6065035 Method and system for procedure boundary detection 16-May-00

6065020 Dynamic adjustment of garbage collection 16-May-00

6065012 System and method for displaying and manipulating user-relevant data 16-May-00

6065011 System and method for manipulating a categorized data set 16-May-00

6065008 System and method for secure font subset distribution 16-MAY-00

6065003 System and method for finding the closest match 0f a data entry 16-May-00

6064999 Method and system for efficiently performing database table aggregation using a bitmask-based index 16-May-00

6064406 Method and system for caching presentation data of a source object in a presentation cache 16-MAY-00

6064393 Method for measuring the fidelity of warped image layer approximations in a real-time graphics rendering pipeline 16-May-00

6064383 Method and system for selecting an emotional appearance and prosody for a graphical character 16-May-00

6061792 System and method for fair exchange of time-independent information goods over a network 09-May-00

6061695 Operating system shell having a windowing graphical user interface with a desktop displayed as a hypertext multimedia document 09-MAY-00

6061692 System and method for administering a meta database as an integral component of an information server 09-May-00

6061684 Method and system for controlling user access to a resource in a networked computing environment 09-May-00

6061677 Data base query system and method 09-May-00

6059838 Method and system for licensed design and use of software objects 09-May-00

6058263 Interface hardware design using internal and e external interfaces 02-May-00

6057841 System and method for processing electronic messages with rules representing a combination of conditions, actions or exceptions 02-May-00

6057837 On-screen indentification and manipulation of sources that an object depends upon 02-May-00

6057836 System and method for resizing and rearranging a composite toolbar by direct manipulation 02-May-00

6055548 Computerized spreadsheet with auto-calculator 25-Apr-00

6055314 system and method for secure purchase and very of video content-Programs 25-Apr-00

6054989 Methods, apparatus and data structures for providing a user interface, which exploits spatial memory in three-dimensions, to objects and which provides spatialized audio 25-Apr-00

6052735 Electronic mail object synchronization between a desktop computer and mobile device 18-Apr-00

6052710 System and method for making function calls over a distributed network 18-Apr-00

6052707 Preemptive multi-tasking with cooperative groups of tasks 18-Apr-00

6052698 Reorganization of collisions in a hash bucket of a hash table to improve system performance 18-Apr-00

6052697 Reorganization of collisions in a hash bucket of a hash table to improve system performance 18-Apr-00

6049869 Method and system detecting and identifying text or data encoding system 11-Apr-00

6049809 Replication optimization system and method 11-Apr-00

6049805 Dynamic event mechanism for objects with associational relationships 11-Apr-00

6049671 Method for identifying and obtaining computer software from a network computer 11-Apr-00

6049663 Method and facility for uninstalling a computer program package 11-Apr-00

6049636 Determining a rectangular box encompassing a digital picture within a digital image 11-Apr-00

6049341 Edge cycle collision detection in graphics environment 11-Apr-00

6047307 Providing application programs with unmediated access to a contested hardware resource 04-Apr-00

6047300 System and method for automatically correcting a misspelled word 04-Apr-00

6047297 Method and- system for editing actual work records 04-Apr-00

6046744 Selective refinement of progressive meshes 04-Apr-00

6044408 Multimedia device interface for retrieving and exploiting software and hardware capabilities 28-Mar-00
6044387 Single command editing of multiple files 28-Mar-00
6044366 Use of the UNPIVOT relational operator in the efficient gathering of sufficient statistics for data mining 28-Mar-00
6044181 Focal length estimation method and apparatus for Construction of panoramic mosaic images 28-Mar-00
6044155 Method and system for securely archiving core data secrets 28-Mar-00
6043826 Transferring outline fonts to devices requiring raster fonts 28-Mar-00
6043817 Method and apparatus for arranging displayed graphical representations on a computer interface 28-Mar-00
6041359 Data delivery system and method for delivering computer data over a broad, cast network 21-Mar-00
6041345 Active stream format for holding multiple media streams 21-Mar-00
6041333 Method and apparatus for automatically updating a data file from a network 21-Mar-00
6041311 Method and apparatus for item recommendation using automated collaborative filtering 21-Mar-00
6040841 Method and system for virtual cinematography 21-Mar-00
6038628 System and method for encapsulating legacy data transport Protocols for IEEE 1394 serial bus 14-Mar-00
6038610 Storage of sitemaps at server sites for holding information regarding content 14-Mar-00
6038567 Method and system for propagating object properties in a desktop publishing program 14-Mar-00
6038551 System and method for configuring and managing resources on a multi-purpose integrated circuit card using a personal computer 14-Mar-00
6037932 Method for sending computer network data as part of vertical blanking interval 14-Mar-00
6036495 interactive simulation including force feedback 14-Mar-00
6035379 Transaction processing for user data employing both togging and shadow copying 07-Mar-00
6035342 Method and computer program product for implementing object relationships 07-Mar-00
6035327 SMTP extension to preserve per-message and per-recipient properties 07-Mar-00
6035269 Method for detecting stylistic errors and generating replacement strings in a document containing Japanese text 07-Mar-00
6035119 Method and apparatus for automatic generation of text and computer-executable code 07-Mar-00
6032197 Data packet header compression for unidirectional transmission 29-Feb-00
6032188 Method and system for controlling data flow 29-Feb-00
6031989 Method of formatting and displaying nested documents 29-Feb-00
6031534 Operating system function for specifying a checked image representation and an unchecked image representation of a menu item 29-Feb-00
6031518 Ergonomic input device 29-Feb-00
6029200 Automatic protocol rollover in streaming multimedia data delivery system 22-Feb-00
6029147 Method and system for providing an interface for supporting multiple formats for on-line banking services 22-Feb-00
6028604 User friendly remote system interface providing previews of applications 22-Feb-00
6026417 Desktop publishing software for automatically changing the layout of content-filled documents 15-Feb-00
6026416 System and method for storing, viewing, editing, and processing ordered sections having different file formats 15-Feb-00
6026239 Run-time code compiler for data block transfer 15-Feb-00
6026238 Interface conversion modules based upon generalized templates for multiple platform computer systems 15-Feb-00
6026233 Method and apparatus for presenting and selecting options to modify a programming language statement 15-Feb-00
6025841 Method for managing simultaneous display of multiple windows in a graphical user interface 15-Feb-00
6023744 Method and mechanism for freeing disk space in a file system 08-Feb-00
6023714 Method and system for dynamically adapting the layout of a document to an output device 08-Feb-00
6023710 System and method for long-term administration of archival storage 08-Feb-00
6023523 Method and system for digital plenoptic imaging 08-Feb-00
6023275 System and method for resizing an input Position indicator for a user interface of a computer system 08-Feb-00
6023272 Continuously accessible computer system interface 08-Feb-00
6021412 Method and system for automatically adding graphics to a document to illustrate concepts referred to therein 01-Feb-00
6021262 System and method for detection of, notification of, and automated repair of problem conditions in a messaging system 01-Feb-00
6021203 Coercion resistant one-time-pad cryptosystem that facilitates transmission of messages having different levels of security 01-Feb-00
6018619 Method, system and apparatus for client-side usage tracking of information server systems 25-Jan-00
6018349 Patch-based alignment method and apparatus for construction of image mosaics 25-Jan-00
6018340 Robust display management in a multiple monitor environment 25-Jan-00
6016520 Method of viewing at a client viewing station a multiple media title stored at a server and containing a plurality of topics utilizing anticipatory caching 18-Jan-00
6016515 Method, computer program product, and data structure for validating creation of and routing messages to file object 18-Jan-00
6016508 Server-determined client refresh periods for dynamic directory services 18-Jan-00
6016497 Methods and system for storing and accessing embedded information in object-relational databases 18-Jan-00
6016492 Forward extensible property modifiers for formatting information in a program module 18-Jan-00
6016488 Method arid System for constructing queries 18-Jan-00
6016150 Sprite compositor and method for performing lighting and shading operations using a compositor to combine factored image layers 18-Jan-00
6016145 Method and system for transforming the geometrical shape of a display window for a computer system 18-Jan-00
6014744 State governing the performance of optional booting operations 11-Jan-00
6014733 and System for creating a perfect hash using an offset table 11-Jan-00
6014706 Methods and apparatus for implementing control functions in a streamed vide display system 11-Jan-00
6014701 Selecting a cost-effective bandwidth for transmitting information to an end user in a computer network 11-Jan-00
6014681 Method for saving a document using a background save thread 11-Jan-00
6014666 Declarative and programmatic access control of component-based server applications using roles 11-Jan-00
6014518 Terminating polymorphic type inference program analysis 11-Jan-00
6012096 Method and system for peer-to-peer network latency measurement 04-Jan-00
6012075 Method and System for background grammar checking an electronic document 04-Jan-00
6012058 Scalable system for K-means clustering of large databases 04-Jan-00
6012052 resources, editing resource link topology, building resource link topology templates, and collaborative filtering 04-Jan-00
6009459 Intelligent automatic searching for resources in a distributed environment 28-Dec-99
6009462 Apparatus and methods for optimally using available computer resources for task execution during idle-time based on probabilistic assessment of future task instances 28-Dec-99
6009441 Selective response to a comment line in a computer file 28-Dec-99
6009190 Texture map construction method and apparatus for displaying panoramic image mosaics 28-Dec-99
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6008820 processor for controlling the display of rendered image layers and method for controlling same 28-Dec-99
6008816 Method and system for managing color specification using attachable palettes and palettes that refer to other palettes 28-Dec-99
6008807 Method and system for controlling the display of objects in a slide show presentation 28-Dec-99
6008806 Shell extensions for an, operating system 28-Dec-99
6008803 System for displaying programming information 287Dec-99
6008799 Method and system for entering data using an improved on-screen keyboard 28-Dec-99

600633 Recovery of online sessions for dynamic directory services 21-Dec-99

6006241 Production of a video stream with synchronized annotations over a computer network 21-Dec-99

6006239 Method and system for allowing multiple users to simultaneously edit a spreadsheet 21-Dec-99

6006218 Methods and apparatus for retrieving and/or processing retrieved information as a function of a user's estimated knowledge 21 -Dec-99

6005582 Method and system for texture mapping images with anisotropic filtering 21-Dec-99

6005575 Foreground window determination through, process and thread initialization 21-Dec-99

6005551 Offline force effect rendering 21-Dec-99

6003108 Method and system for interrupt-responsive execution of communications protocols 14-Dec-99

6003097 System for automatically configuring a network adapter without manual intervention by using a registry data structure maintained within a computer system memory 14-Dec-99

6003061 Method and system for scheduling the use of a computer system resource using a resource planner and a resource provider 14-Dec-99

6003050 Method for integrating a virtual machine with input method editors 14-Dec-9

6002852 Method and system for confirming receipt of data opportunistically broadcast to client computer systems 14-Dec-99

5999996 Adapter for wirelessly interfacing a full-size stand alone keyboard with a handheld computing device 07-Dec-99

5999986 Method and system for providing an event system infrastructure 07-Dec-99

5999979 Method and apparatus for determining a most advantageous protocol for use in a computer network 07-Dec-99

5999938 System and method for creating a new data structure in memory populated with data from an existing data structure 07-Dec-99

5999896 Method and system for identifying and resolving commonly confused words in a natural language parser 07-Dec-99

5999711 Method and system for providing certificates holding authentication and authorization information for users/machines 07-Dec-99

5995997 Apparatus and methods for optimally allocating currently available computer resources to future task instances versus continued execution of current task instances 30-Nov-99

5995940 Method and system for editing multivalued properties of an object 30-Nov-99

5995922 Identifying information related to an input word in an electronic dictionary 30-Nov-99

5991804 Continuous media file server for cold restriping following capacity change by repositioning data blocks in the multiple data servers 23-Nov-99

5991802 Method and system for invoking methods of objects over the internet 23-Nov-99

5991794 Component integration system for an application program 23-Nov-99

5991777 System and method for performing defined actions when grafting the name space of one storage medium into the name space of another storage medium 23-No799

5990905 System provided child window controls 23-Nov-99

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5987517 System having a library of protocol independent reentrant network interface functions for providing common calling interface for communication and application protocols 16-Nov-99

5987481 Method and apparatus for using label references in spreadsheet formulas 16-Nov-99

5987376 System and method for the distribution and synchronization of data and state information between clients in a distributed processing system 16-Nov-99

5987257 Metafile optimization 16-Nov-99

5987164 Block adjustment method and apparatus for construction of image mosaics 16-Nov-99

5986675 System and method for animating an object in three-dimensional space using a two-dimensional input device 16-Nov-9

5986668 Deghosting method and apparatus for construction of image mosaics 16-Nov-99

5986623System and method for interlaced display device data transmission 16-Nov-99

5983274 Creation and use of control information associated with packetized network data by protocol drivers and device drivers 09-Nov-99

5983242 Method and system for preserving document integrity 09-Nov-99

5983240 Method and system of converting data from a source file system to a target file system 09-Nov-99

5982389 Generating optimized motion transitions for computer animated objects 09-Nov-99

5982381 Method and apparatus for modifying a cutout image for compositing 09-Nov-99

5978815 File system primitive Providing native file system support for remote storage 02-Nov-99

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5978802 System and method for providing opportunistic file access in a network environment 02-Nov-99

5978795 Temporally ordered binary search method and system 02-Nov-99

5978566 Client side deferred actions within multiple MAPI profiles 02-Nov-99

5978484 system and method for safety distributing executable objects 02-Nov-99

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5974427 Method and computer system for implementing concurrent accesses of a database record by multiple users 26-Oct-99

5974421 Cache-efficient object loader 26-Oct-99

597416 Method of creating a tabular data stream for sending rows of data between client and server 26-Oct-99

5974410 Method and system for filtering in a uniform data interface 26-Oct-99

5974409 System and method for locating information in an on-line network 26-Oct-99

5970496 Method and system for storing information in a computer system memory using hierarchical data node relationships 19-Oct-99

5970173 Image compression and affine transformation for image motion compensation 19-Oct-99

5968121 Method and apparatus for representing and applying network topological data 19-oct-99

5966719 Method for inserting capitalized Latin characters in a non-Latin document 12-Oct-99

5966716 Automatic spreadsheet forms 12-Oct-99

5966705 Tracking a user across both secure and non-secure areas on the Internet wherein the users is initially tracked using a globally unique identifier 12-Oct-99

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5966140 Method- for creating progressive simplicial complexes 12-Oct-99

5966133 Geomorphs and variable resolution control of progressive meshes 12-Oct-99

5964886 Method and system for recovering text from a damaged electronic file 12-Oct-99

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5963945 Synchronization of a client and a server in a prefetching resource allocation system 05-Oct-99

5963894 Method and system for bootstrapping statistical processing into a rule-based natural language Parser 05-Oct-99

5963893 Identification of words in Japanese text by a computer system 05-Oct-99

5963209 Encoding and progressive transmission of progressive meshes 05-Oct-99

5963197 3-D cursor positioning device 05-Oct-99

5961591 Downloading data while rejection of its use may be overridden 05-Oct-99

5960423 Database system index selection using candidate index selection for a workload 28-Sep-99

5959621 System and method for displaying data items in a ticker display pane on a client computer 28-Sep-99

5958004 Disabling and enabling transaction committal in transactional application components 28-Sep-99

5956724 Method for compressing a data file using a separate dictionary file 21-Sep-99

5956721 Method and computer program product for classifying network communication packets processed in a network stack 21-Sep-99

5956715 Method and system for controlling user access to a resource in a networked computing environment 21-Sep-99

5956509 System and method for performing remote requests with an 0n-line service network 21-Sep-99

5956489 Transaction replication system and method for supporting replicated transaction-based services 21-Sep-99

5956483 System and method for making function calls from a web browser to a local application 21-Sep-99

5956481 Method and apparatus for protecting data files on a computer from virus infection 21-Sep-99

5956033 Document control interface and method for graphical message document software 21-Sep-99

5953729 Using sparse file technology to stage data that will then be stored in remote storage 14-Sep-99

5953012 Method and system for connecting to, browsing, and accessing computer network resources 14-Sep-99

5951694 Method of redirecting a client service session to a second application server without interrupting the session by forwarding service-specific it]formation to the second server 14-Sep-99

5951653 Method and system for coordinating access to objects of different thread types in a shared memory space 14-Sep-99

5950221 Variably-sized kernel memory stacks 07-Sep-99

5950193 Interactive records and groups of records in an address book database 07-Sep-99

5950186 Database system index selection using cost evaluation of a workload for multiple candidate index configurations 07-Sep-99

5949975 Method and system for negotiating capabilities when sharing an application program with multiple computer systems 07-Sep-99

5949430 Peripheral lenses for simulating peripheral vision on a display device 07-Sep-99

5949429 Method for performing pixel addressing operations for a tiled image 07-Sep-99

5949428 Method and apparatus for resolving pixel data in a graphics rendering system 07-Sep-99

5949418 Operating system for handheld computing device having graphical window minimization/enlargement functionality 07-Sep-99

5948113 System and method for centrally handling runtime errors 07-Sep-99

5946698 Database computer system with application recovery 31-Aug-99

5946697 Rapid transfer of HTML files 31-Aug-99

5946696 Object property lists 31-Aug-99

5946691 Method of presenting, storing, and updating a filing identifier for a data record 31-Aug-99

5946648 Identification of words in Japanese text by a computer system 31-Aug-99

5945987 Interactive entertainment network system and method for providing short sets of preview video trailers 31-Aug-99

5945981 Wireless input device, for use with a computer, employing a movable light-emitting element and a stationary light-receiving element 3-Aug-99

5943048 Method and apparatus for testing a graphic control area 24-Aug-99

5941947 System and method for controlling access to data entities in a computer network 24-Aug-99

5941944 Method for providing a substitute for a requested inaccessible object by identifying substantially similar objects using weights corresponding to object features 24-Aug-99

5940847 System and method for automatically correcting multi-word data entry errors 17-Aug-99

5940833 Compressing sets of integers 17-Aug-99

5938752 System and method for encapsulating legacy data transport protocols for IEEE 1394 serial bus 17-Aug-99

5938729 System and method for monitoring server performance at a client computer 17-Aug-99

5936616 Method and system for accessing and displaying a compressed display image in a computer system 10-Aug-99

5935224 Method and apparatus for adaptively coupling an external peripheral device to either a universal serial bus Port on a computer or hub or a game port on a computer 10-Aug-99

5935211 Distributed notification 10-Aug-99

5935210 Mapping the structure of a collection of computer resources 10-Aug-99

5933842 Method and system for compressing publication documents in a computer system by selectively eliminating redundancy from a hierarchy of constituent data structures 03-Aug-99

5933838 Database computer system with application recovery and recovery log sequence numbers to optimize recovery 03-Aug-99

5933822 Apparatus and methods for an information retrieval system that employs natural language processing of search results to improve overall precision 03-Aug-99

5933599 Apparatus for presenting the content of an interactive on-line network 03-Aug-99

5933535 Object-based video compression process employing arbitrarily-shaped features 03-Aug-99

5933145 Method and system for visually indicating a selection query 03-Aug-99

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5731844 Television scheduling system for displaying a grid representing scheduled layout and selecting a programming parameter for display or recording 24-Mar-981

5729748 Call template builder and method17-Mar-98

5729745 Methods and apparatus for creating a base class for manipulating external data connections in a computer generated document 17-Mar-98

5729689 Network naming services proxy agent 17-Mar-98

5727178 System and method for reducing stack physical memory requirements in a multitasking operating system 10-Mar-98

5726687 Auto-scrolling with mouse speed computation during dragging 10-Mar-98

5724594 Method and system for automatically identifying morphological information from a machine-readable dictionary 03-Mar-91

5724588 Method and system for network marshaling of interface pointers for rem0te procedure Calls 03-Mar-98

5724558 System and method for dynamic data packet configuration 03-Mar-98

5724492 Systems and method for displaying control objects including a plurality of panels 03-Mar-98

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5724070 common digital representation of still images for data transfer with both slow and fast data transfer rates 03-Mar-98

5724068 Joystick with uniform center return force 03-Mar-98

5721919 Method and system for the link tracking of objects 24-Feb-98

5721916 Method and system for shadowing file system structures from multiple types, of networks 24-Feb-98

5721847 Method and system for liking controls with cells of a spread sheet 24-Feb-98

5721781 Authentication system and method for smart card transactions 24-Feb-98

5719941 Method for changing passwords on a remote computer 17-Feb-98

5717902 Method and system for selectively applying an appropriate object ownership model 10-Feb-98

5717845 Method and apparatus for transferring a brush pattern to a destination bitmap 10-Feb-98

5715441 Method and system for storing and accessing data in a compound document using object linking 03-Feb-99

5715415 Computer application with help pane integrated into workspace 03-Feb-98

5713020 Method and system for generating database queries containing multiple levels of aggregation 27-Jan-98

5713003 Method and system for caching data 27-Jan-98

5713002 Modified buddy system for managing storage space 27-Jan-98

5710941 System for substituting protected mode hard disk driver for real mode driver by trapping test transfers to verify matching geometric translation 20-Jan-98

5710928 Method and system for connecting objects in a computer system 20-Jan-98

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5710880 Method and system for creating a graphic image with geometric descriptors 20-Jan-98

5709219 Method and apparatus to create a complex tactile sensation 20-Jan-9

5708814 Method and apparatus for reducing the rate of interrupts by generating a single interrupt for a group of events 13-Jan-98

5708812 Method and apparatus for Migrating from a source domain network controller to a target domain network controller 13-Jan-98

5706505 Method and system for binding data in a computer system 06-Jan-98

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5706483 Run-time code compiler for data block transfer 06-Jan-98

5706462 Self optimizing font width cache 06-Jan-98

5706458 Method and system for merging menus of application programs 06-Jan-98

5706450 Method and system for presenting alternatives for selection using adaptive learning 06-Jan-98

5706411 Printer status user interface and methods relating thereto 06-Jan-98

5701511 Redbook audio sequencing 23-Dec-97

5701499 Method and system for automatically entering a data series into contiguous cells of an electronic spreadsheet Program or the like 23-Dec-91

5701491 Method and system for transitioning the network mode of a workstation 23-Dec-97

5701469 Method and System for generating accurate search result using a content-index 23-Dec-97

5701462 Distributed file system providing a unified name space with efficient name resolution 23-Dec-97

5701461 Method and system for accessing a remote database using pass-through queries 23-Dec-97

5701460 Intelligent joining system for a relational database 23-Dec-97

5701424 Palladian menus and methods relating thereto 23-Dec-97

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5699518 System for selectively setting a server node, evaluating to determine server node for executing server code, and downloading server code prior to executing if necessary??6??Dec-91

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5694610 Method and system for editing and formatting.data in a dialog window 02-Dec-97

5694606 Mechanism for using common code to handle hardware interrupts in multiple processor modes 02-Dec-97

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5694559 on-line help method and system utilizing free text query 02-Dec-97

5694153 Input device for providing multi-dimensional position coordinate signals to a computer 02-Dec-97

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5692177 Method and system for data set storage by iteratively searching for perfect hashing functions 25-Nov-9

569217 Methodarid System for combining prefix and first character searching of a list 25-Nov-97

5692157 Method and system for transferring data between objects using registered data formats 25-N0v-97

5692??44 Method and System for depicting an object, springing back from a position 25-Now97

5691745 Low power pixel-based visual display device having dynamically changeable number of grayscale shades 25-Nov-97

5689709 Method and system for invoking methods of an object 18-Nov-97

5689703 Method and system for referring to and binding to objects using identifier objects 18-Nov-97

5689700 Unification of directory service with file system services 18-Nov-97

5689664 Interface sharing between objects 18-Nov-97

5689663 Remote controller user interface and methods relating thereto 18-Nov-97

5689662 Shell extensions for an operating system 18-Nov-97

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5687392 System for allocating buffer to transfer data when user buffer is mapped to physical region that does not conform to physical addressing limitations of controller ??-Nov-97

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5684993 Segregation of thread-specific information from shared task information 04-Nov-97

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5680559 Shell extensions for an operating system 21–00t-97

5680458 Root key compromise recovery 2??-Oct-97

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5675813 system and method for power control in a universal serial bus 07-Oct-97

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5659791 Encapsulation of extracted portions of documents into objects 19-Aug-97

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Part 1: The Debate
Tim:

Sounds like some of Michael's speech was maybe a treaty with the free software people. [laughter]

Anyway, there probably are divisions within Microsoft just as there are divisions within our community. It's kind of interesting, because the diversity of opinions often leads not to division but to strength, and I think we're going to demonstrate that strength as we hear from a number of people who are prominent in our community and are allied under the banner of the core principles of open source, but who do have different takes on how it works and what's important about it.

Anyway, I'd like to invite up the rest of our panel. Michael and Craig, you may want to come back up and sit down. I have here with us Brian Behlendorf, who's one of the cofounders of the Apache Project. [applause] I'll just start down at the far end, then.

Clay Shirky is a partner at an incubator called the Accelerator Group. He's also a well-known
Panelists:
Clay Shirky
Accelerator Group
Shirky.com
Michael Tiemann,
Multimedia
Networking
Programming
Security
Tools
Utilities
X Window System
commentator on coming technologies, and he's recently done some very interesting thinking about some of Microsoft's new technologies, in particular Hailstorm. That's why he's here to talk to us. [applause]

Dave Stutz is, I believe, now the program manager for the shared source implementation of the common language run time and so forth. Is that the appropriate designation?
Dave:
Sure. It'll work.
Tim:
Dave is—
Dave:
—Craig's Mini-Me.
Chief Technical Officer RedHat
David Stutz
Software architect
Microsoft
Mitchell Baker
Chief Lizard Wrangler
Mozilla.org
Ronald Johoston
Partner
Arnold & Porter
Craig Munclie,
Senior Vice President
Advanced Strategies
Microsoft
Brian Behlendort
Founder & CTO
ColtabNet
Tim O'Reilly
Founder & President
O'Reilly & Associates
Tim:

Yeah, I was going to say, I don't know, maybe something like, if you had the hat [reference to the red hats on heads all through the room], I would say, ''Mini-Me. Do not chew on your hat.'' [laughter]

Next in line is Mitchell Baker, who's known as the Chief Lizard Wrangler at Mozilla.org. Mitchell is also the person who wrote the Mozilla license, so she's done a lot of thinking about free software and open source licenses and the needs of corporations. [applause] We have with us Ron Johnson, who's an attorney at Arnold & Porter and the chair of the 22nd Annual Computer and Internet Law Institute.

And obviously you know Craig, and I already introduced Brian. So, Craig, I don't know if you wanted to respond at all to any of Michaers comments [laughter], or whether you want to hear from a few other people before we get there.

Craig:

I'll just offer one general thought, which is, you know, in some sense it's easy to poke fun or think you know what is the look-in from the outside and to be at Microsoft.

We're a company now of 50,000 people, and among any community of 50,000 people, particularly fairly smart people, you're going to have a lot of people who think carefully about a lot of issues, and feel passionately as you do about a lot of issues. So I don't think we're embarrassed at all to find that people would come forward at Microsoft and ask questions or ask whether we do the right thing or not.

What I can tell you is that there is a single-purpose focus in the management of the company. The leadership of the company is not uncertain about what we're doing. We welcome people asking questions in the company, but ultimately we recognize our job is to make decisions and provide consistent leadership. And so if people don't like what the company wants to do, there's no indentured servitude. You know, they're free to go do something else. But the company is clear about what it will do. And I can just tell you that as a member of a management committee of the company, and while listening to Michael's comments that many of the ways he characterizes what he thinks may go on inside the company in

terms of a civil war or anything, frankly [it] just doesn't exist. It may be fine to ruminate about what you think could exist or does exist. I can tell you quite specifically, there's no civil war at the management level and, to me, no observable civil war among the rank and file either. So that's one thought I'd leave with you today.

Tim:

So, Brian, you're obviously someone who has, you know, come up from the GPL side of the house but from the university style of'' license regime. Clearly you have done a lot of thinking about what licenses you would choose and why. Do you have any thoughts on that, or any things you'd like to talk to Craig about with regard to the BSD orientation .... [laughter]

Brian:

Sure. [more laughter] You don't want to call on anybody else, do you? [laughter] One of the slides in [Craig Mundie's] presentation was actually a very useful slide. It showed that there is a relationship—a set of relationships between the public research through universities, corporations, users, and government. I think what we've seen is that it's not one-directional like that. What we've seen is that it's actually bi-directional in all those things—in fact, bi-directional across universities and consumers and government and business and all those directions.

And so while Apache, for example, is under a BSD-style license, it was very important while we were building the Apache community that we not only have other corporations use it and adopt it into their commercial products, but also that we communicate to those companies the need to reinvest back, the need to build Apache itself as a strong force as they build up the momentum behind it. And to us, even though the obligation isn't there to share their code back, the companies that are participating in the Apache Software Foundation and even more broadly, within the BSD communities, understand the need to reinvest, to build it back up. And that's one thing that I think may be missing in some of this debate: the creation of licenses, the creation of regimes that really are bi-directional, that really put all the participants at an equal level.

I totally welcome Microsoft exploring shared source licenses. I think for proprietary software, I'd much rather have the code to it than not have the code to it. I think we're going to see a big difference in the amount of resources that people will put in to a shared source license regime versus one that is an open source license regime. So it's all a matter of experimentation. I'm all for experimenting with different licenses. I think history has shown that open source is a more efficient way to go in certain circumstances. At the same time, there are 10 million Microsoft developers out there who might have a different opinion. I think it's worth finding out.

Craig:

One thought on that. I agree with you that it is bi-directional, and in a way, when you look at all the different licensing regimes, you're correct to point out that there are many different ways to give back. In a sense, giving the code back is just one way. You know giving taxes to the government to give back is essentially another institutionalized way.

Tim:

So how much does Microsoft pay in taxes?

[laughter]

Craig:

It's a lot. I don't know the exact number this year, but it's billions. One of the things that we've been fascinated by, and I guess you could say it's some benchmark of this, [is that] this week, as I kind of predicted in May, we actually came out with this Windows CE source license. I guess we actually posted it three, maybe four days ago. And the first three days, ten thousand people downloaded the entire source tree. And we had had a kit that we had offered to people who just wanted to use it for commercial purposes and we had sold about four

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Post your comments hundred of those in the last year. I guess only time will tell whether people will decide that they really want to make an investment or whether they're just curious. But we were quite happy to see that when we offered it for noncommercial use—really targeting the academic environment, primarily -that ten thousand people in the first three days decided to take it and take a look at it.

So we're enthused with that kind of reaction, and it is, you know, some way of giving back. You know, we give back financially, we give back in the standards world, as Michael said, with XML and other things. I mean, well before XML, we've been a big participant in the process of standardization, and so I think we will continue to seek ways to share and give back.

Microsoft patents a threat to open source

By Peter Galli, eWEEK

August 28, 2001 10:55 AM PT

URL: http://techupdate.zdnet.com/techupdate/stories/main/0,14179,2808548,00.html

Members of the open-source community are becoming increasingly concerned by ongoing moves from Microsoft Corp. to acquire a range of software patents that the company can potentially use down the line to attack and try to restrict the development and distribution of open-source software.

And much of that concern is being directed toward open-source desktop company Ximian Inc.'s Mono Project, an open-source initiative to replace part of Microsoft's .Net product line, including a way to run C# programs and the .Net Common Language Infrastructure on Linux. Leading the charge is Bruce Perens, Hewlett-Packard Co.'s open-source and Linux strategist who helped to craft the Debian Social Contract, which later became the Open Source Definition. Perens told eWEEK in an interview on Monday in San Francisco ahead of the LinuxWorld conference that an increasing number of people in the open-source community are very concerned about the Mono Project and by Microsoft's initiative to buy software patents and to patent as much of its own technology as it can.

''If I were in Microsoft's position, I would be looking through all the patents I had been buying that are potentially being infringed by open-source software,'' Perens said. ''They are going to hold onto these patents until they see what happens with the antitrust case against them. Once that is resolved, they will then use them against the open-source industry.'' But Doug Miller, the director of competitive strategy for Microsoft's Windows division, told eWEEK he was unaware of any intended move by Microsoft to acquire software patents. ''Not to say it isn't happening, but I'm not aware of any such planned attack,'' Miller said.

''With that being said, we strive to protect our intellectual property, and holding patents is one of the ways we do that. But nothing has changed, we're certainly no more aggressive now about filing patents or other copyright protections than we have been over the past couple of decades,'' he said.

But Perens isn't buying this, saying that with regard to the Mono Project, Ximian needs to draw up an advance agreement with Microsoft that states the Redmond, Wash., company does not intend to assert its patents on this technology.

''If we don't get that agreement, I'll be happy to see Ximian implement this stuff, but I'm not sure I'll touch it,'' Perens said. ''I'm also not sure I want to let it touch the rest of GNOME [GNU Network Object Model Environment] very much because if GNOME becomes dependent on it, it would have a potential weakness there.''

Ximian is an active contributor to the GNOME Project, which has built a desktop environment for the user and a powerful application framework for the software developer. Ximian in fact this week launched two versions of the boxed Ximian Desktop, which includes the GNOME desktop interface.

No Linux app is safe

But Miguel de Icaza, the chief technical officer at Ximian, disagreed with Perens, saying that any application that runs on Linux could be infringing on some hidden and unknown patent owned by Microsoft.

''Microsoft has not historically used its patents in an aggressive way,'' he said. ''They've previously used it to defend themselves. While I suppose they might use it for attack purposes going forward, I don't think they'll go after Mono as we are only in the early stages and are sticking to developing technology from existing concepts. There's nothing new in .Net; it's just a combination of existing technologies.''

Nat Friedman, Ximian's vice president of product development, also stressed that Ximian is not co-operating with Microsoft on the Mono Project. ''They are not assisting us in any way,'' he said. ''We have talked to them twice—that's the extent of it.

''We believe this technology and infrastructure is too important to be

controlled and wholly owned by Microsoft. We believe there has to be a free implementation of it out there,'' he said. But while Perens acknowledged that Microsoft has largely not invoked its patent rights to date, he said, ''Past performance is not predictive of future behavior. Microsoft's [senior vice president] Craig Mundie has previously said the company intends to enforce all its patents.'' An example of a patent held by Microsoft that could be detrimental to open-source initiatives going forward was clearly demonstrated in the password change protocol found in Samba, he said. Microsoft had modified the password change technology and then patented the new protocol of the password change.

''This means you cannot make a compatible implementation without potentially infringing on a Microsoft patent,'' Perens said. ''We went ahead and did it anyway, and Microsoft hasn't enforced that patent, but it doesn't mean they never will. This is a telling case as they've taken what was an open protocol and deliberately put in a patent to close it and then introduced the patented feature in all new systems.''

Samba, which develops open-source software that lets a Linux machine share files or manage print jobs like a Windows file server or print server, has included this patented technology. ''In the climate of antitrust it would be nice to force them to overplay their hand, and Microsoft overplays their hand consistently, Perens said.

But while Jeremy Allison, a lead developer for Samba, confirmed that Microsoft holds the patent for the password change protocol, he believed this ''was done with no malicious intent at all. All big companies patent software for protection. I also think this is probably a defective patent anyway,'' he said.

Microsoft's Mundie said he wasn't familiar with the Samba example, ''but in any case where someone reverse-engineers technology—and there's certainly lots of this in the Linux world—there's always the risk they'll infringe on someone% patent. We highly value intellectual property and the laws created to protect this,'' he said.

But Samba's Allison said the Mono Project is ''a very bad idea—in fact, it's a terrible idea. By doing this they are helping .Net become a standard ..... Net will become important if a majority of the clients use it, but it will not be mandatory if only, say, 50 percent use it, as Web sites will then still have to do Java stuff,'' Allison said. ''By implementing an open-source version of this, they are making it easier for Microsoft to get to that magic monopoly figure.

''And when they've got that on the client, all the servers are in trouble. Look at the way they leveraged their client base to take over services like authentication, e-mail with Exchange, and DNS services by tying Active Directory to DNS. It's a continual case of taking their monopoly on a client system and tying servers to it,'' he said.

MTC–00030617

January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvenia Avenue, NW
Washington, DC 20630

Dear Mr. Ashcroft:

The intention of this letter ?? that I may express my feelings about the antitrust suit against Microsoft, and the settlement that was reached last November that ended that suit. The Department of Justice and Microsoft agreed to terms on a proposed settlement, and I support that proposition.

I do believe however, that Microsoft should have been left alone In the flint place. There are many other corporations that should have received the attention from the government that Microsoft did. There are terms in the settlement that go a little far, especially the ones that force Microsoft to turn over their Intellectual property to competitors. They will be documenting various interfaces and source code that Is Internal to the Windows'' operating system, and giving that to their competitors. This is a travesty of justice.

The antitrust suit against Microsoft was uncalled for, but I guess that the settlement Is the best thing that could have happened. It could have been much worse. I support the settlement because I do not wish to see any further legal action taken against Microsoft. This entire law suit was brought about because of sour grapes on the part of a few people, namely Sunmicro system's CEO. With his connections with a few Senators, namely Warren Hatch from Utah). He was able to get a senate hearing, and the rest is history.

Gosh darn it, the Federal Government can do us a great deal more good by going after such corporations as big oil. Look at what they are doing with the price of oil, at this very moment, with market control of prices almost varying by zip code. And they talk of Bill ??ging the public for his Windows programs and getting by with It due to e lack of competition—please, give me a break.

Sincerely,
Harry Riddle
P.O. Box 88
No. Lakewood, WA 98259

MTC–00030618

Subj: Microsoft Settlement
Date: Monday, January 28, 2002 9:39:34 PM
To: Renata B. Hesse, Antitrust Division, US Department of Justice Suite 1200 Washington DC

Ms: Renata B. Hesse

Just a short note asking for a swift settlement of the Microsoft lawsuit, this whole thing started with Pres. Clinton, and Janet Reno, since then the landslide has taken this country economic situation from stable to recession. Microsoft has worked hard for the consumer and its stockholder, and has agreed to settle this situation out of court and make some competitors happy because they did not have the foresight and dedication to make a great product, and now they want the same access and market share that Microsoft has developd. Its time to move on with progress and settle this situation and get the economy moving again.

Thank you for your time and consideration.

Gunther Hausmann
14311–206 St. SE
Snohomish Wash. 98296
425–481–0926

MTC–00030619

W. Thomas
3864 Quail Ridge Road
Lafayette, CA 94549–291Z
(925) 283–6569
Fax: (925) 284–7619
January 27, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

We five in a country that has been built upon the foundations of capitalism and free enterprise. The antitrust suit against Microsoft is a direct violation of these very ideals. When we attack free business we undermine the very foundation of this nation. I feel that the settlement that has been reached m this case must be accepted as soon as possible so that American business can continue to thrive.

According to this settlement Microsoft will license the internal code of its Windows operating system to twenty of its biggest competitors. This basically requires Microsoft to tell their competition how to make their product. While I believe that this term is a bit extreme I feel that the rest of the settlement will have a positive affect on the IT industry and thus the U.S. economy. The fact that this litigation will now be put to rest will, l believe, help mend some of the damage that has been done to the economy since this case was instigated three years ago. Please continue to support this settlement and American business in general. Thank you for your time and consideration of this case, your diligence is to be commended.

Sincerely,
W. Thomas

MTC–00030620

344 Hedgehope Dr.
Las Vegas, NV 89123–0004
January 28, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing to express my support of the settlement in the antitrust case between Microsoft and the Department of Justice. Although I am happy to see that Microsoft will not be broken up, I do think that litigation should have never occurred in the first place. As a Microsoft user, I do not feel that my rights as a consumer have been infringed upon. Microsoft created a product that is superior to its competitors and made navigating certain systems much easier. This has allowed many people who were computer illiterate to become competent on Microsoft Windows systems.

I regret that nine states feel the need to continue lawsuits. I hope the Attorney General will act to suppress this opposition because it is in the best interest of the American Public.

Sincerely,
Evan Emett
cc: Senator Harry Reid

MTC–00030621

Charles W. Guildnet
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am pleased that a settlement has been reached between Microsoft and the U.5. Department of Justice concerning the antitrust lawsuit. Though this is good news, I dare not fool myself into thinking that this matter has come to an end. The fact that there are still nine States who wish to pursue litigation against Microsoft is simply outrageous. What has Microsoft done to deserve such harsh treatment? From the very beginning Microsoft has proven itself to be a very strong company with timeless innovations. This company has done much to enhance the quality of the personal and professional lives of consumers all over the globe. Microsoft should not be punished for their competitors'' inability to keep with Microsoft very distinct strides to revolutionize the IT industry.

Despite the harsh terms of the proposed settlement, Microsoft has not only agreed to these terms, they have also agreed to terms that were not even at issue in the lawsuit. This is the perfect illustration of Microsoft's willingness to comply. As part of their compliance efforts, Microsoft has agreed to enhance competition to the computer industry by granting their competitors greater access to their protocols and intellectual property. Microsoft has proven beyond a shadow of a doubt that they will do every thing they possibly can to prevent future antitrust violations. After oil, no one wants to repeat any of the events of the last three years of litigation. I hope that you make sincere strides to really listen to the public and give Microsoft the chance to continue their innovative and creative service to the computer industry and to as many consumers that want to utilize their products!

Sincerely,

MTC–00030622

Helen B. Gamsey
6006 S River Road
Norfolk. VA 23505–4711
January 27, 2002
Attorney General John Ashcroft
US Department of Justice, 950 Peansylvania Avenue, NW
Washington, DC 20530-O001

Dear Mr. Ashcroft:

I am writing you today to voice my opinion in regards to the Mierosoft settlement issue. I feel that this debate has gone on long enough and that it is time to end this litigation. After three years of litigation, it is time to focus on more pressing issues. The nation is under attack and may soon be involved in a major war. In my opinion, this lawsuit should never have occurred in file first place. R was orchestrated by Microsoft's competitors like Sun Microsystems, Oracle, AOL, IBM, and others. I have not been a shareholder for almost a year but I am still very concerned about what I feel is gross miscarriage of justice in tiffs case.

Microsoft should be rewarded for all the technological and economic advances their products allowed in the last decade, Instead their persecution, instigated by their competitors persists. I hoped the Appeals Court Judges would vacate Judge Jackson's findings. The Oral arguments certainly indicated this might happen, considering their horror upon discovering Judge Jackson's judicial misconduct, and the way they mocked the government's case. Even though their final decision admitted that ''All indications are that the District Judge violated each of these ethical precepts. The violations were deliberate, repeated, egregious, and flagrant.'' Section 455(a) of the Judicial Code requires judges to recuse themselves when their ''impartiality might reasonably be questioned.'' The Appeals Court basically did nothing to remedy Jackson's inexcusable conduct beyond giving him a verbal tongue lasting, and they failed to hate Jackson recused retroactively from the first time there was evidence of judicial misconduct.

Contrary to Mierosoft's competitors whinings,,,this settlement goes beyond that suggested by the Appeals Court. The AC court threw out all of Jackson's remedies which would have broken up the company. They rejected the remedies not only because Jackson erred by not allowing an evidentiary hearing on remedies: but because those remedies no longer applied to the violations they found; which were much less severe than those found by Jackson. They also said that a structural remedy is rarely indicated and only if there was actual proof that ''exclusionary her words, there was no evidence to show that Netsape and Java would

The Appeals Court judges threw out Judge Jackson entire remedy, partly because Jackson violated basic procedural rule m not allowing an evidentiary hearing on the remedy. In their words; ''It is a cardinal principle of our system of justice that factual disputes must be heard in open court and resolved through trial-like evidentiary proceedings. Any other course would be contrary ''to the spirit which imbues our judicial tribunals prohibiting decision without bearing.'' Yet the Appeals Court ignored their own advice, and failed to hold an evidentiary hearing to determine when these 'egregious ethical violations'' occurred. This allowed them to arbitrarily select a date, which conveniently was after Jackson issued his Findings of Fact and Conclusions of Law, even though evidence was presented that revealed the violations occurred before the Findings of Fact were issued.. The entire decision should at least have been vacated and the case remanded to a different judge or the case should have been thrown out in toto.

If this settlement is rejected, I only hope the Supreme Court does the fight thing and throws it out entirely. The respected mediator from the first trial, Judge Posner, is strongly opposed to the participation of the States Attorney Generals who are the mason this case was not settled during the first trial and are the reason why this settlement is being disputed now. Posner has recommended that future antitrust cases brought by the Federal government not allow the States Attorney Generals to participate. Unfortunately, he acknowledged that any change to the laws would occur too late to help this case be resolved.

Further, Posner acknowledges ''A complication is that it is difficult to find truly neutral competent experts to advise the lawyers judges and enforcement agencies on technical questions in the new economy. There aren't that many competent experts, and almost all of them are employed by or have financial pies to firms involved in or potentially affected by antitrust litigation in this sector. It is difficult to find a consultant in the new economy who is both competent and disinterested, or ''find neutral experts they could help the judge administer a consent decree.''

''The new economy presents unusually difficult questions of fact, such as where a plaintiff complains that the defendant has changed the interface to make it more difficult for the plaintiffs product to work with the network or a defendant contends that it disclosing a protocol would allow its competitors by reverse engineering to copy its trade secret, that cannot be protected by copyright or patent law. Both questions are very technical and difficult.'' ''Antitrust in the New Economy. Antitrust Law Jounal, 2001, 68, 920–940

There were no impartial neutral experts to help Judge Jackge nor to advise file appeals Court Judges. Unfortunately, the Appeals Court Judges relied on the expertise of antitrust experts who they thought were impartial. but were actually hired by Microsoft's competitors. Jackson admitted to being completely completely about technology and the economies behind any any, dies. There is little doubt he had much to do with the Findings of Fact or with the Conclusions of Law fudge Jackson admitted frequently he was not competent m technology issues nor in economic issues involved in any remedies. In other words, Jackson was ''technologically and economically, challenged. He admitted that his secretaries would explain certain issues to him. Jackson just rubber stamped the remedy submitted by the Government, who consulted heavily with Microsoft's competitors. The government in turn accepted what Microsoft's competitors gave them, they in turn got ProComp and SIIAA and CIIAA to do their work. Even the Appeals Court judges admitted their ignorance of basic technologicalological issues which were essential to the essence of this case.

THE COURT: I mean I have to say that I have only done downloading of these things with the help of much more skilled people. So I took seriously the proposition that that was a big harrier. But 60 million people just downloaded it? The Appeals Court judges in Microsoft's appeal were astonished to learn that 160 million copies of Netscape browsers were distributed overall, and that their user base doubled to 33 million 1998 when Microsoft's competitors were accusing Microsoft of foreclosing competion. The Appeals Court judges vacated Jackson's finding of attempted monopolization; they remanded the issue of tying to be decided under new standards, (even thouugh they categorically dismissed the charges of lying

during the Oral arguments. (They indicated they were told (by Microsoft's competitors, no doubt) that they used the wrong standards. The only finding they accepted, and not on all of the original counts was fixer of illegal monopoly maintenance. Curiously, this theory of monopoly maintenance was created by Susan Creighton in the original White Paper about Netscape in 19977 Susan Creighton has been a diehard foe and ''card-carrying anti-Microsoft agitator'' of Microsoft from the early ''90's. More curiously, Susan Creighton is now tile deputy director for the P-TC. I hope she has recused herself from any involvement in this case.

The judges unknowingly relied on at least one economist's novel theories—whose theories were apparently created just for fills case. Derails Carlton was an original participant in Project Sherman. ''The Truth, The Whole Truth, and Nothing But The Truth'' http://www.wired.com/wired/archive/811/microsoft.html

Mike Morris was counsel for Sun Micros)stems. ''Morris had been in contact with Joel Klein (in 1998) as part of a three-way effort to nudge the government toward a case against Microsoft'' ''for the past nine months.'' Wired 11/2000 Page 280. The other two parties were Netscape's Roberta Katz and Sabre's counsel, Andy Steinberg. Together they had founded ProComp, ''Now Morris was plotting a solo mission: to put together a sort of private blue-ribbon commission of nationally renowned antitrust lawyers and economists, have them draw up an outline of the kind of Sherman Act case that would make sense for the DOJ to file, including a discussion of possible remedies, and then present the whole firing to Klein and his people. ''According to the article, Joel Klein thought this would be useful. From Wired 1112000 Page 280.

''The political sensitivity of Project Sherman was, needless to say, extremely high, for here was one of Microsoft's most ardent competitors bankrolling a costly endeavor to influence the DOJ—an endeavor undertaken with the department's encouragement.'' ''So began a project that would span three months and consume $3 million of Sun's money: Project Sherman.'' ''Morris look care to select people with impeccable credentials;—mainstream credentials, establishment credentials; the kind of people who spoke Joel Klein's language; the kind who might appear reasonably objective despite the fact that Sun was paying them $600 to $700 an hour.'' (From Wired Magazine, 11/2000, p 280)

''The ''superstar'' cast included economists from the firm of Lexecon; an attorney from Arnold & Porter: a Strafford economist and a former FTC counsel who handles Surfs antitrust work m Washington. ''Members of Project Sherman met every two weeks for three months and then Morris got Gary Reback to assemble industry figures for a hush hush meeting, not knowing they had been paid by Sun. (From Wired Magazine, l 1/2000, p 280) ''Apart from MeNeatey, Morris informed almost no one at Sun, and the other participants were sworn to strict confidentiality.'' (page 280, Wired November 2000).

According to Heilemann, Reback and Creighton lobbied the FTC, the Senate Judiciary Committee, the European Commission, other Attorney Generals and anyone who would listen. A few others who helped out were Mike Hirshland, Republican Senate aid to Senator Orrin Hatch; Jim Clark and Jamcs Barksdate from Nescape, and Venture Capitalist John Doer. ''A few weeks later, Morris and his ''team'' flew to Washington to meet with the DOJ attorneys: Jocl Klein, Melamed, Rubinreid, Malone, Boise for many hours. ''Morris's team ''proceeded to outline the case they believed the DOJ should file.'' The charges were straight from the Netscape White Paper written by Susan Creighton ''illegal monopoly maintenance arid monopoly extension; a violation of Section 2 of the Sherman Act'' They addressed the question of so called ''harm to consumers;'' the so called ''damage to innovation'' and ''then the talk turned to remedies'' and a range of conduct remedies'' was presented as well as the ''case for a structural remedy'' (From Pages 282–283 of Wired Magazine, November 2000)

''In 1975 Microsoft had 3 employees and revenues of $16,000. Over the next 25 years they grew to 36,000 employees and revenues of $20 billion by obsessively figuring out what computer users needed and delivering it to them.'' ''Over the) years Gates and his colleagues made a lot of people mad, especially their competitors. Some of those competitors delivered a 222-page white paper in 1996 to loci Klein, head of the Justice Department's antitrust division, and urged him to do to Microsoft in court what they couldn't do in the marketplace. (Susan Creighton wrote that White Paper).

Another peculiarity of this case is the presence of U.C. Berkeley Haas Business School Professor Michael L. Katz as chief economist of the DOJ antitrust division Apart from his strong support for government regulation, Katz. wrote papers iii support of the DOJ case against Microsoft; including one co-written with Carl Shapiro, the economic counsel to the States Attorney Gencrals .... hmmmm...

Curiously, the Department of Justice worked closely with the competitors like Sire Microsystems for four years, often showing sentences or paragraphs in drafts of the department's plans and soliciting their approval. The politics of the case is a far cry from th?? Platonic ideal of rigorous economists devising the best possible antitrust rules and wise, disinterested judges carefully weighing the, evidence.'' Microsoft's competitors have used the Department of Justice to try to take not just their money but their intellectual pt, well. From ''The Theft of Microsoft'' by David Boaz. http://www.cato.org/dailvs/07–27–00.html

I cannot imagine that Project Sherman was a legal undertaking, and wonder if the Appeals Court judges were aware of Joel Kleins meeting with reporter John Heileman. I wonder if the DOJ would have brought the case if it was publicly acknowledged at the time that they were listening to testimony from hired experts paid handsomely by Microsoft's.

During these difficult times, it is vital to do all we can to boost our economy. Restricting Microsoft will not accomplish this. This country is at war with a world wide network of Islamic extremists intent on destroying us. The Department of Justice needs to focus on ''fixing'' the FBI and improving the security of our nation and protecting American citizens against more terrorist attacks. Has this short passage of time since September 11 dulled memories so quickly that we are back to the old games of using lawyers and politicians and the Department of Justice to squash competitors? Are things really back to normal? I don't think so...until the next terrorist attack. . .

Antitrust laws are not meant to protect competitors against their inability to compete in the marketplace due to their own incompetence...Look who is suing? AOL, Sun Microsystems, Oracle, IBM are multibillion corporations... not more and pop outfits threatened by a bully...The antitrust laws were meant to protect consumers and to allow fair competition. Consumers are not complaining. However antitrust laws are now being used to protect competitors, and to make trial lawyers even richer,,,at the expense of consumers and the economy, How many companies have been forced into bankruptcy now by trial lawyers over asbestos? 20? 30? 50?

AOL, Time Warner, IBM, Sun Microsystems, Oracle, etc have contributed heavily to politicians for years...long before Microsoft was forced to play tiffs game, as a result of their persistent efforts to prosecute and persecute Microsoft.

Should the DOJ continue to ''work'' on behalf of Attorney Generals who are receiving large contributions and specific instructions from Microsoft's competitors via ProComp and other such organizations? After all, it was Sun Microsystems'' who paid antitrust experts like Dennis Carlton to ''produce'' antitrust charges which would appear credible to the DOJ. Reputable antitrust experts like Carlson produced novel antitrust theories of harm from incomplete exclusionary conduct. Almost all of the violations upheld by the Appeals Court were based on Carlton's ''novel'' theories. Others were based on ''novel'' theories developed by Susan Creighton, an ardent Microsoft foe.

I would think that the Enron scandal would make politicians and regulators more wary of the dangers involved from large contributors... I was surprised to learn the extent of Euron's contributions. They gave $50,000 to Paul Krugmnan, from the New York Times, who writes about economic matters, and not too surprisingly, Krugman apparently wrote positive articles in the past about Enron ....

It was a complaint from Sum Microsystems that lead the European Union to launch an antitrust case against Microsoft by the EU. There is something about certain American companies that run to other countries to crush their competition .if they can't get the DO/or FTC to do it... It is telling that Sun Microsystems has 200 lawyers in their legal department, more than many large firms, even in Washington. I think their shareholders might prefer they spent more on improving their products and competing...as their stock contire, es to decline.

Microsoft was consistently been rated one of the top corporations to work for and one

of the most admired companies by Fortune until the trial lawyers and AG and MSFT's competitors started their hatchet jobs and made Microsoft into an ''unsympathetic target.'' http://www.tcchcentralstation.cont/1051/techwrapper.jsp?PLD=1051–250&CID=1051–012901A

Microsoft's competitors lobbied politicians for years before Microsoft was finally forced to join their game and forced to pay this ''protection money.'' ''For about 20 years Gates and his colleagues just sat out there in ''the other Washington'' creating and selling. As file company got bigger, Washington DC, politicians and journalists began sneering at Microsoft's political innocence. A congressional aide told the press, ''They don't want to play the 1). C. game, that's clear, and they've gotten away with it so far. The problem is, in the long run they won't be able to.'' Politicians told Bill Gates, ''Nice little company ya got there. Shame if anything happened to it.'' And Microsoft got the message'' If you want to produce something in America, you'd better play the game. In 1995, after relocated assaults by the Federal Trade Commission mid the Justice Department, Microsoft broke down and started playing the Washington game. It hired lobbyists and Washington PR firms. Its executives made political contributions. And every other high-tech company is getting the message, too, which is great news for lobbyists and fundraisers.'' (but not for consumers or innovators or successful companies..) From ''The Theft of Microsoft'' by David Boaz. http://www.cato.org/dailvs/07–27–00.html

''What lesson should they draw? The antitrust laws are fatally flawed. When our antitrust laws are used by competitors to harm success fid companies, when our most innovative companies are under assault from the federal government, when lawyers and politicians decide to restructure the software, credit, card and airline industries, it's time to repeal the antitrust laws and let firms compete in a free marketplace.

Microsoft's competitors and these phony front groups are using their influence over the media, and their power from contributions to politicians to give the appearance that they are concerned with consumers, when they are only advancing their own agenda, which is harmful to most of us. Microsoft's competitors claim to have the interest of consumers at heart, when in reality their own incompetence lead to their loss of market share. AOL 5 was such a terrible product that even computer experts could not deal with the changes it made to the computer. It changed your default settings and took over. Mossberg from the Wall Street Journal. who has never been a fan of Microsoft, acknowledged this at the tune and there were lawsuits over this which somehow failed to make the news. Anyone who has ever used AOL knows about their inferior products and their poor customer service.

Nonetheless, it is time to end this case that should have never been. and to stop being influenced by Microsoft's competitors who have been behind the case from the beginning of Microsoft's persecution by the Department of Justice, starting in the early ''90's. This settlement is the perfect means to end this dispute. Microsoft will remain together and continue designing and marketing their innovative software, while fostering competition and making it easier for other companies to compete. Microsoft has pledged to share more information about Windows operating system products and has agreed to be monitored for compliance.

I sincerely hope the Department of Justice accepts this settlement and puts an end to this mess and turns their attention to real threats to the Nation- the terrorists who want to destroy the West. Caving into Microsoft's major competitors who are behind the Attorney Generals hurt consumers and the economy further. Let them innovate like Microsoft does, rather than litigate.

Thank you for your attention.

Sincerely.

Helen B. Gamsey

Helen Gamsey

MTC–00030623

Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington DC 20530–0001

Dear Mr Ashcroft,

I am writing to you about the Microsoft settlement as is permitted under the Tunney Act. I am now retired following a 40 year career in banking. I followed the daily reporting of the hearing before Judge Thomas Penfield Jackson and read his entire opinion by downloading it from the internet. The press reporting during the trial led me to certain conclusions, One, the judge was biased against Microsoft during the trial. This was born out when the press characterized one of the expressions of this judge as a look of incredulity such as ''can you really believe this guy'' when David Boles was examining a Microsoft executive during the case. In my opinion this bias carried over and influenced his findings of fact and proposed remedies. Secondly, the judge erred in suggesting harm to the consumer by Microsoft pricing practices

But the purpose of this letter is not to rehash the origina; trial. The Federal Court of Appeals has ruled and remanded the case back for remedies The Department of Justice has a settlement now before the court. I believe that the Department of Justice's most recent decision to end the antitrust case is truly the right one Several states have agreed with thai decision. The remaining recalcitrant states, and that is my term, are defending not the consumer but vested interests of competitors of Microsoft

During the 1980's, various competitors of Microsoft (Sun, Oracle, DEC, iBM) formed a consodium to ostensibly create standards for Personal Computer Operating Systems. It was reported in all of the computer trade journals from the mid 1980's on. As 1 recall they had several meetings over a period of a couple of years, before it broke down. and IBM then proceeded to create their own OS/2 operating system

Dunng the 1950's IBM was the dominant force in large Main Frame Operating systems. This did not deter Burroughs, National Cash Register (NCR), Wang Systems, Digital Equipment and others from creating competing operating systems. Sun Computers had a high-priced engineering operating system in the 1980's and trade journals all reported that Scott McNeely desired to develop a competitor system to Microsoft for Personal Computers. There was only one problem. He could not develop a mass market, few priced system

This fact has been lost in the case against Microsoft It has saddened me to see our courts and some politicians being used as a referee to reward certain competitors, not in the market place of commerce and ideas, but in the courts P.B2

I am retired and do a bit of financial consulting on the side. l use computers quite regularly and would be hard-pressed to find a better set of software products than those created by Microsoft. My first personal computer in 1984 was a Macintosh and I enjoyed it very much, The only problem with it however was that most of the software created by others was buggy and would sometimes crash. I am reminded particulary of some Oracle software which was very buggy and was continually a problem. There was a spreadsheet program however, created by a little company that l had never heard of callled Microsoft, and if worked seamlessly on the Macintosh. I made the conversion to PC's in [he early 90's and would never look back, The affordability and stability of Microsoft products convinced me.

Please express my views to the judge. As a retired business person and a consumer of computer software, f would ask the court to affirm the Department of Justice settlement agreed to by nine states and reject the continued attempts by certain other states to reward the competitors of Microsoft.

Continued litigation will only threaten the Computer software and hardware industry and consequently, the entire economy. I ask that you please stop these lawsuits and let Microsoft concentrate on the business of business once again,

I would greatly appreciate your reflecting my views, or a summary of them to the judge.

Thank you for your time and thoughtful consideration of this matter.

Cordiaily.

Gerald G Lacey

cc: Senator Strom Thurmond

cc: Senator Fritz Hoilings

MTC–00030624

January 14, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing to let you know that I am in favor of the Department of Justice ending its antitrust case against Microsoft. I believe that Microsoft is operating under fair business practices, and that the terms of the settlement agreement reached in November are reasonable. Microsoft will now share information with its competitors about Windows, which will allow them to place their own programs on the operating system.

Ending the case against Microsoft will allow them to concentrate on developing new technologies and services, and their continued success is beneficial to the overall

economy. Their concessions in the settlement agreement will allow them to continue innovating the technology industry.

Please support finalizing the settlement under the current conditions.

Sincerely,

Jack Westbrooks 16590 Heim Road
Chelsea, MI 48118

Jack Westbrooks
Network Consultant
MCT, MCSE, CNE, CCNA

MTC–00030625

ATT: RENATA B. HESSE
ANTITRVST DIVISION
MICROSOFF SETTLENT
5645 Lord Cecil Street San Diego, CA 92122
January 27, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

The settlement of the antitrust case appears to me to be fair, workable, in the best interests of America. The new judge from the Federal District Court who was assigned to the case, and who assigned the mediator, should approve it.

The settlement will change Microsoft is many ways, even beyond the scope of the original litigation. The use of exclusive marketing agreements with companies that build computers will be banned. A uniform price list, with only discounts for large volume shipments, will be instituted with large computer makers, instead of individual negotiations. A committee of experienced software engineering experts will see that the agreement is enforced. This settlement seems like it will be in the best interests of the country, because the technology sector has been slumping. The end of the litigation will help. The increased flexibility and cooperation within the industry will also help.

Let's see this settlement approved as soon as legally possible. Let's see

America strong again.

Thank you for your help.

Sincerely,

Alvaro Munevar

MTC–00030626

Robert Sylvester . 135 Claridge Drive . Moon Twp, PA 15108
January 28, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I understand the Department of Justice is accepting and publishing public comments for the first time since the antitrust suit was brought against Microsoft more than three years ago. Here are some of my views on what I'd like to see happen.

Microsoft has been cooperative throughout this lawsuit. They have agreed that if a third party's exercise of any options provided for by the settlement would infringe any of Microsoft's intellectual property rights, Microsoft will provide the third party with a license to use the necessary intellectual property on reasonable and non-discriminatory terms. Microsoft has also agreed to the establishment of a technical committee that will monitor Microsoft's compliance with the settlement and assist in resolving disputes.

I urge you to do your part in ending this lawsuit. We've already reached an agreement. Let's move forward and deal with some of the more pressing issues, such as rebuilding the technology sector so that we can revive this economy.

WAYNE E. QUINTON
The Highlands
January 23, 2002
Attorney General John Ashcroft
US Department of Justice,
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft:

I am writing to tell you what I think of the Microsoft Case. This case is certainly not serving the public interest; it wasn't even brought on by the public. It was brought on because of their competitors'' influence and is now being paid for with tax money. This case is a ridiculous waste of tax money. People are suing Microsoft because they can't compete. I think there is something wrong when the law allows that.

Microsoft is passing on their technology secrets to their competitors and has even promised not to retaliate when competitors create products from that technology that would compete with Microsoft. If that's not fair, then 1 don't see what would be. Breaking up the company would be disastrous to our country's economy.

This settlement is long past due and needs to be accepted immediately. Accepting this settlement is the right way to end this mess. Thank you for your time.

Sincerely,

Wayn Quinton
The Highlands
Seattle, WA 98177

MTC–00030627

Date: Monday, January 28, 2002
To: Attorney General John Ashcroft
Company: U.S. Department of Justice, Washington, D.C
Fax Phone #: +1 (202) 307–1454
CC:
From: Lucille M. Mcculley
Subject: Microsoft Antitrust Settlement
Total # of Pages (including cover): 1

Memo: Dear Mr. Ashcroft:

I am writing to express support for the Microsoft antitrust settlement. It seems like a good plan and a fair way to resolve what has beeen a lengthy and unnecessary inuiry into Microsft's business dealings. The settlement's terms are very generous to Microsoft's competitors, and giving them access to Windows programming codes will enable them to make their programs more compatible with Microsoft's operating system.

Forgoing further exclusivity agreements with computer manufacturers will also diversify the market more than it already is. The settlement should give both the government and Microsoft what they want to ultimarly put the situation to rest. Please finalize the settlement without further delay.

Sincerely,

Lucille M. McCulley, 221 East 78th Street, NY NY 10021

If all pages were not received, please call back immediately:

Jacobo Kravec
21011 NE 34th Place
Miami, FL 33180–3585
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft,

The settlement that has been reached between the US Department of Justice and Microsoft is harsh to Microsoft, but should be implemented because it is in the best interests of the American public. Microsoft is one of our nation's strongest assets and we cannot afford to have them sitting on the sideline when there is a technological race for superiority in the Technology Industry. Microsoft's innovation has standardized the IT sector and has served as the leader in development for America's tech sector.

Yes, Microsoft's marketing tactics have been heavy-handed at times, but the terms of the settlement should serve to appease all competitors, as Microsoft will be disclosing for their use interfaces that are internal to Windows operating system products—a first in an antitrust case settlement. Microsoft will also be granting computer makers broad new rights to configure Windows so that nonMicrosoft products can be more easily promoted.

Please use your influence to finalize the settlement. It is in the best interests of the American public, IT sector, and our economy to end the dispute and allow Microsoft to focus on business, not politics.

Sincerely,

Jacobo Kravec

MTC–00030628

Carl Lochen
30010 Rancho California Road
Apartment 124
Temecula, CA 92591–2952
January 28, 2002
Attorney General John Ashcroft
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530–0001

Dear Mr. Ashcroft,

As an independent developer and supporter of Microsoft, I write you in regard to the recent Microsoft Settlement. After three years of negotiations, it seems strange that there may even be more delays in the implementation of this plan. The process was extremely well thought out and well monitored throughout. Because of this, the terms that were reached benefit all involved. As we go through these economically stressful times, it is crucial that we support our technology at all levels. By holding up this settlement, we take a backseat in the global market. Our entire technology industry needs to get back to business, and because of the agreement, we are ready to do so. Let us support our IT sector and allow the terms to speak for themselves, including anti-retribution and retaliation acts, and the sharing of selected intellectual property.

Splitting up Microsoft

Specifically the non-Windows platform community has attacked Microsoft for adding

to much functionality to its OS, and therefore stifling competition. They argue splitting up Microsoft, would make it easier to compete with Microsoft. This ignores the large amount of developers and companies that have made available more than 100 000 programs available on the Windows platform. Splitting up Microsoft, will for them mean disrupting the dynamics of developing cutting edge technology for Windows.

Windows Building blocks

Splitting up Microsoft into pieces, will create smaller companies developing solutions/libraries that will not be included in Windows and therefore be keeping secrets from other independent developers who will have to develop their own incompatible solutions. Splitting up Microsoft, destroys Windows's ability to offer solutions for connecting together building blocks with the latest technology. Solutions that are now incorporated in Windows and documented for everyone, will end up as proprietary solutions outside Windows. Making it less feasible for smaller developers to keep up with the latest in technology.

Microsoft is giving us pre-tested building blocks guaranteed to be interchangeable and compatible with each other. Developers using these building blocks for their own designs, know that their programs will be compatible with combinations of future designs trying to link up with or work together with their designs. Think of the many millions of errors windows is getting rid of for current and future developers of software...

Whenever building blocks are rewritten with new interfaces, previous interface(s) are still available to let older designs work as building blocks change. This is true of COM+ and any of the API's that come with Windows. It beats trying to design applications to hook up to zillions of applications not using support from the OS.

The Internet building blocks

Internet technology built into Windows, assists applications using various Windows technologies in communicating and sharing data with each other over the Internet. This degree of integration between applications/components is only possible by having these technologies built into the platform they are running on. Internet Explorer built into Windows facilitates in building web browsers. Any developer can build their own Web Browser with their own customized controls. In less than a day they can design their own Web Browser that is equal in power to Internet Explorer. Just download the MFCIE project from Microsoft Developer Network (has been available a couple of years). In less than a day you implement remaining Internet Explorer Functions through the OLE/COM+ interface. In a matter of days any organization can design their own Internet portals that access primarily sites of their own choosing.

Documentation for developing software

Microsoft develops the functionality and the building blocks needed for applications and distributed components to interact with each other on the Windows platform. Microsoft also provides Documentation and Developer information for all developers to take advantage of these features. Preventing Microsoft from freely expanding these features to provide the latest technologies, will damage the industry's ability to develop comprehensive integrated software solutions for the Windows platform. Instead you will end up with incompatible proprietary solutions and a less versatile Windows platform.

I urge you to support our economy at this time, and help this settlement go through as it stands. I thank you for your support.

Sincerely,

CJ

Carl Lochen

cc: Representative Darrell Essa

MTC–00030629

25010 42nd Avenue S Kent, WA 98032
January 25, 2002
Attorney General John Ashcroft
US Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Ashcroft:

I am of the opinion that the antitrust lawsuit against Microsoft is unnecessary. I do not believe that Microsoft was guilty of antitrust violations in the first place. As a computer user I want an operating system that is complete, and a system that does not include an Internet browser is incomplete. Microsoft wants to be able to provide the best, most complete, products on the market. The addition of Internet Explorer is the natural progression of the Windows operating system. The grounds of this suit are faulty, and in my opinion the best resolution to this case is the dismissal of the charges.

On the other hand I feel that this case needs to come to an end, and the quickest way to accomplish this is to accept the terms of the settlement that was reached in early November. I feel that this settlement is a bit harsh, however Microsoft has committed themselves to the terms and are willing to make the necessary sacrifices to get this litigation finished, and themselves back to business. The terms require that Microsoft disclose information pertaining to the internal interface of the Windows operating system so that other companies can create products that work within the system. This term of the settlement in particular is extreme. It requires Microsoft to reveal information that was formerly known and kept as a trade secret. Terms of this nature have never been included in an antitrust settlement before, and its inclusion in this one is not necessary, however Microsoft has agreed to the settlement and therefore it should stand.

Thank you for all of the work that you have done to bring this suit to a close. Please continue to support American business and free enterprise in the future.

sincerely,

Douglas Harper

MTC–00030630

www.microsoft.com/freadomtoinnovate/
www.usdoj.gov/atr/cases/ais-settie.htm
The letter follows:
January 28, 2002
Attorney General John. Ashcront
Department of Justice
950 Pennsylvania Avenue
Washington. DC 20530–0001

Dear Mr, Ashcroft:

My name is Ruth Burke, I am a resident of Fenton. Missount. My reason for writing is to let you know that I support the Justice Department's proposed settlement with Microsoft and that I appreciate your bringing this matter to at least a partial close.

I do not feel that this case should drag on when a fall agreement has been reached. I am sure that people will have gripes with particular provisions of the settlement, but the agreement, when taken as a whole, is beneficial to the all involved.

By agreeing to a more level playing held in the are as of pricing, distribution, and software combetition, Microsoft has opened the door to both increased competition and ch??e. As I understand it, that is the goal in any antitrust litigation. It is time for everyone involved to get out of Court and get back to work.

Sincerely,

MTC–00030631

01/29/02 TUE 0l:05 FAX 2024085200
STEVENS DAVIS
MILLER MOS 001
To :
From:
VIA FACSIMILE ONLY TO 202–307–1545
Renata B. Hesse, Esq.
U.S. Department of Justice
Antitrust Division
601 D Street, NW
Suite 1200
Washington, DC 20530
Telecopier: 202–307–1545/202–616–9937
Telephone: 202–514–8276
Peter Peckarsky, Esquire
1615 L Street, NW
Suite 850
Washington, DC 20036
Telecopier: 202–408–5200
Telephone: 202–785–0100
Re: U.S.v. Microsoft, Civil Action No. 98–1232
Date: January 28, 2002
No. of pages (including this sheet):
01/29/02 TUE 01:05 FAX 2024085200
STEVENS DAVIS
MILLER MOS
002
January 28, 2002
Renata Hesse, Esq.
Trial Attorney
Antitrust Division
U.S. Department of Justice
Suite 1200
601 D Street NW
Washington, DC 20530
Facsimile: 202–616–9937 or 202–307–1545
E-mail: microsoft.atr@usdoc.gov
The Honorable John Asbcroft
Attorney General of the United States
U.S. Department of Justice
Room 4400
950 Pennsylvania Avenue, NW
Washington, DC 20530 (without exhibits or attachments)
The Honorable Charles A. James
Assistant Attorney General
Antitrust Division
U.S. Department of Justice
901 Pennsylvania Avenue, NW
Washington, DC 20530 (without exhibits or attachments)

Mary Braden, Director
Departmental Ethics Office
U.S. Department of Justice
Room 6642
950 Pennsylvania Avenue, NW
Washington, DC 20530 (without exhibits or attachments)
Re:
Comments of Relpromax Antitrust Inc. with respect to the Revised Proposed Final Judgment dated November 6, 2001, and filed in U.S.v. Microsoft,
Civil Action No. 98–1232, United States District Court for the District of Columbia

Dear Ms. Hesse:

Defendant Microsoft has been found liable for multiple violations of Section 2 of the Sherman Act, 15 U.S.C. 2. A proposal for a consent judgment (in the form of a Revised Proosed Final Judgment (''RPFJ'') dated November 6, 200l, and signed for the United States by Charles A. James, Assistant Attorney General, Antitrust Division, United States Department of Justice) has been submitted in the captioned civil action. As will be made clear below and has beer made clear by others who have submitted comments, the RPFJ does not meet the requirement,, of law and makes a mockery of the judicial power.

Assistant Attorney General James freely concedes that one of the products at issue is one of the necessaries of modern life. As Mr. James recently wrote:

[The case] involves the signature product of the digital age, the Windows operating system, through which the vast majority of computer users worldwide interne; with what has become a basic appliance in human life.

The Act was named for Senator John Sherman (R.—Ohio). The following is what Senator Sherman told the Senate about concentrated economic power controlling the necessaries of life during the debate that led to the passage of the Sherman Act:

If the concentered [concentrated] powers of [a trust] are intrusted to a single man, it is a kingly prerogative, inconsistent with our fore1 of government, and should be subject to the strong resistance of the State and national authorities. If anything is wrong this is wrong. If we will not endure a king as a political power we should not endure a king over the production, transportation, and sale of any of the necessaries of life. If we would not submit to an emperor we should not submit to an autocrat of trade, with power to prevent competition and to fix the price of any commodity.

INTRODUCTION

I am the President of Relpromax Antitrust Inc. I am an economist by education and experience. I received a Ph.D. in economics from Princeton University and an A.B. in economics

See, among others, the Comment (dated January 17, 2002) of Robert E. Litan, Roger D. Noll, and William D. Nordhaus on the Revised Proposed Final Judgment: and the letter (dated January 24, 2002) on behalf of the American Antitrust Institute by Albert A. Foot, Robert H. Lande, Norman W. Hawker, and Oded Pincas.

Charles A. James. The Real ''Microsoft'' Case and Settlement, l6 Antitrust 58 (ABA Fall 2001) (a copy of the article is attached as Exhibit 12). Congressional Record, Senate, March 21, 1890, page 2457.

01/29/02 TUE 01:05 FAX 2024085200 STEVENS DAVIS MILLER MOS from the University of California at Davis. I taught economics at Cleveland State University, Central Michigan University, and Kansas State University. I was a post-doctoral research fellow at Wayne State University. At Kansas State University, I was a Visiting Assistant Professor and taught a course in industrial organization economics. I have worked as an economic analyst at the Illinois Commerce Commission which regulates public utilities.

EXECUTIVE SUMMARY

1. My analysis of the competitive impact of the RPFJ using a computerized model demonstrates that the law requires a structural remedy splitting Microsoft into at :least two (2) competing companies if the compensation for the executives of these companies is based on relative profit maximization (RPM). A re-structuring into at least three (3) competing companies if the compensation for the executives of these firms is based on absolute profit maximization (APM).

2. The conduct of the United States Department of Justice and Microsoft with respect to the RPFJ since about September, 200l, has demonstrated contempt for the Court and the statutory rights of all Americans.

3. The RPFJ affirmatively declares that it creates no rights for Original Equipment Manufacturers (OEMs), Covered OEMs, Interact Access Providers (IAPs), Internet Content Providers (ICPs), Independent Hardware Vendors (IHVs), or Independent Software Vendors (ISVs).

4. The RPFJ will not stop Microsoft's violations of the antitrust laws, prevent a recurrence, restore competition to the market, or deny Microsoft the fruits of its illegal conduct.

5. To avoid a conflict of interest or the appearance of impropriety, the Attorney General, the Assistant Attorney General in charge of the Antitrust Division, and all other political nominees or appointees of the current Administration should recuse themselves from any further involvement in matters related to Microsoft; the authority to continue to represent the United States should be delegated to a non-political career trial attorney of the Antitrust Division of the Justice Department pursuant to 28 U.S.C. 510 by a career employee of the Justice Department acting as the delegatee of the Attorney General.

DISCUSSION

A. The Violations of Law and What The Remedy Must Do By Law

The Antitrust Procedures and Penalties Act (Tunney Act) governs this court's consideration of the RPFJ.

The Tunney Act was signed on December 21, 1974, to remedy one of the remy abuses of power which led to the adoption of the second of three Articles of Impeachment of the President by the Committee on the Judiciary of the United States House of Representatives on July 27, 1974. and to the only Presidential resignation in the history of our nation on August 9, 1974. The Tunney Act is not merely some procedural nicety.

The Tunney Act was intended to protect all Americans against an abuse of the antitrust settlement power. See Exhibit 10 hereto, pages 13–22.

In a unanimous 7–0 decision, the United States Court of Appeals for .'.:he District of Columbia Circuit found Microsoft liable for multiple violations of 15 U.S.C. 2 due to unlawful maintenance of a monopoly. U.S.v. Microsoft, 253 F.3d 34 (DC Cir. 2001).

The violations of law related to anti-competitive restrictions on OEMs, the, integration of Internet Explorer with Windows, exclusionary agreements with IAPs, anti-competitive agreements with ISVs, dealings with Apple Computer, First Wave agreements with ISVs, the fraudulent deception of software developers using Java, and threats to Intel.

By law, the remedy must stop the violations, prevent a recurrence, restore competitive conditions in the market, and deny to Microsoft the fruits of its statutory violation.

171/29/02 TUE 01:06 FAX 2124085200 STEVENS DAVIS MILLER MOS 006

Given that the United States won a judgment sufficient to support these remedies, it is not in the public interest for this Court to rubber stamp its approval on a sweetheart dea?? to protect a campaign contributor to both the Attorney Genera/and the President who put the Attorney General and Assistant Attorney General in charge of the Antitrust Division in their current offices. See Exhibit 10 hereto, pages 16–18, 21, and 25, and Attachments I and 9–43 to the Dautch Declaration which is Exhibit A to Exhibit 10 of this letter.

The Court of Appeals suggests, U.S.v. Microsoft, 253 F.3d 34, 107 (DC Cir. 2001) that: If the Court on remand is unconvinced of the causal connection between Micro sort's exclusionary conduct and the company's position in the OS market, it may well conclude that divestiture is not an appropriate remedy.

It follows that if the Court is convinced of the causal connection, the Court may conclude that divestiture is an appropriate remedy.

Pursuant to 15 U.S.C. 16(e), this Court must make a determination that entry of the RPFJ is in the public interest. The statute provides, in pertinent part, that for the purpose of making a decision on whether entry of the RPFJ is in the public interest, the court may consider:

(1) the competitive impact of such judgment, including terrains*ion of alleged violations, provisions for enforcement and modification, duration or relief sought, anticipated effects of alternative remedies actually considered, and any other considerations bearing upon the adequacy of such judgment;

(2) the impact of entry of such judgment upon the public generally and individuals alleging specific injury from the violations set forth in the complaint including consideration of the public benefit, if any, to be derived from a determination of the issues at trial. limited to the The Court may consider other issues it deems relevant also

and is not considerations set forth in the statute. Some of these issues are discussed below.

1. The Model After the United States Failed to comply with its legal obligation sunder the Tunney Act to provide an analysis of the competitive impact of the RPFJ, 1 prepared a computerized model for the analysis of the competitive impact of the RPFJ. The model is described in derail in Exhibit A hereto.

This economic model considers and calculates the effects on competition of both conduct- only remedies and structural remedies. The model calculates, in dollar terms, the competitive impact of alternative remedies under various sets of assumptions. The model calculates the dollar value of such important economic quantities as consumer surplus, profits of Microsoft and competitors, and total surplus. The main conclusions arc 1) only a structural remedy fully repair the economic damage which Microsoft has caused, and 2) most structural remedies require additional measures to reduce or eliminate the ''fruits'' of Microsoft's unlawful ''victories.''

2. The Conduct of the United States and Microsoft Has Been Contumacious As discussed in Exhibits 10 and 11 hereto, both the United States and Microsoft have defied the court and denied the public the information they are stautorily entitled to have to assess the RPFJ.

3. Tile RPFJ Explicitly Denies Any Protection To Third Parties After purporting to create rights and protections for OEMs, ISVs, IHVs, ISPs, and ICPs, among others, the RPF] takes it oil away in the last section (section VIII) which states: Nothing in this Final Judgment is intended to confer upon any other persons any rights or remedies of any nature whatsoever hereunder or by reason of this Final Judgment. Entry of the RPFJ would make a mockery of the judicial power.

There are a host of other problems with the RPFJ, some of which are due to a lack of econoic analysis.

For example, paragraph 2 of the Revised Proposed Final Judgment says, ''IT]his Final MTC–OOO30631 OOO7

STEVENS DAVIS MILLER MOS

Judgment does not constitute any admission by any party regarding any issue of fact or law.'' This provision is not in the public interest, and is partial evidence that this consent agreement is a sweetheart deal. Microsoft has been duly convicted of serious antitrust violations, and many of these convictions were upheld by the Appeals Court. The Appeals Court for the District of Columbia is widely perceived to be more conservative on antitrust issues than the Supreme Court.

There is virtually no chance that the Supreme Court will overturn those cornvictions which the Appeals Court has upheld.

The failure to obtain an admission of guilt, under these circumstances, is really quite remarkable. It requires some explanation for why it is in the public interest to accept: an agreement with no admission of guilt. The Competitive Impact Statement provides no such explanation. Also no estoppel against Microsoft for private parties.

Another example is the proposed set-up is that the work of the TC is completely secret. Section IV.B.9. requires that the TC's work be kept secret. Section IV.B.10. prohibits the TC members from making public statements. Section [V.D.4.d. requires that everything the TC does must be kept secret, and that TC members may not testify about their work. Section:IV.B.8.g. does allow TC members to communicate to third parties ''how their complaints or inquiries might be resolved,'' but requires confidentiality of all information obtained from Microsoft. The work of the TC, whether good or bad, is not subject to any public check or verification. Such secrecy allows a corrupt DOJ to hide the fact that no enforcement actions against violations by Microsoft are being undertaken. All this secrecy gives no confidence to the public, or to potential complainants, that their complaints will be resolved fairly or expeditiously. This is especially so, giver the widespread perception among Microsoft's would-be competitors that this agreement is essentially a sweetheart deal.

01/29/02 TUE 01:07 FAX 20240.85200

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By way of further example of lack of economic analysis in the Competitive impact Statement, consider the following.

A thorough reading of both the Stipulation and the Competitive Impact Statement indicates that neither document contains any substantive economic analysis of any kind whatsoever. Nor is there any reference to may document which does contain any substantive economic analysis. This is a very serious omission, which is not permitted with respect to other types of proposed government regulation. This omission prevents both the Court and the public from having any genuine basis by which to declare this agreement to be in the public interest. Accordingly, for this reason alone, review of the proposed agreement should be postponed, at least until such time as the Department of Justice revises its Competitive Impact Statement to provide such analyses.

The very words, ''Competitive Impact Statement,'' suggest an attention to,the economic impacts of competition or lack of competition. The nature of these possible impacts is well knower.

There can be competitive impacts on prices, sales quantities, costs, quality of products or service, number of competitors, market shares of competitors, the number and variety of products, and other impacts of competition, imperfect competition, or no competition. There is a whole field of economics, ''industrial organization,'' which is specifically devoted to analyzing these impacts. Many of the economists who are employed by the Antitrust Division of the Department of Justice have studied industrial organization. The Department of Justice has access to numerous consulting economists. It is therefore quite surprising, indeed quite incongruous, that the D(c)J would issue a ''Competitive Impact Statement'' in the very major case before us, which is so completely devoid of any substantive economic analysis.

In accordance with well-established practice, the Court should require prier publication of a substantive economic analysis as part of the government's ''Competitive Impact: Statement'' and allow 60 days for public comments thereafter.

Certainly, there needs to be a quantitative assessment of the likely competitive impacts of the various remedy alternatives. Whether this quantitative assessment should be called cost-benefit analysis or something else is not the primary issue. The primary issue is whether the quantitative analysis of potential remedies illuminates the equity criteria enunciated by the Supreme Court for the resolution of antitrust cases. One important equity criterion is whether a proposed remedy eliminates the ''public injury'' from unlawful conduct. This requires a quantitative assessment of past and prospective injuries, and a quantitative assessment of how particular remedies reduce or eliminate that injury. Another important equity criterion is whether the monopolist has been deprived of the fruits of an unlawful victory. This requires a quantitative measure, of how large those ''fruits'' are and how effective each remedy would be in reducing or eliminating such fruits.

The government provides no economic analysis at all. There are no facts, figures. statements, tables, or economic models concerning Microsoft's costs, prices, revenues, or profits. There is no projection of costs, prices, revenues, profits, or consumer surplus under various alternative scenarios or remedies. Nor is there any economic analysis of any other competitive impacts, real or imagined, which might flow from this proposed remedy or alternative remedies. There is, in short, no genuinely substantive ''Competitive Impact Statement'' which the public may either approve or critique.

Without an economic analysis, there can be no substantive statement of competitive impacts. 15 U.S.C. 16@) requires filing a competitive impact statement. Clause (3) requires '' explanation of the proposal .... including..the anticipated effects on competition of such relief.''

There are areas (1) where an economic analysis would have been useful, but was not provided, and (2) where weakness in the agreement suggests that the whole agreement is, and was perhaps intended to be, essentially a sweetheart deal, For example, Microsoft's predatory acts were undertaken for the purpose of maintaining its highly profitable monopoly. Microsoft's profit from these acts may be counted in the billions of dollars. Only multi-billion dollar fines on Microsoft for failure to obey the terms of the consent agreement can fully deter rational disobedience. The Competitive Impact Statement provides no indication that the settling Plaintiffs contemplate fines of this magnitude, nor is there my economic analysis in the CIS which shows that fines of this size are not needed. If'' fines in the billions of dollars are contemplated, the DOJ ought to say so. We may presume that Microsoft will gladly pay its attorneys even as much as $100 million to avoid a multi-billion dollar fine. Continued litigation by Microsoft is virtually assured. If fines of this magnitude are not contemplated, how does the DOJ intend to enforce this agreement?

By way of further example, the only ''penalty'' specified in the consent agreement

for disobedience to the agreement is to extend the term of the agreement for an additional two years (Section V.B.). However, it would seem to be common-sense economics that if five years of an ineffective regime is insufficient to deter unlawful behavior, then an additional two years of the same ineffective regime is unlikely to deter the unlawful behavior. A more sensible ''penalty'' would be a five-year extension, renewable indefinitely, not just once. In addition, real penalties for disobedience should be instituted. For example, a fine equal to triple the value of expected profits from uncaught disobedience might be imposed. The proposed ''penalties'' of this agreement also constitute partial evidence that, in reality, this is a ''sweetheart'' agreement which the political leadership of the DOJ has no intention of seriously enforcing.

By way of yet further example, section III.B. requires Microsoft to post and publicize uniform licensing terms. This affirmative obligation is all well and good. However there are some puzzles here, which the Competitive Impact Statement does little to elucidate.

First, Section III.B.2. allows the schedule to ''specify reasonable volume discounts.'' However, neither the agreement nor the Competitive Impact Statement specifies what constitutes a ''reasonable'' volume discount. Can there exist any set of'' volume discounts which is ''unreasonable''? If the answer is yes, presumably the DOJ can provide examples of ''unreasonable'' volume discounts, and a methodology (presumably based on economics) for determining whether volume discounts are either ''reasonable'' or ''unreasonable.'' However, the Competitive Impact Statement (pages 27–29) provides neither examples nor methodology. If the answer is no, what is the purpose of this term ''reasonable''? This is one place where an economic analysis is indicated, if only to clarify the meaning of this agreement.

Second, Section III.B.3.a. makes a distraction between the top ten Covered OEMs, and the second ten Covered OEMs, and allows two different uniform schedules, Since the uniform schedules already permit ''reasonable volume discounts,'' what is the purpose of further distinguishing the size of the OEMs? This additional and unneeded flexibility simply gives Microsoft further opportunities for discrinination and retaliatron If Microsoft is especially interested in punishing one particular firm, Microsoft may punish ten firms, while falsely daiming to be nondiscriminatory. While this opportunity to discriminate may not be especially J valuable, why offer this opportunity in the first place? Uniform schedules for everyone is the better approach.

Third, Section III.B. only applies to 20 Covered OEMs. Section VI.D. define:; these Covered OEMs as those manufacturers of personal computers who had the largest purchases of Windows Operating System Products during the previous fiscal year. However, why are these uniform schedules applicable only to the top 20 OEMs? Why not simply apply the uniform schedules to anybody who wishes to purchase Windows Operating Systems, whether an OEM or not? Also, why should these uniform schedules apply only to OEMs who previously purchased Windows Products? It is the essence of non-discrimination that OEMs should not be penalized for using non-Microsoft products. Yet, if an OEM uses a competitor's product, it may find itself in the group of non- Covered OEMs. This does not aid the professed goal of preventing discrimination a, and retaliation.

Explanations for these various oddities are required. An economic analysis of these oddities would be even better. What is the past and projected market share of the top ten OFMs? What is the past and projected market share of the second ten OEMS? What is the past and projected market share of all remaining wholesale and retail purchasers of Windows products? What differences in competitive outcomes does the DOJ expect for the various possible rules concerning the uniform schedules? This economic analysis should have been provided as part of'' the Competitive Impact Statement.

Another example is as follows: Section III.D. requires Microsoft to disclose A PIs and related documentation to all its Windows Operating System Products and its Microsoft Middleware. This affirmative obligation is also well and good. Again, however, there are some puzzles, which the Competitive Impact Statement does little to elucidate.

First, there are the timing differences on when these disclosures must be made. In the case of Microsoft Middleware, it is the ''last major beta test release,'' which is not farther defined. Presumably, the last beta test release could be a mere few weeks before the commercial sale of the product, which is not much advance notice to developers and competitors. For a: new Windows Operating System Product, these disclosures must occur in a ''Timely Manner,'' which is further defined as the first beta test version that is distributed to 150,000 or more beta tester's. Is it possible that Microsoft might therefore choose to beta test future versions o fits operating systems with fewer that 150,000 beta testers? The Competitive Impact Statement (pages 33–35) provide's no explanation for these differences in timing. Nor does it provide any economic analysis concerting whether Microsoft will henceforth have an incentive to ''game'' these restrictions to avoid the intended competitive impact on its future behavior. Nor has the DOJ provided any economic analysis of how possible changes in the timing of API disclosures would affect the competitive impacts.

Second, there is the timing of disclosures for Windows X. This disclosure midst occur upon release of the first Service Pack, or within twelve months, whichever is earlier. It is not explained whether or why Microsoft needs twelve months to provide its disclosures. If this amount of time is not needed, a lesser time interval should have been provided. However, if several months time is needed, then this necessarily delays Microsoft's issuance of Service Pack 1.

Recent newspaper accounts indicate that Windows XP (and some prior products) has a very serious bug which can allow a malicious hacker to take control of thousands of computers running Windows XP. This circumstance would ordinarily imply that Microsoft is under very serious pressure to issue its first Service Pack on an emergency, expedited basis. However, if the required disclosures take too much time to prepare, then Section III.D. harms both Microsoft and the public. If a proper economic analysis had been performed, this oddity of the agreement likely would have been exposed and corrected before being submitted to the public. In any case, without a published economic analysis, it is difficult to decipher why the DOJ thought this provision made good sense.

Yet another example of missing information arises from section VI.J. which provides a confusing definition for ''Microsoft Middleware.'' In the consent agreement, the !four conditions within the definition are combined with the word ''and.'' However, the Competitive Impact Statement (pages 17–19) explains this term in a manner which suggests that these four conditions ought to be combined with the term ''or,'' not ''and.'' The Competitive Impact Statement (pages 18–19) discusses the situation where Microsoft might choose to divide up its redistributables in such manner that the fourth condition is not met, or even not provide a redistributable, yet the Competitive Impact Statement suggests that such non-qualifying software code is included under the definition. Either all four of the conditions must be present to qualify as ''Microsoft Middleware'' (an ''and'' requirement) or only some of the four conditions need be present (an ''or'' requirement). If the Competitive Impact Statement is correct, then the language of the Stipulation requires revision (or vice versa). Very, likely, if the Competitive Impact Statement is correct, then the language of the Stipulation needs to be more extensively revised than simply replacing ''and'' with ''or.''

Since this defined term ''triggers Microsoft's obligations'' (page 17 of the,. Competitive Impact Statement), it is important that the public and the Court be provided with a clear conception of what this term means, it is difficult for me, or any other member of the public, t comment on the suitability of an agreement which might mean one thing, or might mean another thing. In view of this apparent error regarding a key matter, I would suggest that the DOJ revise the Stipulation, revise the Competitive Impact Statement, or both, and resubmit to the public for further comment.

Section VI.T. provides a definition of ''Trademarked'' as used in the consent agreement. Pages 22–23 of the Competitive Impact Statement elucidate this definition further. The Competitive Impact Stateroom makes much of the supposition that Middleware is Trademarked, or if not Trademarked then it is not Middleware. Is this a distinction with a difference, or that will make a difference? Here is one place where an economic analysis would be useful, both to clarify whether this is a substantive part of the agreement, and if it is substantive, the likely competitive impacts of this provision of the agreement.

Obviously, there are many other provisions of this consent agreement for which an economic analysis of competitive impacts would have been useful. Such economic analysis, would have been useful, both to clarify the meaning of the agreement, and to help educate the Court and the public on the expected or intended competitive impacts of the agreement. In addition, such economic analyses would have provided a framework upon which the public, in its commentary on the alleged competitive impacts, might accept, modify, or reject. As it is, the public is left with many questions and no answers; the public is given the unfair burden of developing its own economic models for

4, The RPFJ Does Not Meet The Minimum Requirements Of Law

As many commentators have noted, the RPFJ does not accomplish the four goals of antitrust remedies.

Further, by not entering an admission of guilt, Microsoft is presumably free to. engage ha the same anti-competitive practices enjoined by the agreement, after the five (or sever:) year term is completed. This means that if Microsoft continues these anti-competitive practices, after the term of the agreement is finished, the antitrust authorities must prove anew that these: are unlawful practices. Since there is no assurance that a competitive market will be restored within five years, and no assurance that Microsoft will no longer be the dominant firm in these markets, renewal of these practices would be detrimental to the public. Also, the expectation that these practices may be renewed at the end of the five-year term puts a damper on competitors'' beliefs that Microsoft is truly enjoined from retaliation, since Microsoft can simply wait before retaliating. This consent agreement essentially throws away Microsoft's conviction.

The proposed five-year term is by no means long enough. A Final Judgment was entered in 1995 and expires on February 21, 2002. Exhibits 2, 3, and 4 hereto explain the problems with the prior FJ. From the Declaration of grain Dautch attached hereto as Exhibit 5, it appears that Microsoft may still be engaging in the banned per processor licensing. In any event: the prior FJ did not restore competition to the market for operating systems.

Microsoft has maintained its dominant monopoly position for a period of over ten years. There is no reason to suppose that Microsoft's dominant position will suddenly evaporate as a result of this consent agreement. So long as Microsoft remains the dominant firm, restrictions on its conduct will continue to be necessary. A far better approach for the conduct remedy is to institute a ten-year term, renewable indefinitely at ten-year intervals. If during the term of the conduct remedy Microsoft no longer has dominance in the industry (e.g., has less than 30% market share), Microsoft may petition the Court for relief from the conduct restrictions.

Further, even assuming that the notion of setting up a Technical Committee to investigate complaints is inherently justifiable, there are obvious problems with this particular proposed set-up. The first problem is that Microsoft is allowed to choose half the investigators (Section IV.B.3.). Microsoft's appointment of an internal Compliance Officer (Section 1V.C.), as well as its own regular attorneys, should be sufficient protection for Microsoft; Microsoft does not need to appoint half the investigators. I am unaware of any administrative agency for investigating, discrimination and retaliation complaints which is set up in such a manner that the accused discriminator or retaliator is allowed to choose half the investigators. This provision by itself constitutes partial evidence that this is a corrupt, sweetheart deal between DOJ and Microsoft. Microsoft should play no role in the selection of TC members,

Further, with regard to discrimination, the consent agreement appears deficient, because it does not overflow with objectively verifiable, affirmative obligations upon Microsoft. In the whole of Section Ill, ''Prohibited Conduct,'' only sub-sections III.B. and III..D. require any affirmative obligation by Microsoft. The remaining sub-sections of Section III either do not impose obligations (Sub-section J) or are suffused with anti-discrimination and anti-retaliatory language (Sub-sections A, C, E, F, G, I-t, and I). In the absence of considerable amounts of trust and goodwill by both Microsoft and its competitors, such provisions may prove either unenforceable or enforceable only after extensive litigation. The delays inherent in a) first having a TC investigation, and b) perhaps followed by litigation, provide cold comfort to any competitor or would-be competitor who may experience or fear discrimination or retaliation by Microsoft.

Labor economists have analyzed discrimination for decades. One economic proposition concerning discrimination is that its effects are likely to be worse in monopoly markets roan in competitive markets. If a monopolist discriminates, one must suffer the discrimination, because there is no one else to do business with. However, if one of many competitors discriminates, one may still attempt to do business with the others. Even if half of all employers discriminate, minorities may still find employment on favorable terms with the other half of the employers.

This simple economic proposition has a clear application in this case. If :toe's primary concern is to prevent discrimination and discriminatory retaliation by Microsoft, the best way to achieve this objective is through a structural remedy: Break up Microsoft into two or more firms. Eliminate the monopoly, and the threat of discrimination and retaliation loses its fearsome power, and also becomes mostly unprofitable. Not performing a structural remedy means that discrimination and retaliation is both profitable for Microsoft and fearsome to Microsoft's would-be competitors. This consent agreement fails to use the most efficacious means to achieve its primary objective. The most likely result of the consent agreement is continued fear, continued discrimination, continued retaliation, continued litigation, and continued monopoly.

Labor economists also know that under a wide variety of economic assumptions and circumstances, discrimination against minority workers is an unprofitable activity for employers. 4 In a competitive market, the result is segregation of minority workers into separate firms, but not lower wages, assuming equal skill by the minority workers.

The outlawing of unprofitable activities is easier to enforce than the outlawing of profitable activities. Even though the laws against discriminatory motives are inherently difficult to enforce, their enforcement is aided by the fact that employment discrimination is normally not profitable. This is not the circumstance for discriminatory acts by Microsoft.

5. Appearance Of A Conflict Of Interest

Microsoft has made an investment of about $23 million in politicians from 199:7 to 2001. See Exhibit A (Dautch Dec. and attachments) to Exhibit 10 hereto.

Given an estimated value of AOL's private antitrust suit against Microsoft in the neighborhood of $20 billion, Microsoft may be about to earn close to a 1000 to I on just the AOL suit.

The Attorney General and Assistant Attorney General along with the Other political nominees or appointees of the current Administration should consider recusing themselves and leaving further consideration of this matter to the career employees of the Antitrust Division.

LIMITED COPYRIGHT LICENSE

For the sole purpose of allowing the United States (including all three branches of the government) to analyze these comments, to publish these comments in the Federal Fegister and to file a copy of these comments with any courts it deems appropriate (including the: United States District Court for the District of Columbia), l hereby grant the United States a time-limited non-transferable royalty free non-exclusivc license without the right to sublicense and without the right to enforce limited to the purposes stated herein to make such copies of the copyrighted material as are necessary; 1) to publish the copyrighted computer programs submitted as part of these comments in the Federal Register; 2) to make such copies of the computer programs as are necessary to: file a copy of these comments with the United States District Court for the District of Columbia; and, 3) to run and modify only the inputs and source code to the computer programs for the purpose of preparing a response to these comments or for the purpose of analyzing these comments (no license to create a derivative work is granted by his license).

The limited copyright license granted hereby terminates one day after the last possible clay to file any appeal in any court from the entry of the RPFJ or termination of consideration of the RPFJ in U.S.v. Microsoft, Civil Action No. 98–1232, presently pending in the U.S. District Court for the District of Columbia.

B. The Public Interest The Public interest is in seeing that the laws are fairly and fully enforced by mpartial law enforces without regard to the political or other connections of the alleged violators of the law. Entry of the RPFJ is not in the public interest for many reasons as discussed above and by many of the other commentators on the RPFJ such as

Drs. Litan, Nell, and Nordhaus and the American Antitrust Institute. The RPFJ will not stop the antitrust violations. The RPFJ will not prevent a recurrence of the current violations or very similar violations. The RPFJ will not unfetter the market from predatory anti-competitive conduct. The RPFJ will not deny to Microsoft the flints of it illegal conduct.

The RPFJ, if entered, will make a mockery of the judicial power. The RPFJ may send a clear message to all Americans that if you violate the law and then contribute enough money to the party in power, you may be able to operate outside the law indefinitely and profitably. ''.[he RPFJ may undermine public confidence in the fairness and agility of the Department of Justice It is not in the public interest to achieve the ends set forth in this paragraph.

Entry of file RPFJ is not in the public interest. The court should refuse to approve or enter the RPFJ. in order to avoid a conflict of interest or the appearance of impropriety due t,) the massive amount of campaign contributions by Microsoft to the current Administration and its leaders, the Attorney General and the other nominees or appointees of the current President or Attorney General should recuse themselves from any further consideration of this matter and delegate further consideration to career lawyers in Antitrust Division all of whom should be protected by this Court in advance (in addition to any statutory rights they may have) against reprisals by the political nominees and appointees.

While many issues are raised by these comments, we hereby specifically request a response to questions and issues including, but not in any way limited to, the following:

1. Does Attorney General Ashcroft intend to recuse himself from any further involvement in matters involving Microsoft and, in particular, U.S.v. Microsoft, Civil Action No. 98–1232, presently pending before the U.S. District Court for the District of Columbia? If so, when? if not, why not?

2. Does Attorney General Ashcroft intend to recuse (or remove) any political appointees serving under him in the Department of Justice from any further involvoment in matters involving Microsoft and, in particular, U.S. v. Microsoft, Civil Action No. 98–1232, presently pending before the U.S. District Court for the District of Columbia? If so, which appointee or appointees? If so, when? If not, why not?

3. Does Assistant Attorney General James intend to recuse himself from any further involvement in matters involving Microsoft and, in particular, U.S.v. Microsoft, Civil Action No. 98–1232, presently pending before the U.S. District Court for tile District of Columbia? If so, when?

If not, why not?

4. lf he remains involved in U.S.v. Microsoft, does Assistant Attorney G moral James who has personal ''knowledge that a non-counsel of record (e.g. Charles f''. Rule, Esq.) engaged in undisclosed written and/or oral communications on behalf of Microsoft with officers and/or employees of the United States (specifically officers and/or employees of the Department of Justice) concerning or relevant to the RPFJ (including negotiations leading to agreement on the terms of, and the signing of, the RPFJ) intend to sign and file with the United States District Court for the District of Columbia a certification of compliance (as ordered by the Court on November 8, 2001) with the requirements of the Antitrust Procedures and Penalties Act (Turnkey Act).: 15 U.S.C. 16(b)-(h)? If he remains involved in U.S.v. Microsoft and Microsoft does not amend !he Microsoft Description and Assistant Attorney General James does not sign and file a certificate of compliance himself, does he intend to order or allow one of his subordinates to sign and file such a certificate of compliance? Why did Assistant Attorney General James sign the Stipulation and RPFJ (both dated) November 6, 2001, but not the CIS?

5. Does the United States intend to amend and publish in the **Federal Register** an amended Competitive Impact Statement (''CIS'')? If so, when? If not, what is the basis for the United States'' position that the current CIS complies with 15 U.S.C. 16(b)(3), (4), and (6!I?

PROTEST AND RESERVATION OF RIGHTS

This letter including the exhibits, attachments, and enclosures to and with this letter all of which are hereby incorporated fully by reference herein constitute the comments by Relpromax Antitrust Inc. (''Relproma'') pursuant to the notice published by the United States at Fed. Reg. 59452, Vol. 66, No. 229 (Nov. 28, 2001) and pursuant to 15 U.S.C. 16@) with respect to the Revised Proposed Final Judgment dated November 6, 2001, and filed in U.S.v. Microsoft, Civit Action No. 98–1232, presently pending before the United States District Court for the District of Columbia.

Relpromax has filed with the United States District Court for the District of Columbia two motions related to these comments, certain statutory deadlines, and a court Order related to these comments. The first motion seeks, among other things, an order to compel Microsoft to meet its disclosure obligations under 15 U.S.C. 16(g). A copy of the brief (including exhibits and attachments) in support of the first motion (''Memorandum Of Points And Authorities in Support Of The Motion Of Relpromax Antitrust Inc. For Limited Participation As An Amicus Curiae And For An Extension Of Time'') is attached hereto as Exhibit 10 and incorporated herein fully by reference. The second motion seeks, among other things, an order to compel the United States of America (''United States'') to meet its obligations with respect to a Competitive Impact Statement (''CIS'') under 15 U.S.C. 16@). A copy of the brief in support of the second motion (''Memorandum Of Points And Authorities In Support Of The Motion Of Relpromax Antitrust Inc. For Limited Participation As An Amicus Curiae And For An Extension Of Time On The Grounds That The United States Has Not Provided A Competitive Impact Statement In Compliance With The Requirements Of 15 U.S.C. 16(b) '') is attached hereto as Exhibit 11 and incorporated herein rally by reference.

The failures of the United States and Microsoft to comply fully with the requirements of the Antitrust Procedures and Penalties Act (''Tunney Act''), 15 U.S.C. 16(b)-(h), have kept Relpromax and the public generally from receiving all the information that is required by statute to be provided no less than sixty (60) days (in the case of the CIS) and fifty (50) days (in the case of Microsoft's disclosures) before the deadline for filing these comments. Accordingly, these comments are filed under protest, with a full reservation of all rights available to Relprornax, and must be viewed as preliminary and subject to amendment or expansion if and when additional public disclosures are made by the United States or Microsoft or by third parties making available information which should have been made available by either the United States or Microsoft.

We look forward to receiving the response of the United States to the foregoing and to the publication of all of these comments (including the exhibits and attachments submitted herewith all of which are again incorporated by reference) in the **Federal Register** and to the submission of these comments to the court by the United States.

Thank you very much for your attention to this matter.

Sincerely,

President

Relpromax Antitrust Inc.

Exhibit 1
Exhibit 2
Exhibit 3
Exhibit 4
Exhibit 5
Exhibit 6
Exhibit 7
Exhibit 8
Exhibit 9
Exhibit 10
Exhibit 11
Exhibit 12
Exhibit 13

EXHIBIT LIST

Discussion of computerized model, data inputs to model, and computer source code for model for analysis of competitive impact of the RPFJ consisting of:

a. Explanation, model inputs, and intermediate outputs used as inputs to final calculations: Attachments A-l, A-2, B-F, and R-S

b. Results: Attachments G-J

c. Source code for model: Attachments K-Q

d. Article by Carl Lundgren, Review of Industrial Organization, Volume 1 I, Number 4, August 1996, pp. 533–550: Attachment T

Proposed Final Judgment dated on or about July 15, 1994, in U.S. v.Microsoft, Civil Action No. 94–1564, U.S. District Court for the District of Columbia

Competitive impact Statement dated July 27, 1994 Memorandum Of Amici Curiae In Opposition To Proposed Final Judgment, signed by Gary L. Reback and dated January 10, 1995

Declaration of Brian Dautch dated January 27, 2002

Declaration of Paul M. Romer (Redacted Public Version) dated April .27, 2000

Declaration of Carl Shapiro dated April 28, 2000

Affidavit of former Senator John Tunney dated January 22, 2002

Letter dated August 9, 2001, from 88 Members of Congress to The Honorable John Ashcroft (Attorney General of the United States), Steven Ballmer (Chief Executive Officer of Microsoft), and The Honorable Tom Miller (Attorney General of Iowa) Memorandum Of Points And Authorities In Support Of The Motion 05 Relpromax Antitrust Inc. For Limited Participation As An Amicus Curiae And For An Extension Of Time Memorandum Of Points And Authorities In Support Of The Motion Of Relpromax Antitrust Inc. For Limited Participation As An Amicus Curiae And For An Extension Of Time On The Grounds That The United States Has Not Provided A Competitive Impact Statement In Compliance With The Requirements Of 15 U.S.C. 16(b)

Charles A. James, The Real ''Microsoft'' Case and Settlement,

16 Antitrust 58 (ABA Fall 2001)

Dan Eggen, Enron Executives Contributed to Ashcroft Campaign, The/Washington Post, January 11, 2002, p. A7

EXHIBIT 1 TO THE COMMENTS OF RELPROMAX ANTITRUST INC.

ATTACHMENT A- 1

ECONOMIC MODEL FOR ANALYSIS OF COMPETITIVE IMPACT OF THE RPFJ

A. THE MODELING PROBLEMS CAUSED BY THE SHORTCOMINGS OF THE COMPETITIVE IMPACT STATEMENT

As indicated above, the Competitive Impact Statement provides no economic analysis or economic modeling of any kind. The Competitive Impact Statement does not even provide raw economic data upon which an economic analysis might be made. It provides no information concerning revenues, costs, profits, quantities, or product qualities of Microsoft, its competitors, or potential competitors which might usefully be incorporated into an economic model. The CIS does not indicate the United States reviewed or considered any such items (i. e. revenues, costs, profits, quantities, or product qualities of Microsoft, its competitors, or potential competitors) in connection with the RPFJ or the CIS. The DOJ's ''Competitive Impact Statement'' may be a ''statement'' of sorts, but it is clearly not a statement of ''competitive impacts,'' about which the statement truly says nothing at all.

This places a heavy burden on the public. Members of the public who wish to critique the consent agreement, must not only devise their own economic models and collect their own economic data, they can only guess at what economic models and economic analysis the D0J is hiding from the public.

Accordingly, a member of the public who wishes to comment is forced to devise her own economic models and collect her own economic data. In the case of this model, the work has been performed by a professional economist. It would be preferable to use or critique the DOJ's own economic models of the software -industry. However, the DOJ has provided no such economic models and no analysis of the competitive impact of the Revised Proposed Final Judgment.

B. How an Economist Analyzes Competition

To an economist, an assessment of the competitive impacts of a remedy proposal requires an assessment of the factors impacting on competition. Competition can be measured or understood in a variety of ways. One paradigm that is often used by economists is the Structure-Conduct-Performance paradigm. The Structure of an industry concerns such matters as the number of firms in a market and the market shares of firms in a market. For example, if an industry has twenty business firms, and no firm has more than a twenty percent market share, the industry is probably competitive. If the industry has only two firms, and one of the firms has an eighty percent market share, the industry is probably not competitive.

The Conduct of an industry refers to the behavior of business firms within an industry. How do they conduct business? Are they actively colluding? Do they frequently share price information? Does one firm normally set prices, while the other firms simply set the same price in response? These are all behaviors which may indicate lack of competition. Some of these behaviors may also be a violation of the antitrust laws.

Finally, the Performance of an industry refers to how well the industry serves the interests of consumers (or society generally). For example, are prices high or low relative to the costs of production? Is the quality of goods and services high or low relative to the cost of producing quality, and relative to what consumers are willing to pay for quality? Is the variety of goods and services high or low relative to the value which variety and choice have for consumers, and relative to the extra costs (if any) associated with producing and selling that variety?

Economists typically measure the interests of consumers using a concept called ''consumer surplus'' (''CS''). Consumer surplus is a dollar measure of the value which consumers receive by being able to purchase goods at a low price rather than a high price, by being able to purchase goods they want, and by obtaining good quality from what they purchase. For example, if a consumer would have been willing to pay $200 for an operating system, but only paid $50, then that consumer receives a consumer surplus of $150. If a second consumer would have been willing to pay $75, but only pays $50, then the second consumer receives a consumer surplus of $25.

Economists also typically evaluate the performance of an industry using a related concept called ''total surplus'' (''TS''). Total surplus is simply the sum of ''consumer surplus'' and ''producer surplus'' (''PS''). Producer surplus is a dollar measure of the value which producers receive by being able to sell their land, labor, or capital at a higher price rather than a lower price. For example, if a worker would have been willing to sell his labor for $35,000 a year, but is paid $50,000 a year, that worker receives a producer surplus of $15,000 a year. If a capitalist is willing to lend or invest his money for a 10% return, but receives a 25% return, that capitalist receives a producer surplus of 15%.

When an industry is competitive, its performance in terms of ''total surplus'' will be at a maximum. Its performance for consumers will also be near a maximum. When an industry is competitive, the only way to improve consumer surplus is to lower prices still further, but this would cause producers to suffer losses. Hence, when an industry is competitive, consumer surplus is at a practical maximum, because there must either be government subsidies or unhappy producers, if consumer surplus is to be ..increased still further.

When an industry is not competitive, its performance in terms of total surplus is reduced. When an industry is not competitive, prices are higher and output is lower, than what would occur if the industry were competitive. Because prices are higher, consumer surplus is lower, but producer surplus is higher. However, the total surplus is reduced, because the producer surplus is increased by less than the amount by which consumer surplus falls, so the sum of the two surpluses is reduced. Hence, whether we measure industry performance by the metric of ''consumer surplus'' or by the metric of ''total surplus'', more competition is better than less competition.

C. How an Economic Analysis Impacts this Case

Industry performance can be poor, either because the industry structure is bad, because the industry conduct is bad, or because both structure and conduct are bad. A well-designed competition policy would attempt to remedy or prevent both bad structure and bad conduct.

However, the antitrust law as it is presently formulated is not a well-designed competition policy. The antitrust law attacks bad conduct, but does not attack bad structure per se. A monopoly is usually a bad industry structure, which frequently leads to bad competitive performance, but a monopoly as such is not illegal under the antitrust laws. A monopoly is only illegal if it is acquired or maintained through anti-competitive conduct. Hence, even though Microsoft is a monopoly, if Microsoft never does anything illegal, Microsoft is perfectly free to record its monopoly profits at the expense of consumers.

However, Microsoft did act unlawfully.

It is, of course, the primary aim of the antitrust laws to protect consumers and competition, not competitors as such. Naturally, competition requires competitors, and consumers are better off when competitors are protected from certain types of anti-competitive conduct. Nevertheless, the interests of consumers are paramount when fashioning a remedy. The interests of competitors are of secondary importance. A disinterested economic analysis will always keep this goal in mind when comparing remedies for the Court's consideration.

D. Preliminary Data for the Economic Model

In order to be useful, an economic model must have as close a relationship to reality as possible given the constraints inherent in any model. An economic model cannot mimic economic reality entirely, because economic reality is too complex to model in its entirety, many aspects of economic reality are not humanly known, and such an exacting economic model would be far too complex for either humans or computers to calculate in a reasonably timely fashion. Hence, all economic models (like all

scientific models) are a simplification of reality.

The first consideration is the basic economic data and assumptions. The primary data of interest are costs, revenues, profits, and market shares for each of Microsoft's three monopolies. These three monopolies are the Windows operating system monopoly, the Internet Explorer browser monopoly, and the Office (e.g., word processing, spreadsheet, and database) software monopoly. Each of these three monopolies is implicated in antitrust violations committed by Microsoft. The Windows operating system monopoly is especially implicated in these violations. There is the question of whether we should model all three monopolies, or only one monopoly, for purposes of corrective action. This problem is solved by running one version of the model for Platform revenues only and another version of the model for all types of product revenue.

Neither Microsoft nor the DOJ has provided data on costs, revenues, and profits for each of Microsoft's three monopolies, or for any of them. The DOJ has not provided such data as part of its Competitive Impact Statement, nor has Microsoft provided such data on its Investor Relations website. However, Microsoft does provide data for revenues for various business units since July 1997. These business units are ''Desktop Platforms'', ''Desktop Applications'', ''Enterprise Software and Services'', and a few other misce1Ianeous units. The ''Platforms'' unit corresponds most closely to Microsoft's operating system monopoly. The ''Applications'' unit corresponds most closely to its Office, and possibly its browser, monopoly. It is unclear at this time whether, and to what extent, the ''Enterprise Software'' unit corresponds to either competitive or monopoly markets, including operating systems for server markets, the browser market, or commercial services based on the Internet.

Hence, as initial data for the economic model, four sets of revenue figures for Microsoft's monopolies were used. The first set of revenue figures is based solely on Microsoft's Platform Revenues, which most closely conforms to a narrow vision of Microsoft's monopoly. The second set of revenue figures is a summation of Platforms & Enterprise Software. The third set of revenue figures is a summation of Platforms & Applications. The fourth set of revenue figures is a summation of Platforms, Applications & Enterprise Software. The revenue figures are arranged in increasing order of size, with the first set of figures being the smallest, and the fourth set of figures being the largest. This information is shown in Attachment A-2 which immediately follows this Attachment A-1.

As it turns out upon analyzing the results produced by the model, the qualitative conclusions of the economic model are basically unaffected by whether the model uses Platform revenues as a base or essentially all product revenues as a base. Quantitative results will change, of course, because the fourth set of figures roughly triples the calculated values compared with the first set of figures. Nevertheless, the qualitative conclusions remain the same. In order to p1ace these historical figures into useful format, the revenue figures are projected backwards in time through calendar year 1995. This is done by computing quarterly revenues for each business unit as a percentage of total revenues. A statistical regression on these percentages was used to determine if these percentages were growing or shrinking. These statistical tests indicated modest, but statistically significant, changes in these percentages over the time interval July 1997 through September 2001. Hence, similar percentage changes were used to determine the missing historical data for January 1995 through June 1997. These projected percentage changes for the three business units were multiplied by Microsoft's reported total quarterly revenues for the quarters of these prior years to obtain estimated values for the revenues of each of Microsoft's three main business units for each such quarter.

These data were converted from nominal dollars to real dollars. Nominal dollars are simply the actual reported dollars, without any adjustment for changes in purchasing power due to inflation. Real dollars are nominal dollars as of a given year, but adjusted for inflation for years other than the base year in which the real dollars are being reported. In order to convert the nominal dollars into real dollars, the U.S. Bureau of Labor Statistics'' (BLS) Consumer Price Index (CPI) for ''All Urban Consumers (Current Series)'' was used. This is the most commonly used inflation index. The nominal dollars were converted to real dollars using 2001 as the base year.

Next, the real quarterly revenues were projected into the future. For each of the three business units, the 1995–2001 historical growth rates were calculated using log-linear statistical regressions. Revenue growth rates were very high, 19.8% annual growth for Platforms, 18.5% annual growth for Applications, and 28.9% for Enterprise Software, all expressed in real dollars. However, revenues did falter a bit in the last year of data. Hence, I used the average of the last four quarters of the data available to me as the baseline to estimate the last quarter of revenue data for calendar year 2001.5 Upon this baseline estimate of revenue for the fourth quarter of 2001, I projected all future growth.

In order to project future growth, I assumed that software Downloaded December 5, 2001 from the BLS's CPI web page, available at http://stats.bls.gov/cpi/home.htm . The average CPI for 2001 was computed as the eight- month, mid-year average for 2001. Since the last two months of 2001 were not yet available, the first two months were dropped for symmetry.

Microsoft's accountants use a fiscal year which differs from the calendar year. I re-dated all Microsoft figures to their true calendar years. production would eventually become a ''mature'' industry. As a mature industry, real growth rates are unlikely to exceed some modest figure, such as 3% per year. However, computer software has not yet reached this stage of maturity. Software growth is very much driven by the phenomenal growth in computer hardware capabilities. The growth rate of computer hardware capacity is -unlikely to taper off anytime soon, even if we restrict our attention to foreseeable technological developments.

However, revenue growth rates for software are unlikely to be sustained indefinitely into the future at annual rates of 18%-30%, no matter how amazing these future developments in computer hardware may be. Accordingly, I project that the current rapid growth in monopoly revenues will gradually slow down to the more modest growth rate of 3% a year. In my projections, I allow the historically-observed, rapid growth rates to converge towards the slower ''mature industry'' growth at the convergence rate of 5% per quarter. That is, if the growth rate in quarter I is 20%, then the growth rate in quarter 2 is assumed to be (20% x 0.95) + (3% x .05) = 19.15%. Alternative projections for Microsoft's future monopoly revenues may also be reasonable. However, it is unlikely that alternative projections will fundamentally alter the qualitative conclusions.

These quarterly estimates and projections for Microsoft's revenues by business division were then summed into annual figures for each calendar year from 1995–2025. Attachment A-2 provides the real revenue figures and projections which were used in the computerized economic model.

The next main piece of data is data on costs. Data on costs were also obtained from Microsoft's Investor Relations website. Data on Microsoft's expenses are available for the company as a whole, but do not appear to be available by business division. Hence, the only option is to take an average across business divisions as being representative of Microsoft's three main business divisions.

Microsoft's spreadsheets available on the microsoft website list their expense items as a percentage of revenue for each microsoft Fiscal Year. The percentages from the last ten fiscal years were used to compute ten-year averages for each expense item as a percent of revenue. These 10-year averages are listed in Attachment B.

These expense items were then classified as either short-run costs or long-run costs. Microsoft's profit and loss sheet does not show capital expenses as such. However, it does show Research and Development (R&D) expense. It is assumed that R&D for its software products is Microsoft's main long-term cost. ''General and administrative'' expense is also classified as a long-term cost. The other expenses I classify as short-run costs. According to this classification, Microsoft spends 41.01% of its revenue on short-term costs, and 18.55% of its revenue on long-term costs. These percentages have held fairly steady over the years, with some variations.

To the extent that long-term costs take time to develop their respective revenues, and to the extent that Microsoft's revenues are growing, these long-term costs as a percent of revenue are probably overstated. For example, if Microsoft's revenue in Year I is $100, and its R&D expense in Year 1 is $20, that is 20% of revenue. However, suppose that it takes 4 years for Microsoft's R&D expenditure to pay off. Suppose that in the

same 4 years Microsoft's revenue has doubled to $200. Microsoft's $20 R&D expenditure in Year I has helped to create $200 of revenue in Year 5. This is a percent of revenue of only 10%, not 20%.

However, to the extent that investors require a positive return on their capital investments, these long-term costs as a percent of revenue may be understated. For example, if investors require a return of 50% on their capital over a 4-year period, then an investment of $20 in Year I will require repayment of $30 in year 5. If Microsoft's revenues had remained at $100 in Year 5, this would be a percent of revenue of 30%, not 20%. If Microsoft's revenues rose to $200 in Year 5, this would be a percent of revenue of 15%, and not 10%, 20%, or 30%.

For purposes of the computerized economic model, it is assumed that these two effects offset each other, and accordingly the model uses the raw percentage, 18.55%, as Microsoft's long-term cost of production. These two effects will exactly offset each other only if investors'' required return on capital exactly matches Microsoft's growth rate. This is unlikely to happen exactly. It is most likely that the investors'' required real rate of return on capital investment is less than Microsoft's phenomenally rapid growth rates in revenue. Hence, Microsoft's long-term cost of production is probably somewhat less than 18.55%.

Finally, we consider Microsoft's market share. In the Findings of Fact, Judge Jackson indicated that Microsoft's market share in operating systems was over 90% for over a decade.7 More recent market share data indicates that Microsoft has approached or Finding of Fact number 35. U.S. v. Microsoft, 84 F.Supp.2d 9, 19 (D.DC 1999) exceeded a 90% market share in all three of Microsoft's monopolies: Since the beginning of the trial, Microsoft's share of the web browser market has increased from less than %5% to more than B7%, its position in the desktop operating system market has risen to 92% (a 3% increase in the last year) and its market share for business productivity applications, such as word processing and e- mail, is now over 96%.

E. Equations for the Economic Model

An economic model must model both the demand side and the supply side of the markets in question. However, to keep the model simple and tractable, it is best to use equations that are fairly easily solved and calculated. For the demand side, I assume that the product being produced is ''homogenous''. This means that the product is essentially the same, in the eyes of the consumer, whether the product is produced by one firm or another firm.

Software products produced by different firms are probably not completely homogenous, either because a firm's reputation, or its product quality, or other product features may differ across firms. However, the assumption of product similarity across firms is often & true enough for modeling purposes. In addition, even though product quality may differ, a simple reinterpretation of the model can handle such situations. To the extent that people are willing to pay more for higher quality, we can interpret this situation as if the higher quality is equivalent to higher quantity.

Another simplifying assumption for the demand side is that the industry demand curve (graph of the price of a product vs. quantity of a product demanded at each price) is linear. A demand curve is unlikely to be linear (that is, it is unlikely to be a straight line). However, the only range of prices worth considering for the competitive analysis is the prices and outputs that lie between the monopoly price and output and the competitive price and output. Over a small range of prices and outputs, the demand curve is likely to be close to a straight line. Therefore, it is unlikely that assuming curvature or lack of curvature in the demand curve will play any significant qualitative role in the conclusions of such a competitive analysis.

Accordingly, the demand side assumes that products are homogenous and that demand curves are linear, according to the equation:

P = A—bQ (1)

Where P=Price (same for all firms), Q=Industry Output Quantity, and A and b are positive parameters (intercept and slope of the demand curve) .

We now turn to the supply side. Technically, only competitive firms have supply curves (graph of the price of a product vs. quantity of a product supplied at each price). Monopoly firms have only marginal cost curves. In this industry, we assume that firms are few in number, either one or a very few firms. Hence, the industry at all times is either a monopoly or an oligopoly. Standard textbook theory tells us how to analyze the production decisions of a monopoly firm. However, there is no single textbook model for how to analyze an oligopoly. This is because there are multiple ways in which an oligopoly industry might behave.

In order to analyze the production decisions of either a monopoly or an oligopoly, it is necessary to posit the nature of the cost curves which they face. It is assumed that different firms may have different costs of production. However, for simplification, it is assumed that each firm (subscripted i for each firm i, where i = 1, 2, 3 ....) has both a fixed cost (Fi) and a marginal cost (Ci). It is assumed the marginal cost is constant (but different) for each firm. Since the fixed cost has an effect only on entry decisions, exit decisions, and shut-down decisions, rather than pricing decisions, it is assumed that the fixed cost is the same for all firms (Fi=F for all i). These simplifying assumptions are unlikely to have a significant qualitative impact on the conclusions.

Hence, the total cost or cost curve for each firm is assumed to be:

TCi = Fi + QiCi (2)

Where TCi = Total Cost for firm i, Fi = Fixed Cost for firm i, Qi = Quantity of output for firm i, and Ci is the constant marginal cost for firm i. In addition, we assume that Fi = F for all firms which are producing and Fi = 0 for all firms which are not producing.

For a monopoly firm, it is sufficient to know the cost side and the demand side to obtain a prediction for the production decision. The monopolist's profit is:

Profiti = TRi—TCi
= PQi—(Fi + QiCi)
= PQi—QiCi—Fi (3)

Where TRi = Total Revenue for firm i = PQi, and TCi comes from equation (2).

Assuming that the fixed cost is not so high as to make production not profitable, the monopolist finds it most profitable to produce at the output level where marginal cost (MC) equals marginal revenue (MR). On a graph showing a plot (or curve) of dollars of profit per unit vs. the quantity of units produced, this output level (where MC = MR) is the highest point on the curve. The eye can determine this point at a glance.* To determine this output -level by computer, calculus is used and this output level is determined by obtaining the partial derivative of Profits with respect to the firm's choice of Qi and setting these derivatives equal to zero:

(d Profiti / d Qi) =
(d P / d Qi)Qi + P—Ci = 0
bQi + P—Ci = 0 (4)

Where we substitute (d P / d Qi) = b from the derivative of the demand curve in equation (1).

For an oligopoly firm, we must make a choice from many possible oligopoly models, a model which is reasonable for the situation at hand. A standard oligopoly model, first developed by a French economist named Cournot over 150 years ago, is still frequently used by economists today because it is fairly easy to compute. The Cournot model assumes that each oligopoly firm makes its output decision under the assumption that rival firms will not change their output in response to its own change in output. The Cournot model yields an oligopoly price and output which is intermediate between competition and monopoly. Also in the Cournot model (when firms have the same marginal cost), an increase in the number of firms causes prices to fall and output to rise. When there are a very large number of firms, the Cournot model predicts competitive pricing, which is what we would expect.

When all firms attempt to maximize their absolute level of profits, the profit-maximizing equations for each firm under the Cournot model are:

Profiti = PQi—QiCi—Fi (4)
(d Profiti / d Qi) =
(d P / d Qi)Qi + P—Ci = 0
bQi + P—Ci = 0 (5)

The Cournot model is reasonable for the circumstances of this industry. Given a fairly significant level of fixed costs for this industry, it is unlikely that more than two or three firms can survive as major players in this industry. Fixed costs for software production (i.e., for research and development) require that firms must have significant sales simply to break even. This limits the number of firms which can survive as major players in the industry.

Microsoft's long-run costs appear to be about 18.55% of revenues. If all of these costs are fixed costs, then no more than five firms can exist in the industry, because fixed costs for six firms would eat up 18.55% × 6=111.3% of the industry's total revenue. This is unviable. In addition, there are also the short- run costs that must be covered. Furthermore, when there are two or more firms in the industry, we expect prices to fall, which allows firms to sell more, but only at a lower profit margin.

Computer results from a preliminary economic model, which allowed up to five firms in the industry, indicated that if fixed costs are either 75% or 100% of the long-run costs, then only two firms can survive in this industry. If fixed costs are either 25% or 50% of the long-run costs, then only three firms can survive in this industry. If fixed costs are 0% of the long-run costs (i.e., all long-run costs are variable costs), then it is possible for four or five firms to survive in this industry. Accordingly, the computer model was revised to consider a maximum of three firms in the industry.

Given that only two or three firms can successfully survive, under Cournot assumptions, we may ask if the Cournot model is a reasonable description. Alternative oligopoly models do exist, and these may suggest either higher prices or lower prices than what the Cournot model would predict.

Under the circumstances of an industry structure with only two or three firms, it is more reasonable to assume that prices may be higher than the Cournot model would predict. This is so for two reasons. First, software products are likely to be somewhat differentiated, rather than homogenous, as the computer model assumes. If products are differentiated, then consumers see the products of different firms as being somewhat different from each other, albeit also similar to each other. For example, Corel WordPerfect and Microsoft Word have their differences, as well as their similarities. Within a small range of prices, each software product can act as a kind of ''mini-monopolist'' with respect to its own product price.

Second, when there are only two or three firms, tacit collusion which raises prices is easier to implement, and difficult to prove. Moreover, unlawful conspiracies to raise prices are less easily discovered. However, it is the general experience that oligopolies with very few firms rarely collude by means of unlawful conspiracies (which could net jail time), presumably because tacit collusion is so much easier.

For both these reasons, it is substantially more likely that oligopoly prices would be higher than what the simple Cournot model would predict, than that the oligopoly prices would be lower. If we assume that prices would be higher, this means that more firms can survive in the industry. For example, if the Cournot model would predict that only one firm can be profitable, it may be that two firms can be profitable. If the Cournot model predicts only two firms can survive, it may be that three firms can survive. And so forth.

Hence, the Cournot model is probably a bit cautious in its predictions about how many firms can actually compete and survive in this industry. This is probably a good thing. One of the issues in this case, at least implicitly, is whether or not Microsoft is a ''natural monopoly.'' If Microsoft is a natural monopoly, someone might argue, then Microsoft caused little or no harm by keeping out the competition, since the competitors could not have survived anyway. The computerized model does not in any way lend support to this type of argument. Hence, the Court should not be reluctant to consider structural remedies which divide Microsoft into two or more firms.

F. Equations For a Relative Profit Maximizing Firm

One of the options for a structural remedy is to change the incentives of the business managers of the successor firms to Microsoft when Microsoft is re-structured. The incentives of the business managers can be altered by changing the method of compensation for the officers of the business firm. A method of incentives for preventing collusion is further explained in a paper published in a refereed academic journal.

For purposes of this comment and the computer economic model, attention is restricted to the simplest possible methods for implementing this incentive system. More complex methods for implementing the incentive system are certainly possible, and some of these more complex implementations may even be better or more effective than the simple implementation discussed here. In its purest implementation, the incentive scheme sets up a zero-sum game for two or more firms in an industry. In the zero-sum game, there is no incentive for all firms in the industry to engage in any type of collusion. The method even prevents tacit collusion, which may be hard to detect, and difficult or impossible to prosecute. The method accomplishes this amazing feat simply by changing the financial incentives of business managers, not by passing strict new antitrust laws with draconian penalties.

The method sets up a set of incentives called Relative Profit Maximizing (RPM) incentives. Business firms whose managers are motivated by these incentives may be called Relative Profit Maximizing (RPM) firms. Each business manager is assumed to be motivated by at least some desire to increase his wealth. In a well-run business firm, managers are normally paid in a manner which motivates them to increase their wealth by increasing the profits of their firm. RPM incentives alter these common methods of financial compensation by additionally motivating the manager to maximize the firm's profits relative to competing firms' profits.

In its most general form, the goal of the RPM manager is to maximize his profits relative to the profits of rival firm(s). It is only be achieving this goal that the RPM manager can attain maximum financial satisfaction, because that is how the manager is being paid. In its simplest form, the goal functions for two rival RPM farms look as follows:

Goal1=Profit1—z(Profit2)

Goal2=Profit2—z(Profit1)

When z=1.0 in the above two goal functions, we set up the pure zero-sum game. In the zero-sum game there is no incentive to collude. If instead, z = 0.0 in the above two goal functions, then both firms are motivated by Absolute Profit Maximizing (APM) incentives. APM incentives are simply the incentives we normally expect to find in business firms. Absolute Profit Maximizing (APM) firms simply try to maximize their own level of profits, regardless of the level of other firms'' profits. APM firms-which are the most common type of business firm in a capitalist economy—do have an incentive to collude, if an opportunity arises.

In simple terms in a two firm industry using RPM incentives, if a manager increases his firm's annual profits by 10% which is equivalent to $1 billion he only gets a bonus (or salary in the case of absolute dependence on RPM) if the profits of the other firm in the industry increase by less than 10%. In a two firm industry using APM incentives, the manager would get a bonus for the extra $1 billion even if his firm's profits increased less than the other firm's profits in terms of annual percentage gain.

The parameter z in the above goal functions can also take on additional values. For example, if z is set less than zero, the two firms would have Joint Profit Maximizing (JPM) incentives. JPM incentives would likely create less vigorous competition between the two business firms than would otherwise occur with APM incentives.

If z in the above goal functions is between 0.0 and 1.0, this creates an impure system of relative profit maximizing incentives. For example, if z=0.3, this creates a mixture of two incentive schemes which might be described as ''30% RPM plus 70% APM.'' An impure RPM incentive scheme partially reduces the incentive for collusion, but does not completely eliminate the incentive for collusion. An RPM firm, even one with an impure RPM incentive, can normally be expected to compete more vigorously than an APM firm. For this reason, the Court should consider using RPM incentives as part of an overall structural remedy.

For purposes of illustration with the computerized economic model, only values of z between -0.3 and 0.9 are used. Generally, z is in the range of 0.0 to 0.9 in the model and no preferred solution has z less than 0.0. The value of 1.0 (pure RPM) is avoided, because with this simple illustrative model (with no mechanism for avoiding losses), pure RPM would practically guarantee that one or both firms will lose money. This is because if the industry has little or no product differentiation, pure RPM causes prices to be set to the average of marginal costs. If in addition, software firms have high fixed costs, pure RPM practically guarantees that at least one firm, and possibly both firms, will be unable to recover their fixed costs of production. Pure RPM may still be useful and beneficial, but only if additional mechanisms are instituted to avoid this outcome.

The goal-maximizing outputs for the goal functions listed in equations (6) and (7) are:

(d Goall / d Q1)

(d P / d Q1)Q1 + p—C1 + (d P / d Q1)Q2 = 0

bQ1 + p—C1 + bQ2 = 0 (8)

(d Goal2 / d Q2) =

(d P / d Q2)Q2 + p—C2 + (d P / d Q2)Q1 = 0

bQ2 + p—C2 + bQ1 = 0 (9)

G. Basics of Scenario Analysis

The purpose of a scenario analysis is to provide a projection of a range of possible futures. The basic parameters of an economic model are usually not known, although they can often be estimated (through empirical or theoretical analysis). These estimates may be arrived at with a greater or lesser degrees of confidence, accuracy, and reliability. Additionally, even if the basic parameters of

an economic model were known with certainty, most economic models allow for uncertainty in how those basic parameters will vary for particular firms or individuals. For example, even if it were known with certainty that the probability of bankruptcy for a particular firm in a particular industry was exactly 3% a year, this would not tell us whether that particular firm will be bankrupt in twenty years.

In a well-done scenario analysis, one should vary the parameters through a reasonable range of values, including both moderate values and extreme values. In addition, the fate of individual firms (given the assumed parameters for a particular scenario) is varied according to the laws of probability governing that particular scenario.

There are two basic ways of conducting a scenario analysis. One way is to compute all the possibilities (appropriately weighted by probabilities) for a limited number of parameters that are allowed to vary through a small number of reasonable values for each parameter, including both moderate and extreme values. The second method is called a ''Monte Carlo'' study. The Monte Carlo study allows a large number of parameters to be varied, randomly, through a large set of possible values. The Monte Carlo study necessarily uses random numbers, which are available in many computer packages. The first type of study might or might not use random numbers.

The computer model used for these comments employs the first method of scenario analysis. Probabilities for every scenario are exhaustively computed and assigned. No random numbers or random number generators were used in the analysis.

The computer model computes probabilities and outcomes for two distinct types of scenarios. One type is a static scenario. The static scenario occurs at a particular period of time, within a single transition period. These transition periods (for a change or transition from one short run cost level to another as is discussed further in section H below) are assumed to have a length of three, five, or eight years.

The other type is a dynamic scenario, which is a path that links two or more static scenarios occurring in two or more time periods. For each set of initial conditions and basic parameters, the computer starts with a single scenario in transition period zero. The computer then calculates the probability that various additional static scenarios will be reached in transition periods one through ten. The probability that one static scenario will turn into another static scenario depends on how similar or dissimilar are the two scenarios. The computer calculates the outcomes for every static scenario, and weights those outcomes by the probability that the static scenario will occur in each of the eleven transition periods (periods zero through ten).

H. Details of Static Scenarios

The static scenarios assume that firms differ only by level of cost. The computerized economic model assumes that there are three firms and five levels of short-run cost. These five levels of cost are level one (lowest cost), level two, level three, level four, and level five (highest cost). These five levels of cost are assumed, over the long run, to have differing probabilities of occurrence. In particular, the probability of cost level one (lowest cost, 10% chance) is assumed be lower than the probability of cost level five (highest cost, 30% chance). This reflects the plausible assumption that it is easier to be a high-cost firm than a low-cost firm.

All possible combinations of the five cost levels for three firms are computed. These possible combinations are organized into 35 static scenarios. Whenever a static scenario has the same cost level for two or more firms, the costs of each firm are adjusted slightly so that no two firms have the same level of cost. A list of the cost levels associated with each static scenario is shown in Attachment C. The weighted average of cost levels over all firms and scenarios is 3.5.

The basic parameters for static scenarios are varied along two dimensions. The first dimension is the cost spread for short- run costs. The cost spread is defined as the ratio of cost level one to cost level five. For example, if the lowest cost level is twice as efficient as the highest cost level, then the cost spread is 50%. Five different ratios for the cost spread were chosen for the analyses. These cost spread ratios were 25%, 33%, 40%, 50%, and 67%.

The second dimension for variation is the portion of long-run cost which is allocated to fixed cost. The portion of long-run cost which is actually a fixed cost is open to some question or interpretation. The mere fact that a software firm has spent $X billion on software development does not mean that the whole expenditure was necessary to develop the software in question. Five different values for the fixed-cost portion of long-run costs were computed. These percentages were 0%, 25%, 50%, 75%, and 100%. In all cases, the remainder of the long-run cost was classified as a variable cost.

Thus, twenty-five static variations on the basic parameters were computed. For each of these variations, the computer programs computed the prices, quantities, profits, and consumer surplus outcomes for each of the thirty-five static scenarios. These static numbers were applied to the probabilities computed for each static scenario for each of the eleven transition periods. The computer model uses the static figures and the associated probabilities for each transition period to compute the expected profit and consumer surplus outcomes for each transition period.

I. Details of Dynamic Transitions

The basic parameters for determining the probabilities of transition effectively vary along only one dimension: The speed with which transitions occur from one cost level to another. This speed variable is implemented in two different ways.

The first method is relatively straightforward. The length of time for the transition periods is allowed to vary. A three-year length for the transition period implies a fast transition speed. A five-year length implies moderate transition speed, and an eight- year length implies a slow transition speed.

The second method influences the speed of transition by determining the extent by which one static scenario may change into another static scenario, from one transition period to the next transition period. For all transition speeds, the model assumes that one static scenario is more likely to change to another static scenario, the more similar are the two scenarios. The measure of similarity or dissimilarity between two scenarios is determined by how similar or dissimilar the short-run costs are for each firm in the industry.

In the slow speed for transition, the second method presumes that a firm's short-run cost cannot change more than one level at a time. For example, a firm whose cost level is four, can change to cost levels five or three, and it can stay at cost level four, but it cannot move to cost levels one or two in only one period of transition. In the slow transition, the firm is more likely to stay at the same cost level, from one transition period to the next, than to move to the cost level above or below.

In the moderate speed for transition, the second method presumes that a firm's short-run cost cannot change more than two levels at a time. For example, a firm whose cost level is four, can change to cost levels two, three, or five, and it can stay at cost level four, but it cannot move to cost level one in only one period of transition. In the moderate speed transition, the firm is more likely to move only one cost level, rather than two cost levels, from one transition period to the next.

In the fast speed for transition, the second method presumes that a firm's short-run cost can change as many as four levels at a time. For example, a firm whose cost level is one, can change to cost levels two, three, four, or five, and it can also stay at cost level one. In the fast transition, a firm is more likely to move only one cost level than two cost levels, more likely to move two levels than three levels, and more likely to move three levels than four levels, from one transition period to the next.

The computer model also causes the exit of firms from the industry when their short-run costs become too high. If a firm's short-run costs reach the adjusted cost level of five or greater, the firm is presumed to exit the industry. This is because an experienced firm which cannot keep its costs down (or quality up) has no competitive advantage over potential competitors, and has presumably lost its ability to compete profitably. The model presumes that the exiting firm is replaced by a new firm which is equally high cost. The new firm then has the opportunity to reduce its cost in future transition periods. Hence, all new entrants to the industry are presumed to enter with high short-run costs.

The computer model starts transition period zero, either with Microsoft as a monopoly, or with Microsoft divided into two or three firms. If Microsoft starts as a monopoly, Microsoft is presumed to start at cost level three. Cost level three is midway between cost level one (lowest cost) and cost level five (highest cost). Cost level three is slightly more efficient than the long- term average cost level of three and a half. Although some may argue that Microsoft acquired its monopoly because it was so much more efficient than its competitors,

that monopoly acquisition happened at least ten years ago and was probably due to the arguably per processor licensing which was the subject of a prior consent judgment (attached as Exhibit 2 to this comment letter). There is no reason to suppose, today, that Microsoft has anything other than about average efficiency for an incumbent firm.

If Microsoft is split into two or three firms, we may suppose that there could be some cost-efficiency losses due to initial disorganization. To see this possibility in extremis, suppose that the Court ordered Microsoft divided into ten competing firms. We might consider ourselves lucky if three of the ten firms were equally efficient as Microsoft is today. However, we should not exaggerate the likely cost-inefficiency impacts of dividing a very large company into two or three very large companies. If Microsoft is split into two firms, the model assumes that one of the Microsoft successor firms starts at cost level three, while the other starts at cost level four. If Microsoft is split into three firms, the model assumes that one of the Microsoft successor firms starts at cost level three, while the other two successor firms start at cost level four.

The computerized economic model also treats the initial period (period zero) differently from the subsequent transition periods. In the initial period, potential competitors do not produce; only Microsoft or Microsoft's successors produce. In subsequent periods, both Microsoft and competitors can produce. This is because, at least initially, major competitors do not exist, because their entry has been blocked by anti-competitive acts. However, under the presumption that an effective conduct or structural remedy creates the opportunity for entry, competitors can produce in subsequent transition periods.

J. Construction and Computation of Remedy Alternatives

The computerized economic model developed for these comments is best suited for analyzing structural remedies. Nevertheless, the model can be applied to analyze conduct remedies, albeit with some caveats.

The model computes several alternative basic outcomes for the industry. The first basic alternative is ''no remedy''. If there is no remedy, it is assumed that Microsoft is a monopoly in all years from 1995 through 2025.

The second basic alternative is a 100% effective conduct remedy, starting in 2002. To calculate the results in terms of CS, TS, and the profits of Microsoft and its competitors in the case of a 100% effective conduct remedy, the model assumes all barriers to entry are removed and there is no anti-competitive conduct in the market. Under the assumption that there are no barriers to entry into the market, Microsoft starts as a monopoly in 2002, but is subject to entry from competitors thereafter. The choice of an early date for a conduct remedy is due to the timing of the negotiated conduct remedy, or alternatively the timing of the conduct remedy offered by the Litigating States. Hence, either conduct remedy can go into effect almost immediately.

In practice, no conduct remedy is likely to be 100% effective. The Litigating States'' strong conduct remedy may be perhaps 60% to 80% effective as a conduct remedy. The DOJ's weak conduct remedy may be about 20% effective. If we optimistically assume that the DOJ has hidden all the convincing and persuasive evidence which should have been in the Competitive Impact Statement, the DOJ might someday provide evidence to the public and the Court that the negotiated agreement with Microsoft may be 40% effective.

The model does not specifically compute the effects which any particular provision of a conduct remedy may have on future competition. Rather, it is up to the Court or the analyst to subjectively assess the overall effectiveness of a particular proposed conduct remedy, and to judge it accordingly. The computer model simply combines the two basic alternatives, ''no remedy'' and ''100% effective conduct remedy'' to compute estimated outcomes for conduct remedies with only partial effectiveness. For example, to compute a ''60% effective conduct remedy'' the program computes a weighted average of the two basic remedies, with a 60% weight on ''100% effective conduct remedy'' and a 40% weight on ''no remedy.''

The outcomes in the case of other partially effective remedies are calculated in a similar manner.

The third set of basic alternatives is a structural remedy in which Microsoft is divided into two or three competing firms. If we accept the DOJ's pessimistic appraisal, no structural remedy can reasonably go into effect before 2005. More optimistically, if the Court follows the road maps laid out by the Appeals Court and the Supreme Court, there is at least a 50% chance that a structural remedy could take effect in 2003, without such remedy being overturned or stayed.

In any case, the computer model pessimistically assumes that a structural remedy is not available before 2005. This time delay somewhat disadvantages the structural remedy, but the structural remedy is sufficiently superior to the conduct remedy, that it is not much of a disadvantage. Without the time delay, a structural remedy would always be superior to a conduct remedy.

The model computes several variations on a structural remedy. The first main variations are the division of Microsoft into two or three absolute profit maximizing (APM) firms. An APM firm is simply the conventional profit-maximizing firm that we see everyday in the business world. This type of division of Microsoft into two or more firms has been advocated by several economists, including four economists who filed an amicus brief before this Court.

The second main variations are the use of relative profit maximizing (RPM) incentives after Microsoft is split up into two firms. A primary advantage of the RPM incentives is that competition can be maintained even if there are only two RPM firms in the industry. RPM incentives can be applied to two firms, three firms, or even more firms, but this computer model only applies RPM incentives to two Microsoft successor firms. The RPM incentives are assumed to be An effect so long as both Microsoft successor firms are still in the industry. If either RPM firm exits the industry, the goal function of the remaining Microsoft successor firm returns to the usual APM incentives.

The computer model also prints out estimates for the two- monopolies remedy previously proposed by the Plaintiffs in this case. If Plaintiffs'' remedy worked as planned, it would be akin to a conduct remedy with enhanced effectiveness. In addition to removing the applications barrier to entry, the proposal would possibly introduce some measure of extra competition, because the two monopolists might decide to compete with each other. The computer model does not specifically analyze this remedy, but simply estimates its value as being a third of the distance between a ''100% effective conduct remedy'' and a 2-firm APM structural remedy. This is calculated as a weighted average of these two basic remedies, with a 2/3 weight on the ''100% effective conduct remedy'' and a 1/3 weight on the 2-firm APM structural remedy.

Finally, the model computes what might have happened along a ''Lawful Path.'' The lawful path assumes that Microsoft starts as a lawful monopoly in the year 1995, and commits no antitrust violations at any time. Although some private lawsuits allege antitrust violations which occurred before 1995, this case does not concern those allegations. This case concerns anti-competitive acts committed by Microsoft in the browser wars, which did not start until 1995. To simulate the lawful path, Microsoft starts as a monopoly in 1995, but is subject to potential competition in 1996 and later years.

The purpose of calculating the ''Lawful Path'' is to serve as an equity standard for evaluating alternative remedies. The Lawful Path tells us what Microsoft likely would have earned, if Microsoft committed no violations. To the extent that Microsoft's profits exceed those lawful earnings, we may refer to those excess earnings as the fruits of its unlawful actions. Likewise, to the extent that consumer surplus exceeds (or falls short) of what would occur along the Lawful Path, this is the extent to which consumers benefit (or remain harmed) as a result of a particular remedy. K. Weighting of Alternative Scenario Parameters

The computerized economic model computes and weights 225 sets of scenarios, which differ by the basic parameters assumed for each scenario. These differ along four dimensions. Not all scenarios are equally likely. Hence, in the reporting of results, they are weighted by their likelihood of occurring. Attachment D shows the four basic parameters, the sixteen parameter values, the point values of their weighting, and their implied probability of occurring.

The first dimension of parameter variation is the cost-spread for short-run cost. Five different ratios for the cost spread were used: 25%, 33%, 40%, 50%, and 67%. In Attachment D these are labeled ''Cost-Spread Ratio.''

Studies of production efficiency between firms suggest that some firms can be only half as efficient as other firms. So that cost-spread ratios of 50% and 67% are certainly within the realm of plausibility. In addition, the

short-run cost variable is doing double duty as a stand-in for possible differences in software quality between firms. If we assume similar ratios for differences in quality, then a 25% cost spread is certainly possible, though less likely. Such a cost spread implies that the inefficient firm has both double the costs and half the quality; it is an unlucky combination of extremes that is therefore less likely. Hence, I weight the 25% and 33% cost-spread ratios with a point value of 1, and weight the 40%, 50%, and 67% ratios with a point value of 2.

The second dimension of parameter variation is the portion of long-run cost which is allocated to fixed cost. Five different percentages for the fixed-cost portion were used: 0%, 25%, 50%, 75%, and 100%. In Attachment D these are labeled ''Fixed-Cost Portion of Long-Run Cost.'' At this point, there is no particular reason to suppose that one allocation of the fixed-cost portion is better than another. Hence, I assume a uniform distribution over the interval, 0% to 100%. This implies assigning point values of 1 to the two extremes (0% and 100%) and a point value of 2 to the in-between values (25%, 50%, and 75%).

The third and fourth dimensions for parameter variation are the speed of transition and the length of transition periods. In Attachment D ''Transition Speed'' takes on values of 1.5 (slow), 2.5 (moderate), and 4.5 (fast). In Attachment D, the length of transition periods is given by ''Transition Length'' of 3 years (short), 5 years (moderate), or 8 years (long). Extremes may either amplify each other (e.g., slow and long) or offset each other (e.g., slow, but short). Hence, even if we do not weight these values further, moderate combinations are more likely than genuinely extreme combinations. Hence, all transition speeds and transition length receive the same point value of 1.

Finally, for each of the 225 combinations of parameters, the points assigned to each parameter value are multiplied together. This yields a total of 576 points. Based on these point values, the computer model assigns each combination of parameter values an assumed probability of occurrence. These probabilities are used to weight the outcomes of the various calculations when reporting the final results, which we come to shortly.

L. Method of Computing Remedy Alternatives

For each remedy alternative, dollar values for costs, revenue, profits, and consumer surplus are calculated by the model in real dollars for each of the years, 1995–2025. These dollar values are calculated in real terms, in dollars of constant purchasing power, as of the year 2001.

It is generally standard practice to assume that money has at least some time value. That is, a dollar now is preferable to a dollar ten years from now, even if both dollars otherwise have the same purchasing power. One reason people prefer the dollar now is that money can be invested and earn interest. Another reason is that people are impatient.

In regulatory analysis of U.S. government regulations (e.g., under Executive Order 12886), it is standard practice to use a 7% real discount rate. This discount rate is somewhat akin to an interest rate. This means that future dollars will be discounted compared with present dollars, while past dollars will accumulate interest compared to present dollars.

Attachment E provides an example of how the 7% real discount rate can be applied to Microsoft's real monopoly revenues. In Attachment E it can be seen that Microsoft's revenues for its Windows monopoly were rather small, compared to what they will be if Microsoft operating systems continue to be a rapidly growing monopoly. In 1995 Microsoft's revenues for its Windows monopoly were only $3.0 billion in 2001 dollars. In 2002 they were estimated at $9.1 billion. In 2025 they are projected to be $34.1 billion in 2001 dollars.

When we apply the 7% discount factor, the picture changes somewhat. Revenues for 1995 ''earn interest'' of 50% when brought to 2001, while revenues from 2025 are discounted 80.3% from the value of equivalent purchasing power in of 2001. Discounted revenues for 1995 become larger ($4.5 billion) while discounted revenues for 2025 become smaller ($6.7 billion). The projected undiscounted revenues always grow, but the discounted revenues are projected to reach a peak in 2008, with $17.1 billion in undiscounted revenues and $10.65 billion in discounted revenues.

This illustrates an important cause of one of the more interesting results which emerge from the economic analysis: Because Microsoft's monopoly revenues are growing rapidly, we may anticipate worse damage to consumers in the future than what has already occurred in the past. Attachment F provides some comparisons for the Windows operating system monopoly which illustrate this result.

In Attachment F, the values for consumer surplus, competitors'' profits, Microsoft's profits, and for the sum of these, total surplus, are provided for the past (1995–2001), the future (2002- 2025), and in total (1995–2025). The top half of the Attachment shows the aggregated values of these quantities. The bottom half shows how these quantities compare with the same quantities along the Lawful Path. All quantities from the past earned interest at 7% per year, while all quantities from the future are discounted at the rate of 7% per year back to 2001 dollars.

Looking at the top half of Attachment F, we see both past and future values for ''No Remedy,'' a ''100% Effective Conduct Remedy,'' and a ''3-firm APM Structural Remedy.'' In all cases, the future values for consumer surplus, Microsoft profits, and Total Surplus are substantially larger in the future, than in the past. In all these cases, the future values are more than double the size of the past values, even though the future is discounted and the past is inflated.

In the middle of Attachment F, we see the aggregated values for Lawful Path. Again all the future values are at least double the past values. If Microsoft had always pursued the Lawful Path, its profits would be lower, both in the past and in the future. Even on the Lawful Path, Microsoft's future profits are more than double its lawful past profits. Again, this is true even though past profits are inflated and future profits are discounted.

In the bottom half of Attachment F, the various aggregates in the top half of the Attachment are compared with the Lawful Path. If we compare ''No Remedy'' with the Lawful Path, we see very interesting differences between past and future. These differences are on the order of 10 to 1. Consumers in the past lost $4.1 billion in consumer surplus, but are scheduled to lose $35.0 billion in the future. Competitors lost $2.6 billion profit in the past, but are scheduled to lose $31.5 billion profit in the future.

Microsoft, by contrast, does extremely well. Microsoft gained $6.7 in unlawful extra profit in the past, but is scheduled to receive $60.4 billion in unlawful extra profit in the future. These numbers should give the Department of Justice and the Court some pause before adopting any settlement which effectively endorses continued extraction of profits from consumers due to anti-competitive conduct by Microsoft.

We may compare these numbers with what may happen under two alternative remedies. In the past (which no remedy can change), consumers lost $4.1 billion. In the future, they will lose an additional $4.7 billion under a 100% effective conduct remedy, but only an additional $0.3 billion under a 3-firm structural split-up of Microsoft Corporation.

Under a 100% effective conduct remedy, competitors in the future will still lose $6.7 billion while Microsoft gains $9.1 billion, relative to the Lawful Path. By contrast, under the 3-firm structural remedy, competitors lose $26.4 billion in the future, while Microsoft gains $26.5 billion in the future, relative to the lawful path. In other words, competitors benefit more from a 100% effective conduct remedy, while both consumers and Microsoft gain more from a structural remedy. This is an amazing result, which has some startling implications for how best to resolve this case.

This result does not appear to be an artifact of making peculiar assumptions in the economic model. The result is most likely due to the limited space available in the market for more than two or three firms. If Microsoft remains intact, competitors have room to enter the market and earn profits. However, if Microsoft is split into two or three firms, there is less room in the market for competitors to enter. Accordingly, under a structural remedy, the Microsoft successor firms all presumably initially owned by current Microsoft shareholders earn much of the profits which competitors might otherwise be able to take away.

This does not mean, as a practical matter, that competitors are necessarily better off with a conduct remedy than with a structural remedy. In actual practice, a pure conduct remedy cannot be 100% effective. A weak conduct remedy might be worse for competitors, while a strong conduct remedy may be better for competitors, as compared with a structural remedy. Likewise, Microsoft is not necessarily worse off with a conduct remedy than with a structural remedy. In comparison with a structural remedy, Microsoft may fare better with a weak conduct remedy than with a with a strong conduct remedy

M. Analysis of Computed Remedy Alternatives

Attachments G, H, I, and J provide a summary of the computations for several remedy alternatives. These summaries provide estimates of consumer surplus, profits for both Microsoft and its competitors, and total surplus. Total surplus is simply the sum of consumer surplus and the profits of all firms in the industry. These figures are aggregated for all the years, 1995- 2025. They are expressed in real dollars, as of 2001. They are also appropriately discounted to the year 2001 at the standard 7% real discount rate which is commonly used in the analysis of United States government regulations.

The first page of each of these Attachments provides the total values for each of the quantities, Consumer Surplus, Competitors'' Profits, Microsoft's Profits, and Total Surplus. These figures are computed and summarized for each of the alternative circumstances. These circumstances are ''No Remedy,'' conduct remedies with various levels of effectiveness, thirteen structural remedies which split Microsoft into two or more firms, and the ''Lawful Path'' in which Microsoft never disobeyed the antitrust laws.

The second page of each of these attachments compares each of the alternative circumstances with the Lawful Path. These numbers are calculated by subtracting the total quantities under the Lawful Path from the total quantities available under each alternative circumstance.

For example, in Attachment G Consumer Surplus under the Lawful Path is $105.9 billion, but under ''No Remedy'' the Consumer Surplus is only $66.7 billion. On the second page of the Attachment these two numbers are subtracted, so that we can see that consumers were/will be deprived of $39.2 billion in consumer value, if there is no remedy. Likewise, Microsoft has obtained/will obtain $108.5 billion under ''No Remedy'', but would have obtained only $41.3 billion under Lawful Path. The difference of $67.2 billion in profit is shown on the second page of the Attachment. This figure is representative of the unjust gain (the fruits of Microsoft's unlawful conduct) that Microsoft has obtained or will obtain if there is no remedy.

Attachments G and I calculate the remedy alternatives under the assumption that the only monopoly of concern is the Operating System (''Desktop Platforms'') monopoly. Attachments H and J calculate the remedy alternatives under the assumption that all of Microsoft's monopolies (''Platforms'' + ''Applications'' + ''Enterprise Software'') are of concern. The figures in Attachments H and J are approximately three times as large as the figures in Attachments G and I.

Clearly, ''No Remedy'' is not an option for this Court. These attachments also provide bottom line information on various conduct and structural remedies which the Court is entitled to consider. The first eight remedies are conventional remedies of a conduct or structural variety. In all four attachments, it may be seen that ''APM, 3-firms'' is the best of the conventional (non-RPM) remedies in the sense that best means maximum CS or TS. The ''APM, 3-firms'' remedy is simply a split-up of Microsoft Corporation into three competing successor companies, of the ordinary absolute profit maximizing (APM) variety.

The three-firm split-up is similar to what other economists have advocated.

We may confirm this conclusion by reading the first nine entries in the columns for ''Consumer Surplus'' and in the columns for ''Total Surplus,'' on either the first or second page of each attachment. Of the first nine entries, the 3-firm APM remedy always has the largest consumer surplus, and also has the largest total surplus. It may also be noted that this 3-firm remedy restores most, but not all, of the consumer surplus and total surplus that would otherwise be wrongfully taken by Microsoft.

This may be seen by the negative numbers for this remedy on the second page of each attachment.

Also of note for the 3-firm structural remedy is that Microsoft profits considerably from its unlawful acts, relative to the Lawful Path. This may be seen from the large positive numbers for Microsoft's Profits for this remedy on the second page of each attachment. For Attachments G and I, Microsoft achieves an unlawful gain of $33.2 billion, even with the 3-firm split up. For Attachments H and J, Microsoft achieves an unlawful gain of $96.2 billion. Most of these remaining unlawful profits come from the pockets of competitors and would-be competitors (many of whom are not identifiable) who were excluded or deterred from competition by Microsoft's anti-competitive acts.

The consideration of structural remedies involving relative profit maximizing (RPM) incentives is as follows. In all cases, the RPM remedy is applied to only two Microsoft successor farms, after Microsoft is split into two competitors. These are shown in the attachments as ''RPM, z=0.000'' through ''RPM, z=0.900''. ''z'' is the value of the parameter z in the RPM firm's goal function. ''z'' tells us the extent to which a firm's business managers are financially motivated to maximize the relative profits of their business firm, rather than absolute profits. If z=0.0, there is no RPM incentive. If z=1.0, managers are solely motivated to maximize relative profits. For purposes of these comments, only the outcomes for values of z generally between 0.0 and 0.9 are illustrated. However, in the scenarios shown on Attachments I and J which allow a change in z (referred to as zbump=0.3) some percentage of all scenarios listed as having z values from 0.0 to 0.2 will have a z value of less than 0.0.

Attachments G and H assume that the value of z remains fixed, and that it does not respond to changing circumstances. In both attachments, consumer surplus is maximized when z=0.4 and total surplus is maximized when z=0.5. In Attachment G, the RPM solution can improve consumer surplus by $2.9 billion, and can improve total surplus by $4.6 billion over the 3-firm split up, which is the best conventional remedy. In Attachment H, the RPM solution can improve consumer surplus by $8.6 billion, and can improve total surplus by $13.5 billion over the 3-firm split up.

Attachments I and J assume that the value of z is more flexible, and can change in response to changing circumstances.

The circumstance to which z is allowed to respond is the circumstance where one (or both) RPM firms are experiencing losses.

These losses, of course, should not simply be short-term or even annual losses, but losses that are more chronic or long-term. In these computer runs, z is allowed to vary through a small range of values. In these attachments, z was allowed to range from the indicated value of z down to the smaller value of z which is 0.3 lower.

In Attachments I and J, consumer surplus is maximized when z=0.6, but this line includes some scenarios which can range down to z=0.3 due to the effect of a change in z as large as 0.3 (i.e., zbump = 0.3). Total surplus is maximized when z=0.8, but can range down to z=0.5 in the same manner due to a change in z as large as 0.3. In Attachment I, the RPM solution can improve consumer surplus by $9.3 billion, and can improve total surplus by $5.2 billion over the 3-firm split up, which is the best conventional remedy. In Attachment J, the RPM solution can improve consumer surplus by $27.2 billion, and can improve total surplus by $15.2 billion over the 3-firm split up.

In each of the Attachments, the 2-firm RPM remedy also reduces Microsoft's unlawfully acquired profits by a few billion dollars, relative to what Microsoft would obtain from the conventional 3- firm APM remedy. Hence, in all respects, whether measured in terms of increasing consumer surplus, increasing total surplus, or in the diminution of Microsoft's unjust fruits of its unlawful conduct, the RPM incentive system is capable of doing better than the best of the conventional economic remedies (APM).

N. Equity Analysis in Light of the Economic Analysis

The primary objectives of the antitrust laws, expressed in economic terms, is either to maximize consumer surplus or to maximize total surplus (or perhaps both, though it may not be possible to maximize both simultaneously). The Court should select a remedy according to whichever objective best fits the equity requirements of the antitrust law. According to the economic analysis just provided, a structural remedy combined with an RPM incentive, is better than any conventional structural or conduct remedy. Among the conventional remedies, the 3-firm split-up is better than any conceivable conduct remedy, including even a 100% effective conduct remedy. And, of course, among the conduct remedies, a strong conduct remedy (such as the Litigating States have proposed)is better than the weak conduct remedy which the DOJ has proposed.

A secondary objective is to assure that Microsoft does not gain extra profit in the future as a result of the future effect of its past (and continuing) unlawful behavior.

The computerized economic model (whose source code is attached as Attachments K-S) only models the price effects of Microsoft's anti-competitive acts. An additional harm caused by Microsoft in this case includes losses of innovation in the software industry.

Due to the failure of the United States to address this issue analytically in the CIS resource constraints precluded modeling these additional losses in consumer surplus and total surplus. It is possible that the dollar value of this damage to the consuming public (in the form of innovation which did not

occur) caused by Microsoft's unlawful conduct exceeds the unlawful profits calculated by the model. Thus, it is unlikely that consumers and the public will ever regain that to which they are entitled as a matter of equity.

ATTACHMENT A-2.—MICROSOFT CORPORATION, ANNUAL REVENUE BY BUSINESS DIVISION, REAL 2001 DOLLARS

[In billions] Platforms,

Calendar Year	Desktop Platforms	Platforms & Enterprise	Platforms & Applications	Platforms, Applications & Enterprise
1995	3.003532	4.207892	6.855180	8.059541
1996	3.727131	5.347350	8.460443	10.080662
1997	5.035883	7.458570	11.217205	13.639892
1998	6.454595	9.391382	14.204543	17.141330
1999	7.693463	12.210871	17.149630	21.667038
2000	8.186612	13.192271	17.729841	22.735500
2001	7.204304	11.348110	16.786433	20.930239
2002	9.142475	14.955194	19.792872	25.605591
2003	10.588836	17.711490	22.821122	29.943776
2004	12.001410	20.453823	25.771053	34.223466
2005	13.364562	23.136215	28.613009	38.384662
2006	14.670118	25.728773	31.332338	42.390993
2007	15.915669	28.215390	33.925832	46.225553
2008	17.102945	30.590792	36.398387	49.886235
2009	18.236419	32.857597	38.760186	53.381363
2010	19.322209	35.023736	41.024499	56.726025
2011	20.367255	37.100384	43.206070	59.939200
2012	21.378745	39.100399	45.319994	63.041648
2013	22.363742	41.037214	47.380985	66.054457
2014	23.328943	42.924094	49.402933	68.998085
2015	24.280557	44.773678	51.398672	71.891793
2016	25.224251	46.597717	53.379885	74.753351
2017	26.165138	48.406960	55.357103	77.598925
2018	27.107806	50.211128	57.339763	80.443086
2019	28.056353	52.018953	59.336296	83.298896
2020	29.014438	53.838247	61.354226	86.178035
2021	29.985331	55.675990	63.400283	89.090942
2022	30.971962	57.538426	65.480504	92.046967
2023	31.976974	59.431156	67.600333	95.054514
2024	33.002757	61.359227	69.764708	98.121178
2025	34.051497	63.327217	71.978146	101.253866

Source: Computed from spreadsheet data provided on Microsoft's Investor Relations website (downloaded December 5, 2001 from http://www.microsoft.com/msft/history.htm) and CPI indices from the BLS website (Downloaded December 5, 2001 from http://stats.bls.gov/cpi/home.htm).

ATTACHMENT B.—MICROSOFT CORPORATION, PROFIT & LOSS ITEMS, AS A PERCENT OF REVENUE, TEN-YEAR AVERAGE OF PERCENTAGES (MICROSOFT FISCAL YEARS 1992–2001) & CLASSIFICATION OF EXPENSE ITEMS INTO SHORT-RUN AND LONG-RUN COST

[FY 1992–2001 ten-year average]

Profit & Loss Item	As a Percent of Revenue	Categorized as
Revenue	100.00%	
Operating expenses:		
Cost of revenue	18.51%	Short-Run Cost
Research and development	14.73	Long-Run Cost
In-process R&D	0.19	Long-Run Cost
Sales and marketing	22.14	Short-Run Cost
General and administrative	3.63	Long-Run Cost
Other expenses	0.36	Short-Run Cost
Total operating expenses	59.59	
Total Short-Run Cost	41.01%	
Total Long-Run Cost	18.55%	
Operating income	40.41%	
Losses on equity investees and other	−0.55	
Investment income	6.04	
Noncontinuing items	−0.27	
Income before income taxes	45.97	
Provision for income taxes	15.67	
Net income	30.29	

Source: Computed from spreadsheet data provided on Microsoft's Investor Relations website (downloaded December 5, 2001 from http://www.microsoft.com/msft/history.htm).

ATTACHMENT C.—ADJUSTED AND UNADJUSTED COST LEVELS FOR FIRMS IN 35 STATIC SCENARIOS AND LONG-RUN PROBABILITY OF SCENARIO

Static Scenario	Long-Run Propability	Unadjusted Cost Levels Firm	Adjusted Cost Level			Firm 1	Firm 2
			Firm 1	Firm 2	Firm 3		
1	2.7000%	5	5	5	4.7500	5.0000	5.2500
2	6.7500%	4	5	5	4.0000	4.8333	5.1667
3	5.6250%	4	4	5	3.8333	4.1667	5.0000
4	1.5625%	4	4	4	3.7500	4.0000	4.2500
5	5.4000%	3	5	5	3.0000	4.8333	5.1667
6	9.0000%	3	4	5	3.0000	4.0000	5.0000
7	3.7500%	3	4	4	3.0000	3.8333	4.1667
8	3,6000%	3	3	5	2.8333	3.1667	5.0000
9	3.0000%	3	3	4	2.8333	3.1667	4.0000
10	0.8000%	3	3	3	2.7500	3.0000	3.2500
11	4.0500%	2	5	5	2.0000	4.8333	5.1667
12	6.7500%	2	4	5	2.0000	4.0000	5.0000
13	2.8125%	2	4	4	2.0000	3.8333	4.1667
14	5,4000%	2	3	5	2.0000	3.0000	5.0000
15	4.5000%	2	3	4	2.0000	3.0000	4.0000
16	1.8000%	2	3	3	2.0000	2.8333	3.1667
17	2.0250%	2	2	5	1.8333	2.1667	5.0000
18	1.6875%	2	2	4	1.8333	2.1667	4.0000
19	1.3500%	2	2	3	1.8333	2.1667	3.0000
20	0,3375%	2	2	2	1.7500	2.0000	2.2500
21	2,7000%	1	5	5	1.0000	4.8333	5.1667
22	4,5000%	1	4	5	1.0000	4.0000	5.0000
23	1,8750%	1	4	4	1.0000	3.8333	4.1667
24	3,6000%	1	3	5	1,0000	3.0000	5.0000
25	3,0000%	1	3	4	1.0000	3.0000	4.0000
26	1,2000%	1	3	3	1.0000	2.8333	3.1667
27	2.7000%	1	2	5	1.0000	2.0000	5.0000
28	2.2500%	1	2	4	1.0000	2.0000	4.0000
29	1,8000%	1	2	3	1.0000	2.0000	3.0000
30	0.6750%	1	2	2	1.0000	1.8333	2.1667
31	0,9000%	1	1	5	0.8333	1.1667	5.0000
32	0.7500%	1	1	4	0.8333	1.1667	4.0000
33	0.6000%	1	1	3	0.8333	1.1667	3.0000
34	0.4500%	1	1	2	0.8333	1.1667	2.0000
35	0.1000%	1	1	1	0.7500	1.0000	1.2500

Source: Adapted from file ''CostList.txt'' generated by the computer program ''MS1File.bas''.

ATTACHMENT D.—POINT VALUES AND EQUIVALENT PROBABILITIES FOR THE WEIGHTING OF ALTERNATIVE BASIC PARAMETERS FOR THE SCENARIO ANALYSES.

	Point Values	Equivalent Probability
Cost-Spread Ratio (Low Cost/High Cost):		
25.00%	1	12.5%
33.33%	1	12.5%
40.00%	2	25.0%
50.00%	2	25.0%
66.67%	2	25.0%
Fixed-Cost Portion Point Equivalent Of Long-Run Cost:		
0.00%	1	12.5%
25.00%	2	25.0%
50.00%	2	25.0%
75.00%	2	25.0%
100.00%	1	12.5%
Transition Speed (Allowed Cost Level Jumps):		
1.5	1	33.3%
2.5	1	33.3%
4.5	1	33.3%
Transition Length (Number of Years):		
3	1	33.3%
5	1	33.3%
8	1	33.3%

ATTACHMENT E.—MICROSOFT'S REAL MONOPOLY REVENUES BY YEAR DISCOUNTED AT 7% RATE PER YEAR, REAL 2001 DOLLARS

[In billions]

Year	Undiscounted Revenues	Discount Factor	Discounted Revenue
1995	3.003532	1.500731	4.507492
1996	3.727131	1.402552	5.227496
1997	5.035883	1.310796	6.601017
1998	6.454595	1.225043	7.907158
1999	7.693463	1.144900	8.808247
2000	8.186612	1.070000	8.759675
2001	7.204304	1.000000	7.204304
2002	9.142475	0.934579	8.544368
2003	10.588836	0.873439	9.248699
2004	12.001410	0.816298	9.796724
2005	13.364562	0.762895	10.195759
2006	14.670118	0.712986	10.459589
2007	15.915669	0.666342	10.605279
2008	17.102945	0.622750	10.650851
2009	18.236419	0.582009	10.613758
2010	19.322209	0.543934	10.509997
2011	20.367255	0.508349 1	0.353674
2012	21.378745	0.475093	10.156882
2013	22.363742	0.444012	9.929763
2014	23.328943	0.414964	9.680676
2015	24.280557	0.387817	9.416412
2016	25.224251	0.362446	9.142423
2017	26.165138	0.338734	8.863031
2018	27.107806	0.316574	8.581630
2019	28.056353	0.295864	8.300855
2020	29.014438	0.276508	8.022726
2021	29.985331	0.258419	7.748772
2022	30.971962	0.241513	7.480127
2023	31.976974	0.225713	7.217616
2024	33.002757	0.210947	6.961821
2025	34.051497	0.197146	6.713130

Source: Adapted from the ''Rev—Disc.txt'' file generated by the ''MS6Summ.bas'' program using RevStream=1 (Microsoft's Platform-only revenues) and the data in Attachment A.

ATTACHMENT F.—CONSUMER SURPLUS & PROFITS FOR PAST (1995–2001) & FUTURE (2002–2025) TIME INTERVALS, COMPARISONS FOR SELECTED REMEDIES AND LAWFUL PATH

Time Interval	Consumer Surplus	Competitor Profits	Microsoft Profits	Total Surplus
Aggregates for No Remedy Path				
Past	12.1839999	0.0000000	19.8218227	32.0058226
Future	54.4862867	0.0000000	88.6422783	143.1285650
Total	66.6702866	0.0000000	108.4641010	175.1343876
Aggregates for 100% Effective Conduct Remedy				
Past	12.1839999	0.0000000	19.8218227	32.0058226
Future	84.8797426	24.7805427	37.2686222	146.9289075
Total	97.0637425	24.7805427	57.0904448	178.9347301
Aggregates for 3-firm APM Structural Remedy				
Past	12.1839999	0.0000000	19.8218227	32.0058226
Future	89.2098711	5.1158769	54.7189826	149.0447306
Total	101.3938710	5.1158769	74.5408053	181.0505532
Aggregates for Lawful Path				
Past	16.3216726	2.6242527	13.0930073	32.0389326
Future	89.5353459	31.5087389	28.2007864	149.2448711
Total	105.8570185	34.1329915	41.2937937	181.2838037

ATTACHMENT F.—CONSUMER SURPLUS & PROFITS FOR PAST (1995–2001) & FUTURE (2002–2025) TIME INTERVALS, COMPARISONS FOR SELECTED REMEDIES AND LAWFUL PATH—Continued

Time Interval	Consumer Surplus	Competitor Profits	Microsoft Profits	Total Surplus
Comparing: No Remedy minus LawfulPath				
Past	−4.1376727	−2.6242527	6.7288153	−0.0331101
Future	−35.0490592	−31.5087389	60.4414920	−6.1163061
Total	−39.1867319	−34.1329915	67.1703073	−6.1494161
Comparing: 100% Effective Conduct Remedy minus LawfulPath				
Past	−4.1376727	−2.6242527	6.7288153	−0.0331101
Future	−4.6556032	−6.7281961	9.0678358	−2.3159636
Total	−8.7932759	−9.3524488	15.7966511	−2.3490736
Comparing: 3-firm APM Structural Remedy minus LawfulPath				
Past	−4.1376727	−2.6242527	6.7288153	−0.0331101
Future	−0.3254747	−26.3928620	26.5181963	−0.2001404
Total	−4.4631474	−29.0171147	33.2470116	−0.2332505

Source: Adapted from output file ''AGGRWTD8.txt'' from Lundgren's six computer programs, where revstream=1 in ''MS6Summ.bas''.

ATTACHMENT G.—SUMMARY OUTPUT OF ALTERNATIVE REMEDIES FOR MICROSOFT

[Total Aggregates for Alternative Remedies]

Remedy	Consumer Surplus	Competitor Profits M	icrosoft Profits	Total Surplus
No-Remedy:	66.6702866	0.0000000	108.4641010	175.1343876
20% Conduct:	72.7489789	4.9561086	98.1893712	175.8944587
40% Conduct:	78.8276711	9.9122172	87.9146414	176.6545298
60% Conduct:	84.9063629	14.8683262	77.6399093	177.4145984
80% Conduct:	90.9850527	19.8244345	67.3651770	178.1746642
100% Conduct:	97.0637425	24.7805427	57.0904448	178.9347301
2-Monopolies:	97.2443831	20.0995342	61.7667505	179.1106678
APM, 2-firms:	97.6056643	10.7375170	71.1193619	179.4625432
APM, 3-firms:	101.3938710	5.1158769	74.5408053	181.0505532
RPM, z=0.000:	97.6056643	10.7375170	71.1193619	179.4625432
RPM, z=0.100:	100.0494922	10.5198190	70.1711669	180.7404781
RPM, z=0.200:	101.7502572	10.2983154	70.2577918	182.3063644
RPM, z=0 300:	104.1852610	10.0963259	69.3834217	183.6650087
RPM, z=0 400:	104.3235767	9.9646972	70.6687936	184.9570675
RPM, z=0 500:	103.6437601	9.8490147	72.1858682	185.6786430
RPM, z=0 600:	100.2265622	9.7727729	75.5755929	185.5749280
RPM, z=0 700:	95.5628679	9.7447668	79.3962211	184.7038557
RPM, z=0 800:	89.8870594	9.7966324	83.5152687	183.1989605
RPM, z=0 900:	84.3841146	10.0564241	87.0578989	181.4984376
Lawful Path:	105.8570185	34.1329915	41.2937937	181.2838037

Revenue Stream = Platforms only.
The value of z in the RPM scenarios is fixed as indicated.
Figures are in billions of real 2001 dollars (7% discount rate).
Figures are aggregated for the years 1995–2025.
Figures are a weighted average of all computed scenarios.

ATTACHMENT G—COMPARING REMEDIES: EACH REMEDY MINUS LAWFUL PATH:

Remedy	Consumer Surplus	Competitor Profits M	icrosoft Profits	Total Surplus
No-Remedy: 39.1867319	−34.1329915	−67.1703073 D −6.1494161		
20% Conduct:	−33.1080412	−29.1768834	−6.8955769	−5.3893477
40% Conduct:	−27.0293505	−24.2207753	−46.6208465	−4.6292793
60% Conduct:	−20.9506588	−19.2646663	−36.3461144	−3.8692107
80% Conduct:	−14.8719674	−14.3085576	−26.0713827	−3.1091422
100% Conduct:	−8.7932759	−9.3524488	−15.7966511	−2.3490736
2-Monopolies:	−8.6126354	−14.0334574	−20.4729568	−2.1731359
APM, 2-firms:	−8.2513542	−23.3954745	−29.8255682	−1.8212605
APM, 3-firms:	−4.4631474	−29.0171147	−33.2470116	−0.2332505
RPM, z=0.000:	−8.2513542	−23.3954745	−9.8255682	−1.8212605
RPM, z=0.100:	−5.8075263	−23.6131726	−28.8773732	−0.5433256
RPM, z=0.200:	−4.1067613	−23.8346762	28.9639981	1.0225607

ATTACHMENT G—COMPARING REMEDIES: EACH REMEDY MINUS LAWFUL PATH:—Continued

Remedy	Consumer Surplus	Competitor Profits M	icrosoft Profits	Total Surplus
RPM, z=0.300:	−1.6717575	−24.0366656	−28.0896281	2.3812049
RPM, z=0.400:	−1.5334418	−24.1682943	−29.3749999	3.6732638
RPM, z=0.500:	−2.2132584	−24.2839768	−30.8920745	4.3948392
RPM, z=0.600:	−5.6304563	−24.3602186	34.2817992	4.2911243
RPM, z=0.700:	−i0.2941506	−24.3882248	38.1024274	3.4200520
RPM, z=0.800:	−15.9699591	−24.3363591	−42.2214750	1.9151568
RPM, z=0.900:	−21.4729039	−24.0765674	45.7641052	0.2146339

Source: Adapted from output file ''AGGCWTD8.txt'' from Lundgren's six computer programs, where zbump=0.0 in ''MS5TranR.bas'' and revstream=l in ''MS6Summ.bas''.

ATTACHMENT H.—SUMMARY OUTPUT OF ALTERNATIVE REMEDIES FOR MICROSOFT

[Total Aggregates for Alternative Remedies]

Remedy	Consumer Surplus	Competitor Profits	Microsoft Profits	Total Surplus
No-Remedy	193.2538881	0.0000000	314.3995669	507.6534549
20% Conduct	211.1377498	14.6052416	284.1619090	509.9049004
40% Conduct	229.0216116	29.2104832	253.9242510	512.1563459
60% Conduct	246.9054718	43.8157260	223.6865862	514.4077840
80% Conduct	264.7893265	58.4209665	193.4489212	516.6592142
100% Conduct	282.6731812	73.0262070	163.2112562	518.9106443
2–Monopolies	283.2511215	59.2815132	176.9034634	519.4360981
APM, 2-firms	284.4070022	31.7921257	204.2878778	520.4870056
APM, 3-firms	295.4965492	15.1737142	214.5194539	525.1897174
RPM, z=0.000	284.4070022	31.7921257	204.2878778	520.4870056
RPM, z=0.100	291.5721057	31.1496087	201 5156026	524.2373169
RPM, z=0.200	296.5683886	30.4958291	201 7670167	528.8312345
RPM, z=0.300	303.7018786	29.8995957	199 2199958	532.8214701
RPM, z=0.400	304.1242099	29.5110516	202 9787968	536.6140583
RPM, z=0.500	302.1262579	29.1695258	207 4368322	538.7326159
RPM, z=0.600	292.1012489	28.9444187	217 3834949	538.4291624
RPM, z=0.700	278.4197409	28.8617920	228 5928304	535.8743633
RPM, z=0.800	261.7511839	29.0150366	240 6874245	531.4536450
RPM, z=0.900	245.5925757	29.7822425	251.0843904	526.4592086
Lawful Path	307.5699061	99.8842184	118.3262301	525.7803546

Revenue Stream = Platforms+Applications+Enterprise.
The value of z in the RPM scenarios is fixed as indicated.
Figures are in billions of real 2001 dollars (7% discount rate).
Figures are aggregated for the years 1995–2025.
Figures are a weighted average of all computed scenarios.

ATTACHMENT H.—COMPARING REMEDIES EACH REMEDY MINUS LAWFUL PATH

Remedy	Consumer Surplus	Competitor Profits	Microsoft Profits	Total Surplus
No-Remedy	−114.3160180	−99.8842184	196.0733368	−18.1268996
20% Conduct	−96.4321609	−85.2789783	165 8356771	−15.8754620
40% Conduct	−78.5483037	−70.6737381	135 5980175	−13.6240244
60% Conduct	−60.6644435	−56.0684954	105 3603526	−11.3725863
80% Conduct	−42.7805842	−41.4632534	75 1226894	−9.1211483
100% Conduct	−24.8967249	−26.8580114	44 8850261	−6.8697102
2–Monopolies	−24.3187846	−40.6027052	58 5772333	−6.3442565
APM, 2-firms	−23.1629040	−68.0920927	85 9616478	−5.2933489
APM, 3-firms	−12.0733569	−84.7105042	96.1932238	−0.5906372
RPM, z=0.000	−23.1629040	−68.0920927	85.9616478	−5.2933489
RPM, z=0.100	−15.9978005	−68.7346098	83.1893726	−1.5430376
RPM, z=0.200	−11.0015175	−69.3883893	83.4407867	3.0508799
RPM, z=0.300	−3.8680276	−69.9846227	80.8937657	7.0411155
RPM, z=0.400	−3.4456962	−70.3731668	84.6525667	10.8337037
RPM, z=0.500	−5.4436482	−70.7146926	89.1106021	12.9522613
RPM, z=0.600	−15.4686572	−70.9397997	99.0572648	12.6488078
RPM, z=0.700	−29.1501652	−71.0224264	110.2666003	10.0940087
RPM, z=0.800	−45.8187223	−70.8691818	122.3611945	5.6732904
RPM, z=0.900	−61.9773304	−70.1019759	132.7581603	0.6788540

Source: Adapted from output file ''AGGCWTD8.txt'' from Lundgren's six computer programs, where zbump=0.0 in ''MS5TranR.bas'' and revstream=4 in ''MS6Summ.bas''.

ATTACHMENT I.—SUMMARY OUTPUT OF ALTERNATIVE REMEDIES FOR MICROSOFT

[Total Aggregates for Alternative Remedies:]

Remedy	Consumer Surplus	Competitor Profits	Microsoft Profits	Total Surplus
No-Remedy	66.6702866	0.0000000	108.4641010	175.1343876
20% Conduct	72.7489789	4.9561086	98.1893712	175.8944587
40% Conduct	78.8276711	9.9122172	87.9146414	176.6545298
60% Conduct	84.9063629	14.8683262	77.6399093	177.4145984
80% Conduct	90.9850527	19.8244345	67.3651770	178.1746642
100% Conduct	97.0637425	24.7805427	57.0904448	178.9347301
2–Monopolies	97.2443831	20.0995342	61.7667505	179.1106678
APM, 2-firms	97.6056643	10.7375170	71.1193619	179.4625432
APM, 3-firms	101.3938710	5.1158769	74.5408053	181.0505532
RPM, z=0.000	97.6178004	i0.7375170	71.0922687	179.4475861
RPM, z=0.100	100.0792119	10.5200355	70.1142454	180.7134929
RPM, z=0.200	102.4749421	10.3041911	69.0645211	181.8436543
RPM, z=0.300	105.5117884	10.1207266	67.4459993	183.0785144
RPM, z=0.400	107.9097123	10.0131838	66.0581453	183.9810414
RPM, z=0.500	109.3712929	9.9176811	65.7228881	185.0118620
RPM, z=0.600	110.6707337	9.8362632	65.0862391	185.5932361
RPM, z=0.700	109.3070756	9.7864170	67.0511494	186.1446421
RPM, z=0.800	106.7436886	9.7342133	69.7748845	186.2527864
RPM, z=0.900	101.4498564	9.7168714	74.5723925	185.7391203
Lawful Path	105.8570185	34.1329915	41.2937937	181.2838037

Revenue Stream = Platforms only.
The actual value of z in the RPM scenarios varies between the indicated z and z-0.3.
Figures are in billions of real 2001 dollars (7% discount rate).
Figures are aggregated for the years 1995–2025.
Figures are a weighted average of all computed scenarios.

ATTACHMENT I.—COMPARING REMEDIES: EACH REMEDY MINUS LAWFUL PATH

Remedy	Consumer Surplus	Competitor Profits	Microsoft Profits	Total Surplus
No-Remedy	−39.1867319	−34.1329915	67.1703073	−6.1494161
20% Conduct	−33.1080412	−29.1768834	56.8955769	−5.3893477
40% Conduct	−27.0293505	−24.2207753	46.6208465	−4.6292793
60% Conduct	−20.9506588	−19.2646663	36.3461144	−3.8692107
80% Conduct	−14.8719674	−14.3085576	26.0713827	−3.1091422
100% Conduct	−8.7932759	−9.3524488	15.7966511	−2.3490736
2–Monopolies	−8.6126354	−14.0334574	20.4729568	−2.1731359
APM, 2-firms	−8.2513542	−23.3954745	29.8255682	−1.8212605
APM, 3-firms	−4.4631474	−29.0171147	33.2470116	−0.2332505
RPM, z=0.000	−8.2392181	−23.3954745	29.7984750	−1.8362176
RPM, z=0.100	−5.7778066	−23.6129560	28.8204517	−0.5703108
RPM, z=0.200	−3.3820764	−23.8288004	27.7707274	0.5598506
RPM, z=0.300	−0.3452300	−24.0122649	26.1522056	1.7947106
RPM, z=0.400:	2.0526938	−24.1198077	24.7643516	2.6972377
RPM, z=0.500:	3.5142744	−24.2153105	24.4290944	3.7280583
RPM, z=0.600:	4.8137152	−24.2967283	23.7924455	4.3094323
RPM, z=0.700:	3.4500571	−24.3465745	25.7573557	4.8608383
RPM, z=0.800:	0.8866701	−24.3987783	28.4810908	4.9689827
RPM, z=0.900	−4.4071621	−24.4161201	33.2785988	4.4553166

Source: Adapted from output file ''AGGCWTD8.txt'' from Lundgren's six computer programs, where zbump=0.3 in ''MS5TranR.bas'' and revstream=l in ''MS6Summ.bas''.

ATTACHMENT J.—SUMMARY OUTPUT OF ALTERNATIVE REMEDIES FOR MICROSOFT

[Total Aggregates for Alternative Remedies]

Remedy	Consumer Surplus	Competitor Profits	Microsoft Profits	Total Surplus
No-Remedy	193.2538881	0.0000000	314.3995669	507 6534549
20% Conduct:	211.1377498	14.6052416	284.1619090	509 9049004
40% Conduct:	229.0216116	29.2104832	253.9242510	512 1563459
60% Conduct:	246.9054718	43.8157260	223.6865862	514 4077840
80% Conduct:	264.7893265	58.4209665	193.4489212	516 6592142
100% Conduct:	282.6731812	73.0262070	163.2112562	518 9106443
2-Monopolies:	283.2511215	59.2815132	176.9034634	519.4360981
APM, 2-firms:	284.4070022	31.7921257	204.2878778	520.4870056
APM, 3-firms:	295.4965492	15.1737142	214.5194539	525.1897174
RPM, z=0.000:	284.4427827	31.7921257	204.2079998	520.4429082

ATTACHMENT J.—SUMMARY OUTPUT OF ALTERNATIVE REMEDIES FOR MICROSOFT—Continued

[Total Aggregates for Alternative Remedies]

Remedy	Consumer Surplus	Competitor Profits	Microsoft Profits	Total Surplus
RPM, z=0.100:	291.6597578	31.1502485	201.3477301	524.1577365
RPM, z=0.200:	298.6895994	30.5131724	198.2740901	527.4768619
RPM, z=0.300:	307.5955291	29.9716086	193.5330233	531.1001609
RPM, z=0.400:	314.6358118	29.6541255	189.4628042	533.7527415
RPM, z=0.500:	318.9329183	29.3722039	188.4709348	536.7760570
RPM, z=0.600:	322.7383754	29.1318953	186.6145056	538.4847762
RPM, z=0.700:	318.7571699	28.9848037	192.3609534	540.1029270
RPM, z=0.800:	311.2289728	28.8306843	200.3597163	540.4193734
RPM, z=0.900:	295.6928896	28.7794391	214.4391657	538.9114945
Lawful Path:	307.5699061	99.8842184	118.3262301	525.7803546

Revenue Stream = Platforms+Applications+Enterprise.
The actual value of z in the RPM scenarios varies between the indicated z and z-0.3.
Figures are in billions of real 2001 dollars (7% discount rate).
Figures are aggregated for the years 1995–2025.
Figures are a weighted average of all computed scenarios.

ATTACHMENT J.—COMPARING REMEDIES: EACH REMEDY MINUS LAWFUL PATH

Remedy	Consumer Surplus	Competitor Profits	Microsoft Profits	Total Surplus
No-Remedy:	−114.3160180	−99.8842184	196.0733368	−18.1268996
20% Conduct:	−96.4321609	−85.2789783	165.8356771	−15.8754620
40% Conduct:	−78.5483037	−70.6737381	135.5980175	−13.6240244
60% Conduct:	−60.6644435	−56.0684954	105.3603526	−11.3725863
80% Conduct:	−42.7805842	,41.4632534	75.1226894	−9.1211483
100% Conduct:	−24.8967249	−26.8580114	44.8850261	−6.8697102
2-Monopolies:	−24.3187846	−40.6027052	58.5772333	−6.3442565
APM,2-firms:	−23.1629040	−68.0920927	85.9616478	−5.2933489
APM, 3-firms:	−12.0733569	−84.7105042	96.1932238	−0.5906372
RPM, z=0.000:	−23.1271235	−68.0920927	85.8817698	−5.3374464
RPM, z=0.100:	−15.9101483	−68.7339699	83.0215001	−1.6226181
RPM, z=0.200:	−8.8803067	−69.3710460	79.9478600	1.6965073
RPM, z=0.300:	0.0256230	−69.9126099	75.2067932	5.3198063
RPM, z=0.400:	7.0659057	−70.2300929	71.1365742	7.9723870
RPM, z=0.500:	11.3630122	−70.5120145	70.1447047	10.9957024
RPM, z=0.600:	15.1684692	−70.7523231	68.2882755	12.7044217
RPM, z=0.700:	11.1872638	−70.8994147	74.0347234	14.3225724
RPM, z=0.800:	3.6590666	−71.0535341	82.0334862	14.6390188
RPM, z=0.900:	−11.8770165	−71.1047793	96.1129357	13.1311399

Source: Adapted from output file ''AGGCWTD8.txt'' from Lundgren's six computer programs, where zbump=0.3 in ''MS5TranR.bas'' and revstream=4 in ''MS6Summ.bas''.

Documentation for BASIC Programs to Simulate Antitrust Remedies for Microsoft Case.

This document, ''MS—Sim—Doc.txt'', simply describes and documents six programs for the Microsoft antitrust remedy simulations.

These six programs are named:

MS1File.bas (0.2 seconds)
MS2ProbA.bas (10.3 minutes)
MS3ProbR.bas (18.1 minutes)
MS4TranA.bas (1.6 minutes)
MS5TranR.bas (24.9 minutes)
MS6Summ.bas (1.7 minutes)

The programs should be run in the order indicated, since files generated by one program are used by subsequent programs. The running times are approximate, based on the running times for a 1.6 GHz home computer. The programs were coded and run in Microsoft QuickBASIC. The programs may require some recoding, if it is desired to run them in other versions of the BASIC computer language.

Below is a summary description of what each program does. Each program has its own more detailed description.

Program MS1File.bas: This program generates files needed by subsequent programs. The program generates the ''COSTLIST.txt'' file, which details the assumed cost levels for each scenario. For 3 firms and 5 levels of cost, 35 cost scenarios are generated. The program also generates the ''Ordering.txt'' and ''OrderRPM.txt'' files.

These files generate the permutations by which the ranking of firms can be reordered. For 3 firms, there are 6 permutations. ''OrderRPM.txt'' allows the ''MS3ProbR.bas'' program to track the rankings of two Microsoft successor firms simultaneously.

Program MS2ProbA.bas:

This program computes the probabilites associated with each scenario, as the industry transitions from a particular starting point, and gradually converges towards a long-run stochastic equilibrium. This program assigns probabilities for equilibria consisting only of Absolute Profit Maximizing (''APM'') firms. The starting point varies by the number of Microsoft firms (msfirms) in period zero.

If msfirms=l, Microsoft starts as a monopoly.

If msfirms=2, Microsoft is split into two firms.

ATTACHMENT K

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If msfirms=3, Microsoft is split into three firms. The program uses three different speeds (speed=l,2,3) for the transition. Probability files are outputted for each msfirms=l,2,3 starting point, and each speed=l,2,3 for the transition speed.

Program MS3ProbR.bas:

This program is similar to ''MS2ProbA.bas'', since it computes probabilites associated with each scenario, as the industry transitions from a particular starting point, and gradually converges towards a long-run stochastic equilibrium. This program differs from ''MS2ProbA.bas'', because it assigns probabilities for equilibria consisting of two Relative Profit Maximizing (''RPM'') firms, along

with such APM firms as may be involved in the transitions. The equilibria automatically convert to APM equilibria if one or both RPM firms exits the industry.

The program uses three different speeds (speed=l,2,3) for the transition.

Probability files are outputted for the one starting point (msfirms=2), and each speed=l,2,3 for the transition speed. This program is more complex than ''MS2ProbA.bas'' because it must simultaneously track the rankings of two Microsoft-successor firms simultaneously. Program MS4TranA.bas:

This program uses the probability data computed by ''MS2ProbA.bas'' to compute Consumer Surplus and Profits for both Microsoft and Microsoft's competitors. These are determined for transition period zero (iter=0) under the assumption that Microsoft has no competitors in period zero. In transition periods one through ten, Microsoft is assumed to have (at least potentially) one or more competitors. This program only calculates APM equilibria.

The 225 outputted transition (TRAN .... txt) files are computed for three speeds of transition (speed=l,2,3), five cost ratios for short-run cost (cratio=l,2,3,4,5), five assumptions concerning the portion of long-run costs allocated to fixed costs (port=0,1,2,3,4), and three starting points (msfirms=l,2,3).

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Program MS5TranR.bas:

This program uses the probability data computed by ''MS3ProbR.bas'' to compute Consumer Surplus and Profits for both Microsoft and Microsoft's competitors. These are determined for transition period zero (iter=0) under the assumption that Microsoft has no competitors in period zero. In transition periods one through ten, Microsoft is assumed to have (at least potentially) one or more competitors. This program calculates both RPM and APM equilibria.

The 750 outputted transition (TRPM .... txt) files are computed for three speeds of transition (speed=l,2,3), five cost ratios for short-run cost (cratio=l,2,3,4,5), five assumptions concerning the portion of long-run costs allocated to fixed costs (port=0,1,2,3,4), and ten starting points (z = 0.0, 0.i, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9).

The starting point always has Microsoft divided into two RPM firms, where the goal functions for the two firms are:

Goal1 = Profit1—z * Profit2

Goal2 = Profit2—z * Profit1

An additional feature of the program allows the value of z to change in response to circumstances. If zbump=0.0, then z is fixed, and does not change in response to circumstances. If zbump > 0, then z changes in response to circumstances. In the program, z responds to the circumstance that one of the RPM firms is not producing, because it is achieving negative absolute profit.

In this circumstance, the program automatically ''bumps down'' the value of z for both RPM firms by the amount of zbump. For example, if z=0.7 and zbump=0.4, then if one or both RPM firms would shut down, then the value of z is automatically bumped down to z=0.3.

In many circumstances, this allows both RPM firms to continue producing.

Program MS6Summ.bas:

This program computes and summarizes the data produced by prior programs, including both ''MS4TranA.bas'' and ''MS5TranR.bas'' The program produces data summarized for particular scenarios in files marked ''AGGC .... txt'', ''AGGR .... txt'', and ''YEAR .... txt''. The ''AGGC .... txt'' files (which are most user friendly) summarize all past and future data, appropriately discounted, into a single set of figures which may be compared across remedy proposals. The ''AGGR .... txt'' files categorize the aggregate data into past and future amounts of consumer surplus, profits, and total surplus for each remedy proposal, and how these amounts compare with the same amounts along the lawful path. The ''YEAR .... txt'' files (which are least user friendly) output the calculated amounts, by year, for each remedy proposal and the lawful path.

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Attachment L.

''BASIC Program ''MS1File.bas''.

''Program Number 1 in a series of six programs ''designed to simulate alternative antitrust ''remedies for the Microsoft software industry. ''Copyright, January 23, 2002, Carl Lundgren. ''This program, ''MS1File.bas'', generates files ''needed by the subsequent computer programs ''for the Microsoft antitrust remedy simulations. ''This program generates the ''COSTLIST.txt'' file, ''which details the assumed cost levels for each scenario. ''For 3 firms and 5 levels of cost, 35 cost scenarios are generated. ''This program also generates the ''Ordering.txt'' ''and ''OrderRPM.txt'' files. These files generate the ''permutations by which the ranking of firms can be reordered. ''For 3 firms, there are 6 permutations. ''The file ''OrderRPM.txt'' allows the ''MS3ProbR.bas'' program to track ''the rankings of two Microsoft successor firms simultaneously.

```
DEFDBL A-Z
DIM broadscen(1023), class(5), cost(5)
DIM weight(50), newclass1(50),
    newclass2(50), newclass3(50)
DIM newclass4(50) , newclass5(50)
DIM c1(50), c2 (50), c3 (50), c4(50) , c5(50)
DIM pv(50, 3), finprob(50)
DIM new(5), ORDER(6, 3), 0RDERRPM(6, 15)
timex = TIMER
CLS
GOSUB GENERATE:
GOSUB COLLAPSE:
GOSUB COSTIT:
GOSUB PVASSIGN:
GOSUB FINALPROB:
GOSUB PRINTCOST:
GOSUB ORDER:
GOSUB PRINTORDER:
GOSUB PRINTORDERRPM:
```

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```
PRINT TIMER—timex END GENERATE:
''Submodule to generate possible scenarios.
FOR scennum = 0 TO 215
broadscen(scennum) = 0
NEXT scennum FOR firm1 = 1 TO 5
FOR firm2 = 1 TO 5
FOR firm3 = 1 TO 5
GOSUB CLASSIFY:
NEXT firm3
NEXT firm2
NEXT firm1
RETURN
''*****END of Generate Submodule*****
CLASSIFY:
''Submodule of Generate submodule'' to
    classify the generated scenarios.
class (1) = 0
class (2) = 0
class(3) = 0
class (4) = 0
class (5) = 0
class(firm1) =
class(firm1) + 1
class(firm2) = class(firm2) + 1
class(firm3) = class(firm3) + 1
scennum = 256 * class(l) + 64 * class(2) + 16
    * class(3) + 4 *
class(4) + class(5)
broadscen(scennum) = broadscen (scennum)
    + 1
RETURN
''*****END of Classify Submodule*****
COLLAPSE:
''Submodule to collapse the number of
    scenarios'' to a more manageable
    number.
newnum = 0
FOR class1 = 0 TO 3
FOR class2 = 0 TO 3
```

ATTACHMENT L

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```
FOR class3 = 0 TO 3
FOR class4 = 0 TO 3
FOR class5 = 0 TO 3
scennum = 256 * class1 + 64 * class2 + 16
    * class3 + 4 *
class4 + class5
broadnum = broadscen(scennum)
IF broadnum > 0 THEN
newnum = newnum + 1 weight(newnum) =
    broadnum
newclass1(newnum) = class1
newclass2(newnum) = class2
newclass3(newnum) = class3
newclass4(newnum) = class4
newclass5(newnum) = class5
END IF
NEXT class5
NEXT class4
NEXT class3
NEXT class2
NEXT class1
newtot = newnum
RETURN
''*****END of Collapse Submodule*****
COSTIT:
''Submodule to assign cost levels to firms,''
    with lowest-cost firms ordered first.
FOR scen = 1 TO newtot
```

```
n1 = newclass1(scen)
n2 = newclass2(scen) + n1
n3 = newclass3(scen) + n2
n4 = newclass4(scen) + n3
FOR n = 1 TO n1
cost(n) = 1
NEXT n
FOR n = n1 + 1 TO n2
cost(n) = 2
NEXT n
FOR n = n2 + 1 TO n3
cost(n) = 3
NEXT n
FOR n = n3 + 1 TO n4
cost(n) = 4
```

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```
NEXT n
FOR n = n4 + 1 TO 3
cost(n) = 5
NEXT n
c1(scen) = cost(1)
c2(scen) = cost(2)
c3(scen) = cost(3)
NEXT scen
RETURN
''*****END of Costit Submodule*****
PVASSIGN:
''Submodule to assign point values for firm
    cost levels, with lowest-cost firms
    ordered first. The point values are 60
    times the cost level, with some
    adjustment in point values, when two or
    more firms share the same cost level.
FOR scen = 1 TO newtot
pv(scen, 1) = c1(scen) * 60
pv(scen, 2) = c2(scen) * 60
pv(scen, 3) = c3(scen) * 60
NEXT scen FOR scen = I TO newtot
n1 = newclass1(scen)
n2 = newclass2(scen) +
n1 n3 = newclass3(scen) + n2
n4 = newclass4(scen) + n3
''Assign point values to level one costs.
ns = 0
nc = newclass1(scen)
IF nc = 2 THEN
pv(scen, ns + 1) = pv(scen, ns + 1)—10
pv(scen, ns + 2) = pv(scen, ns + 2) + 10
END IF
IF nc = 3 THEN
pv(scen, ns + 1) = pv(scen, ns + 1) 15
pv(scen, ns + 3) = pv(scen, ns + 3) + 15
END IF
''Assign point values to level two costs.
us = ns + nc
nc = newclass2(scen)
IF nc = 2 THEN
pv(scen, ns + 1) = pv(scen, ns + 1) 10
```

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```
pv(scen, ns + 2) = pv(scen, ns + 2) + 10
END IF
IF nc = 3 THEN
pv(scen, ns + 1) = pv(scen, ns + 1)—15
pv(scen, ns + 3) = pv(scen, ns + 3) + 15
END IF
Assign point values to level three costs.
ns = ns + nc
nc = newclass3 (scen)
IF nc = 2 THEN
pv(scen, ns + 1) = pv(scen, ns + 1)—10
pv(scen, ns + 2) = pv(scen, ns + 2) + 10
END IF
IF nc = 3 THEN
pv(scen, ns + 1) = pv(scen, ns + 1)—15
pv(scen, ns + 3) = pv(scen, ns + 3) + 15
END IF
''Assign point values to level four costs.
ns = ns + nc
nc = newclass4(scen)
IF nc = 2 THEN
pv(scen, ns + 1) = pv(scen, ns + 1)—10
pv(scen, ns + 2) = pv(scen, ns + 2) + 10
END IF
IF nc = 3 THEN
pv(scen, ns + 1) = pv(scen, ns + 1)—15
pv(scen, ns + 3)—pv(scen, ns + 3) + 15
END IF
''Assign point values to level five costs.
ns = ns + nc
nc = newclass5(scen)
IF nc = 2 THEN
pv(scen, ns + 1) = pv(scen, ns + 1) 10
pv(scen, ns + 2) = pv(scen, ns + 2) + 10
END IF
IF nc = 3 THEN
pv(scen, ns + I) = pv(scen, ns + 1)—15
pv(scen, ns + 3)—pv(scen, ns + 3) + 15
END IF NEXT scen
RETURN
''*****END of PVassign Submodule*****
```

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```
FINALPROB:
''This submodule computes the final
    probability ''for each scenario—the
    probability toward which ''each scenario
    tends to converge over the long run.
''cost(s,f) = short-run marginal cost of firm f
    in scenario s.
''finprob(s) = final probability assumed for
    scenario s.
''weight(s) = number of permutations of
    scenario s.
''finprob is computed as weight(s) * assumed
    probabilities
for each cost level:
Prob(cost level one) = 10% (low cost)
Prob(cost level two) = 15% (low-middle cost)
Prob(cost level three) = 20% (middle cost)
Prob(cost level four) = 25% (middle-high
    cost)
Prob(cost level five) = 30% (high cost)
FOR scen = I TO newtot fprob = weight(scen)
L1 = newclass1(scen)
L2 = newclass2 (scen)
L3 = newclass3 (scen)
L4 = newclass4 (scen)
L5 = newclass5 (scen)
IF L1 > 0 THEN fprob = fprob * .1#
IF L1 > 1 THEN fprob = fprob * .1#
IF L1 * 2 THEN fprob = fprob * .1#
IF L2 * 0 THEN fprob = fprob * .15#
IF L2 * 1 THEN fprob = fprob * .15#
IF L2 * 2 THEN fprob = fprob * .15#
IF L3 * 0 THEN fprob = fprob * .2#
IF L3 > 1 THEN fprob = fprob * .2#
IF L3 > 2 THEN fprob = fprob * .2#
IF L4 > 0 THEN fprob = fprob * .25#
IF L4 * 1 THEN fprob = fprob * .25#
IF L4 > 2 THEN fprob = fprob * .25#
IF L5 > 0 THEN fprob = fprob * .3#
IF L5 > 1 THEN fprob = fprob * .3#
IF L5 > 2 THEN fprob = fprob * .3#
finprob (scen) = fprob
NEXT scen
RETURN
''***** END OF FinalProb SUBMODULE
    *****
PRINTCOST:
''Submodule to print out the collapsed
    scenarios
```

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```
''and the ordered cost assignments
''as part of file ''CostList.txt''.
costs = '':\basic\ms—sim\costlist.txt'' ''Output
    cost list
OPEN costs FOR OUTPUT AS #1
PRINT #1, ''Scen''; ''L1 L2 L3 L4 L5''; ''Wgt'';
    ''Fin-Prob'';
PRINT #1, ''C1 C2 C3''; ''PV1 PV2 PV3''
FOR scennum = 1 TO newtot
PRINT #1, USING ''##''; scennum;
PRINT #1, '''';
PRINT #1, USING ''###'';
    newclass1(scennum);
PRINT #1, USING ''###'';
    newclass2(scennum);
PRINT #1, USING ''###''; newclass3
    (scennum);
PRINT #1, USING ''###'';
    newclass4(scennum);
PRINT #1, USING ''###'';
    newclass5(scennum);
PRINT #1, USING ''#####'';
    weight(scennum);
PRINT #1, USING ''###.######'';
    finprob(scennum);
PRINT #1, '''';
PRINT #1, USING ''###''; c1(scennum);
PRINT #1, USING ''###''; c2(scennum);
PRINT #1, USING ''###''; c3(scennum);
PRINT #1, '''';
PRINT #1, USING ''####''; pv(scennum, 1);
PRINT #1, USING ''####''; pv(scennum, 2);
PRINT #1, USING ''####''; pv(scennum, 3);
PRINT #1, NEXT scennum
CLOSE #1
RETURN
''*****END of PrintCost Submodule*****
ORDER:
''Submodule to compute all possible
    orderings'' of three firms (six
    permutations total).
ordernum = 0
FOR o3 = 5 TO 1 STEP −1
FOR o2 = 5 TO 1 STEP −1
FOR o1 = 5 TO 1 STEP −1
GOSUB TESTORDER:
NEXT o1
NEXT o2
NEXT 03
ordertot = ordernum
RETURN
```

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```
''*****END of Order Submodule*****
TESTORDER:
''Submodule of Order submodule to test''
    whether proposed ordering is acceptable.
IF o1 + 02 + 03 <> 6 THEN RETURN
IF o1 * o2 * 03 <> 6 THEN RETURN
ordernum = ordernum + 1
ORDER(ordernum, 1) = o1
ORDER(ordernum, 2) = o2
ORDER(ordernum, 3) = o3
GOSUB ORDERRPM:
RETURN
''*****END of Order Submodule*****
```

```
ORDERRPM:
Submodule to provide ordering information
    to track location of two MS firms among
    five firms, for purpose of determining
    costs of such two firms for calculating
    RPM remedy.
There are six basic permutations of three
    firms, among which the rankings of two
    firms must be tracked simultaneously.
new(O) = 0
FOR old = 1 TO 3
new(old) = ORDER(ordernum, old)
NEXT old
FOR old1 = 0 TO 3
FOR old2 = 0 TO 3
oldnum = old1 * 4 + old2
new1 = new(old1)
new2 = new(old2)
newnum = new1 * 4 + new2
ORDERRPM(ordernum, oldnum) = newnum
NEXT old2
NEXT old1
RETURN
''*****END of OrderRPM Submodule*****
PRINTORDER:
''Submodule to print out the 6 permutations
```

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```
'' in which 3 firms can be ordered.
''Printing is to the file ,,Ordering.txt''.
ORDERS = ,,c:\basic\ms—sim\ordering.txt''
    ''Output ordering list
OPEN ORDERS FOR OUTPUT AS #1
PRINT #1, ,'Onum''; ''o1 o2 03''
FOR ordernum = 1 TO ordertot
PRINT #1, USING ''###''; ordernum;
PRINT #1, '''';
PRINT #1, USING ''###''; 0RDER(ordernum,
    1);
PRINT #1, USING ''###''; ORDER(ordernum,
    2);
PRINT #1, USING ''###''; ORDER(ordernum,
    3);
PRINT #1,
NEXT ordernum
CLOSE #1
RETURN
*****END of PrintOrder Submodule*****
PRINTORDERRPM:
''Submodule to print out the 6 permutations
    in which 3 firms can be ordered, with
    further information to track two firms
    simultaneously, for further use in later
    programs to calculate the effects of RPM
    firms.
Printing is to the file ,,OrderRPM.txt''
ORDERRPM$ = ''c: \basic\ms—
    sim\orderrpm.txt'' ''Output RPM
    ordering
list
PEN ORDERRPM$ FOR OUTPUT AS #1
  PRINT #1, ''Onum''; ''o00 o01 o02 o03'';
PRINT #1, ''o10 o11 o12 o13'';
PRINT #1, ''020 o21 022 023'';
PRINT #1, ''o30 o31 032 o33'';
PRINT #1,
FOR ordernum = 1 TO ordertot
PRINT #1, USING ''###''; ordernum;
PRINT #1, '''';
FOR oldnum = 0 TO 15
PRINT #1, USING ''####'';
    0RDERRPM(ordernum, oldnum);
NEXT oldnum
PRINT #1,
NEXT ordernum
CLOSE #1
RETURN
*END of PrintOrderRPM Submodule*
```

ATTACHMENT L

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END OF Program ''MS1File.bas''.

ATTACHMENT M

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```
Attachment M.
''BASIC Program ''MS2ProbA.bas''
''Program Number 2 in a series of six
    programs ''designed to simulate
    alternative antitrust ''remedies for the
    Microsoft software industry. ''Copyright,
    January 23, 2002, Car1 Lundgren.
  This program, ''MS2ProbA.bas'', computes
the probabilites associated with each
scenario, as the industry transitions from a
particular starting point, and gradually
converges towards a long-run stochastic
equilibrium.
  This program assigns probabilities for
equilibria consisting only of Absolute Profit
Maximizing (''APM'') firms. The starting
point varies by the number of
''Microsoft firms (msfirms) in period zero:
If msfirms=1, Microsoft starts as a monopoly.
If msfirms=2, Microsoft is split into two
    firms.
If msfirms=3, Microsoft is split into three
    firms.
''The program uses three different speeds
    (speed=l,2,3) for the transition.
''Probability files are outputted for each
    starting point (msfirms=l,2,3),
''and for each transition speed (speed=l,2,3).
  The parameters controlling the transition
speed (pvmax in submodule InitProb10) are
supplied by the user.
  The program reads in 35 possible cost
structures for the industry, each with 3 firms.
  The program assigns probabilities for each
scenario, and for whether a Microsoft firm
(either Microsoft or a successor to Microsoft
after divestiture) is ranked as firm 1, 2, or 3,
or is firm 0 (with zero market share).
DEFDBL A–Z
DIM pvtot0(35, 3), pvtot1(35, 3), pvtot2(35, 3)
DIM pvtot3 (35, 3)
DIM prob2 (35, 3)
DIM diff(3, 3)
DIM finprob (35)
```

ATTACHMENT M

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```
'' CONTROL MODULE
CLS
timex—TIMER
''This section calls the main module 3 times.
''This control module chooses speed for cost
    shifts:
''speed = 1 ''Slow speed for cost shifts.
''speed = 2 ''Moderate speed for cost shifts.
''speed = 3 ''High speed for cost shifts.
FOR speed = 1 TO 3
GOSUB MAINMODULE:
NEXT speed
PRINT TIMER—timex
END
MAINMODULE:
GOSUB FILENAMES: ''Assign file names to
    input/output files.
PRINT ''Computing transition weights
    (deviation):,,
GOSUB INITIALIZE0: ''Initialize transition
    weights.
endcomp = 0
FOR iter = 1 TO 100
GOSUB TRANSCOMP: ''Iterate transition
    weights.
IF endcomp = 1 THEN 99
NEXT iter
99 GOSUB PRINTPROBT: ''Print last
    computed transition weights.
CLOSE #2
PRINT ''Computing transitions from MS=1
    APM firm:''
msfirms = 1
iter = 0
GOSUB INITIALIZE1: ''Microsoft starts as
    monopoly.
iter = 1
GOSUB TRANSIT0:
GOSUB PRINTPROB:
FOR iter = 2 TO 10
GOSUB TRANSFERPROB:
GOSUB TRANSIT1:
GOSUB PRINTPROB:
NEXT iter
CLOSE #2
PRINT ''Computing transitions from MS=2
    APM firms:''
msfirms = 2
```

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```
iter = 0
GOSUB INITIALIZE2: ''Microsoft split into 2
    firms.
iter = 1
GOSUB TRANSIT0:
GOSUB PRINTPROB:
FOR iter = 2 TO 10
GOSUB TRANSFERPROB:
GOSUB TRANSIT1:
GOSUB PRINTPROB:
NEXT iter
CLOSE #2
PRINT ''Computing transitions from MS=3
    APM firms:''
msfirms = 3
iter = 0
GOSUB INITIALIZE3: ''Microsoft split into 3
    firms.
iter = 1
GOSUB TRANSIT0:
GOSUB PRINTPROB:
FOR iter = 2 TO 10
GOSUB TRANSFERPROB:
GOSUB TRANSIT1:
GOSUB PRINTPROB:
NEXT iter
CLOSE #2
CLOSE
RETURN
''***** END OF MAIN MODULE *****
FILENAMES:
costs = ''c:\basic\ms—sim\costlist.txt'' ''Input
    scenario costs
orders = ''c:\basic\ms—sim\ordering.txt''
    ''Input firm re-orderings
prob0$ = ''c:\basic\ms—sim\out\prob00.txt''
    ''Output iwgt
convergence
prob1$ = ''c:\basic\ms—sim\out\prob10.txt''
    ''Output 1-firm APM
transition probs
prob2$ = ''c:\basic\ms—sim\out\prob20.txt''
```

```
    ''Output 2-firm APM
transition probs
prob3$ = ''c:\basic\ms—sim\out\prob30.txt''
    ''Output 3-firm APM
transition probs
IF speed = 1 THEN sp$ = ''1''
IF speed = 2 THEN sp$ = ''2''
```

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```
IF speed = 3 THEN sp$ = ''3''
replaces = sp$
MID$(prob0$, 26, 1) = replaces
MID$(prob1$, 26, 1) = replaces
MID$(prob2$, 26, 1) = replaces
MID$(prob3$, 26, 1) = replaces
RETURN
''***** END OF FileNames SUBMODULE
    *****
INITIALIZE0:
''Submodule to find transition weights.
GOSUB SCENREAD: ''Read in scenario list.
GOSUB ORDERREAD: ''Read in ordering list.
GOSUB INITPROB10:
iter = 0
GOSUB TRANSCOMP: ''Computes transition
    weights to scenarios.
OPEN prob0$ FOR OUTPUT AS #2
RETURN
''***** END OF Initialize0 SUBMODULE
    *****
INITPROB10:
''This submodule sets the prob1 variables to
    zero,'' and then sets initial values for
    non-zero prob1.
DIM prob1(35, 3), cost(35, 3), herf(35)
DIM iwgt(35), iwgt0(35)
''****User supplies pvmax, which controls
    transition speed.****
IF speed = I THEN pvmax = 1.5 ''Slow speed
    for cost shifts.
IF speed = 2 THEN pvmax = 2.5 ''Moderate
    speed for cost shifts.
IF speed = 3 THEN pvmax = 4.5 ''High speed
    for cost shifts.
FOR scen1 = 0 TO 35
FOR firm1 = 0 TO 3
prob1(scen1, firm1) = 0
NEXT firm1
NEXT scen1
''This section sets initial values to reflect''
    distribution of final probabilites.
FOR scen1 = I TO 35
prob1(scen1, 0) = finprob(scen1)
iwgt(scen1) = finprob(scen1)
NEXT scen1
RETURN
''***** END OF InitProb10 SUBMODULE
    *****
```

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```
TRANSCOMP:
Submodule to compute transition weights.
Transitions are from any scenario (scen1)
to any same or different scenario (scen2).
Goal is to find transition weights (iwgt) such
    that if prob1 is set at final probabilities,
    then computed prob2 also reflects final
    probabilities. The transition weights are
    iteratively adjusted, until there is
    convergence. Such convergence means
    that the long-run distribution of
    scenarios will reflect the final
    probabilities selected.
GOSUB INITPROB2: ''Initialize prob2
    variables.
PRINT speed; iter; ''*'';
FOR scen1 = 1 TO 35
PRINT '''';
iprob0 = prob1(scen1, 0)
iprob1 = prob1(scen1, 1)
iprob2 = prob1(scen1, 2)
iprob3 = prob1(scen1, 3)
FOR scen2 = 1 TO 35
GOSUB PVADD:
NEXT scen2
GOSUB PVADJUST:
NEXT scen1
devtot = 0
itotal = 0
FOR scen = 1 TO 35
iwgt0(scen) = iwgt(scen)
iwgt(scen) = iwgt(scen) * prob1(scen, 0) /
    prob2(scen, 0)
itotal = itotal + iwgt(scen)
dev = prob1(scen, 0)—prob2(scen, 0)
devtot = devtot + ABS(dev)
NEXT scen
FOR scen = 1 TO 35
iwgt(scen) = iwgt(scen) / itotal
NEXT scen
IF devtot < .000001 THEN endcomp = 1
PRINT USING###''; devtot
RETURN
This submodule finds transition weights
    (iwgt) to each scenario,
that cause convergence to the assumed final
    probabilities
(FinProb)
attached to the various possible market
    outcomes
```

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```
'' in a very long-run stochastic equilibrium.
''***** END OF TransComp SUBMODULE
    *****
INITIALIZE1:
''Submodule to initialize Microsoft starts as
    monopoly.
GOSUB INITPROB11:
OPEN prob1$ FOR OUTPUT AS #2
GOSUB PRINTPROB0:
RETURN
''***** END OF Initializel SUBMODULE
    *****
INITPROB11:
''This submodule of Initialize1 sets the prob1
    variables to zero,
'' and then sets initial values for non-zero
    prob1.
FOR scen1 = 0 TO 35
FOR firm1 = 0 TO 3
prob1(scen1, firm1) = 0
NEXT firm1
NEXT scen1
''This section sets initial scenario to
'' Microsoft is a monopoly,
'' Scenario 5, Cost levels 3(MS), 5(comp),
    5(comp).
scen0 = 5
prob1(0, 1) = 1
FOR firm = 1 TO 3
cost(O, firm) = cost(scen0, firm)
NEXT firm
RETURN
''***** END OF InitProb11 SUBMODULE
    *****
INITIALIZE2:
''Submodule to initialize splitting Microsoft
    into two firms.
GOSUB INITPROB12:
OPEN prob2$ FOR OUTPUT AS #2
GOSUB PRINTPROB0:
RETURN
''***** END OF Initialize2 SUBMODULE
    *****
INITPROB12:
''This submodule sets the prob1 variables to
    zero,
```

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```
and then sets initial values for non-zero
    prob1.
FOR seen1 = 0 TO 35
FOR firm1 = 0 TO 3
prob1(scen1, firm1) = 0
NEXT firm1
NEXT scen1
This section sets initial scenario to
Microsoft is split into two equal-sized firms,
Scenario 6, Cost levels 3(MS-1), 4(MS-2),
    5(comp).
scen0—6
prob1(0, 1) = 1# / 2#
prob1(0, 2) = 1# / 2#
FOR firm = 1 TO 3
cost(0, firm) = cost(scen0, firm)
NEXT firm
RETURN
''***** END OF InitProb12 SUBMODULE
    *****
INITIALIZE3:
''Submodule to initialize splitting Microsoft
    into three firms.
GOSUB INITPROB13:
OPEN prob3$ FOR OUTPUT AS #2
GOSUB PRINTPROB0:
RETURN
''***** END OF Initialize3 SUBMODULE
    *****
INITPROB13:
''This submodule sets the prob1 variables to
    zero,
'' and then sets initial values for non-zero
    prob1.
FOR scen1 = 0 TO 35
FOR firm1 = 0 TO 3
prob1(scen1, firm1) = 0
NEXT firm1
NEXT scen1
''This section sets initial scenario to
'' Microsoft is split into three equal-sized
    firms,
'' Scenario 7, Cost levels 3(MS–l), 4(MS–2),
    4(MS–3).
scen0 = 7
prob1(0, 1) = 1# / 3#
prob1(0, 2) = 1# / 3#
prob1(0, 3) = 1# / 3#
FOR firm = I TO 3
MTC–00030631—0121
```

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```
cost(0, firm) = cost(scen0, firm)
NEXT firm
RETURN
''***** END OF InitProb13 SUBMODULE
    *****
SCENREAD:
''This submodule reads in the scenario costs
    list.
OPEN costs FOR INPUT AS #1
LINE INPUT #1, dummy$
''cost(s,f) = short-run marginal cost of firm f
```

```
    in scenario s.
''finprob(s) = final probability assumed for
    scenario s.
''wgt(scen) = number of permutations of
    scenario s.
FOR scen = 1 TO 35
INPUT #1, scen2, L1, L2, L3, L4, L5, wgt,
    finprob(scen)
IF scen <> scen2 THEN PRINT ''Scenario
    mismatch'', scen, scen2
INPUT #1, c1, c2, c3
FOR firm = 1 TO 3
INPUT #1, ctemp
cost(scen, firm) = ctemp / 60#
NEXT firm
NEXT scen
CLOSE #1
RETURN
''***** END OF ScenRead SUBMODULE
    *****
ORDERREAD:
''This Submodule reads in the ordering list,
'' which is a list of 6 permutations by which
    firms 1–3
'' may become firms 1–3 in the same or a
    different order.
OPEN orders FOR INPUT AS #1
LINE INPUT #1, dummy$
''ordnum = number of ordering.
''order(o,f) = ordering number o for firm f,
'' the firm number which firm f becomes in
    ordering o.
DIM order(6, 3)
FOR ordnum = 1 TO 6
INPUT #1, ordnum2
IF ordnum <> ordnum2 THEN PRINT ''Order
    Number mismatch'',
ordnum, ordnum2
FOR firm = 1 TO 3
INPUT #1, order(ordnum, firm)
NEXT firm
```

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```
NEXT ordnum
CLOSE #1
RETURN
''***** END OF OrderRead SUBMODULE
    *****
TRANSIT0:
''This submodule controls the initial
    transitions.
'' Transitions are from scenario zero (scen1)
'' to the other possible scenarios (scen2).
GOSUB INITPROB2: ''Initialize prob2
    variables.
PRINT speed; iter; ,,*,,;
scen1 = 0
PRINT -.-;
iprob0 = prob1(scen1, 0)
iprob1 = prob1(scen1, 1)
iprob2 = prob1(scen1, 2)
iprob3 = prob1(scen1, 3)
FOR scen2 = 1 TO 35
GOSUB PVADD:
NEXT scen2 GOSUB PVADJUST:
GOSUB MSEXITS:
PRINT
RETURN
''***** END OF Transit0 SUBMODULE
    *****
TRANSIT1:
''This submodule controls the subsequent
    transitions.
''Transitions are from any scenario (scen1)
'' to any same or different scenario (scen2).
GOSUB INITPROB2: ''Initialize prob2
    variables.
PRINT speed; iter; ''*',;
FOR scen1 = 1 TO 35
PRINT ''.,,;
iprob0 = prob1(scen1, 0)
iprob1 = prob1(scen1, 1)
iprob2 = prob1(scen!, 2)
iprob3 = prob1(scen1, 3)
IF iprob0 + iprob1 + iprob2 + iprob3 = 0
    THEN 10
FOR scen2 = 1 TO 35
GOSUB PVADD:
NEXT scen2
```

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```
GOSUB PVADJUST:
10 NEXT scen1
GOSUB MSEXITS:
PRINT
RETURN
''***** END OF Transit1 SUBMODULE
    *****
INITPROB2:
''This submodule of TRANSIT sets the prob2
    variables to zero.
FOR scen2 = 0 TO 35
FOR firm2 = 0 TO 3
prob2(scen2, firm2) = 0
NEXT firm2
NEXT scen2
RETURN
''***** END OF InitProb2 SUBMODULE
    *****
PVADD:
This submodule adds up point values (pv) for
    transition from a single scenario (scen1)
    to a single scenario (scen2).
pvtot0(s,f) = point value for probability of
    transition from scenario with
    Microsoft=firm 0 (zero market share), to
    scenario s and to Microsoft=firm f.
''pvtot1(s,f) = same, but from Microsoft=firm
    1.
''pvtot2(s,f) = same, but from Microsoft=firm
    2.
''pvtot3(s,f) = same, but from Microsoft=firm
    3.
FOR firm1 = 1 TO 3
FOR firm2 = 1 TO 3
diff(firm1, firm2) = ABS(cost(scen1, firm1)
    cost(scen2, firm2))
NEXT firm2
NEXT firm1
FOR firm2 = 0 TO 3
pvtot0(scen2, firm2) = 0
pvtot1(scen2, firm2) = 0
pvtot2(scen2, firm2) = 0
pvtot3(scen2, firm2) = 0
NEXT firm2
sprob = iwgt(scen2)
sprob3 = sprob / 6#
```

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```
GOSUB PVADD3:
RETURN
''***** END OF PVadd SUBMODULE *****
PVADD3:
''This submodule of PVADD adds up point
    values for transition from a single
    scenario (scen1) to a single scenario
    (scen2), where scen1 and scen2 both
    have 3 firms.
FOR o = 1 TO 6
o1 = order(o, 1)
o2 = order(o, 2)
o3 = order(o, 3)
pv = 1
pvtemp = pvmax—diff(1, o1)
IF pvtemp < 0 THEN pvtemp = 0
pv = pv * pvtemp
pvtemp = pvmax—diff(2, o2)
IF pvtemp < 0 THEN pvtemp = 0
pv = pv * pvtemp
pvtemp = pvmax—diff(3, o3)
IF pvtemp < 0 THEN pvtemp = 0
pv = pv * pvtemp
pvtot0(scen2, 0) = pvtot0(scen2, 0) + pv *
    iprob0 * sprob3
pvtot1(scen2, o1) = pvtot1(scen2, o1) + pv *
    iprob1 * sprob3
pvtot2(scen2, 02) = pvtot2(scen2, 02) + pv *
    iprob2 * sprob3
pvtot3(scen2, o3) = pvtot3(scen2, 03) + pv *
    iprob3 * sprob3
NEXT o
RETURN
''***** END OF PVadd3 SUBMODULE
    *****
PVADJUST:
''This module adjusts computed point values
    (pv)
'' to reflect true probability measures (prob2).
pvtota10 = 0
pvtotal1 = 0
pvtota12 = 0
pvtota13 = 0
FOR scen = 1 TO 35
FOR firm2 = 0 TO 3
pvtota10 = pvtota10 + pvtot0(scen, firm2)
pvtotal1 = pyrotal1 + pvtot1(scen, firm2)
```

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```
pvtota12 = pvtota12 + pvtot2(scen, firm2)
pvtota13 = pvtota13 + pvtot3(scen, firm2)
NEXT firm2
NEXT scen
ratio0 = 0
ratio1 = 0
ratio2 = 0
ratio3 = 0
20 IF pvtota10 = 0 THEN 21
ratio0 = prob1(scen1, 0) / pvtota10
21 IF pvtotal1 = 0 THEN 22
ratio1 = prob1(scen1, 1) / pyrotal1
22 IF pvtota12 = 0 THEN 23
ratio2 = prob1(scen1, 2) / pvtota12
23 IF pvtota13 = 0 THEN 24
ratio3 = prob1(scen1, 3) / pvtota13
24 REM
FOR scen = 1 TO 35
FOR firm2 = 0 TO 3
pvtemp = pvtot0(scen, firm2) * ratio0
pvtemp = pvtemp + pvtot1(scen, firm2) *
    ratio1
pvtemp = pvtemp + pvtot2(scen, firm2) *
    ratio2
pvtemp = pvtemp + pvtot3(scen, firm2) *
    ratio3
prob2(scen, firm2) = prob2(scen, firm2) +
    pvtemp
NEXT firm2
NEXT scen
RETURN
''***** END OF PVadjust SUBMODULE
    *****
MSEXITS:
''This submodule determines which
```

```
    prob2(s,f) and cost(s,f)
numbers imply zero market share for
    Microsoft.
Where this occurs for f>0 (MS still in
    market),
the probability values are transferred
to f=0 (Microsoft not in market).
The criterion for exit is that the firm in
    question
has very high short-run costs.
FOR scen = 1 TO 35
FOR firm = 1 TO 3
IF cost(scen, firm) > 4.999 THEN
```

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```
prob2(scen, 0) = prob2(scen, 0) + prob2(scen,
    firm)
prob2(scen, firm) = 0
END IF
NEXT firm
NEXT scen
RETURN
''***** END OF MSexits SUBMODULE
    *****
PRINTPROBT:
''This submodule prints the last iteration
    (presumed convergence)
'' computed for the the transition weights for
    each scenario.
PRINT #2, ''Iter ''; ''Scen '';
PRINT #2, ''Init-weight(0) ''; ''Prob1(target) '';
    ''Prob2(result)
''; ''Init-weight(1) ''
FOR scen= 1 TO 35
PRINT #2, USING ''#####''; iter; scen;
PRINT #2, USING ;###'' iwgt0(scen);
    prob1(scen, 0); prob2(scen, 0); iwgt(scen)
NEXT scen
RETURN
''***** END OF PrintProbT SUBMODULE
    *****
PRINTPROB0:
''This submodule prints the probabilities for
    scenario zero.
PRINT #2, ''Iter ''; ''Scen '';
PRINT #2, ''Prob(firm0) ''; ''Prob(firm1) '';
    ''Prob (firm2)
PRINT #2, ''Prob(firm3)
scen = 0
PRINT #2, USING ''#####''; iter; scen0;
FOR firm = 0 TO 3
PRINT #2, USING #''; prob1(scen, firm);
NEXT firm
PRINT #2,
RETURN
''***** END OF PrintProb0 SUBMODULE
    *****
PRINTPROB:
''This submodule prints the probabilities for
    each subsequent
'' scenario and MS firm number.
FOR scen= 1 TO 35
```

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```
PRINT #2, USING ''#####''; iter; scen;
FOR firm = 0 TO 3
PRINT #2, USING #####''; prob2(scen, firm);
NEXT firm
PRINT #2,
NEXT scen
RETURN
''***** END OF PrintProb SUBMODULE
    *****
TRANSFERPROB:
''This submodule transfers the prob2 values
    to prob1,
'' so that the next transition iteration can
    proceed.
FOR scen = 0 TO 35
FOR firm = 0 TO 3
prob1(scen, firm) = prob2(scen, firm)
NEXT firm
NEXT scen
RETURN
''***** END OF TransferProb SUBMODULE
    *****
''**********END OF Program
    ''MS2ProbA.bas'' .**********
```

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```
Attachment N.
''BASIC Program .MS3ProbR.bas''.
''Program Number 3 in a series of six
    programs
''designed to simulate alternative antitrust
''remedies for the Microsoft software
    industry.
''Copyright, January 23, 2002, Carl Lundgren.
'' This program, ''MS3ProbR.bas'', computes
    the probabilites
''associated with each scenario, as the
    industry transitions
''from a particular starting point, and
    gradually converges
''towards a long-run stochastic equilibrium.
''This program assigns probabilities for
    equilibria consisting
''of two Relative Profit Maximizing (''RPM'')
    firms, along with
''such Absolute Profit Maximizing ''APM''
    firms as may be involved
''in the transitions. The equilibria
    automatically convert to
''APM equilibria if one or both RPH firms
    exits the industry.
''The program uses three different speeds
    (speed=1,2,3) for the transition.
''Probability files are outputted for the one
    starting point
''(msfirms=2), and each transition speed
    (speed=1,2,3).
'' This program is similar to
    ''MS2ProbA.bas'',
''since it computes probabilites associated
    with each scenario,
''for a total of 11 transition periods.
''This program differs from ''MS2ProbA.bas'',
''because it assigns probabilities for equilibria
    consisting
''of both RPM and APM firms, rather than
    APM firms only.
''This program is more complex than
    ''MS2ProbA.bas''
''because it must simultaneously track the
    rankings
''of two Microsoft-successor firms
    simultaneously.
'' This program calculates transition
    probabilities
''where Microsoft starts as two firms, and
    simultaneously
''tracks the outcomes and rankings for both
    firms.
'' The parameters controlling the transition
    speed
''(pvmax in submodule InitProb10) are
    supplied by the user.
''The program reads in 35 possible cost
    structures
''for the industry, each with 3 firms.
''The program assigns probabilities for each
    scenario,
''and also tracks whether Microsoft #1 is
    ranked as
''firm 1, 2, or 3, or is firm 0 (with zero market
    share).
```

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```
''Likewise, the program tracks whether
    Microsoft #2 is
''ranked as firm 1, 2, or 3, or is firm 0.
DEFDBL A-Z
DIM pvtot(35, 15), prob1t(35, 15), prob2r(35,
    15)
DIM diff(3, 3), iwgt(35), cost(35, 3)
''CONTROL MODULE
CLS
timex = TIMER
''This section calls the main module 3 times.
''This control module chooses speed for cost
    shifts:
''speed = 1 ''Slow speed for cost shifts.
''speed = 2 ''Moderate speed for cost shifts.
''speed = 3 ''High speed for cost shifts.
FOR speed = 1 TO 3
GOSUB MAINMODULE:
NEXT speed
PRINT TIMER—timex
END
MAINMODULE:
IF speed = 1 THEN pvmax = 1.5 ''Slow speed
    for cost shifts.
IF speed = 2 THEN pvmax = 2.5 ''Moderate
    speed for cost shifts.
IF speed = 3 THEN pvmax = 4.5 ''High speed
    for cost shifts.
GOSUB FILENAMES: ''Assign file names to
    input/output files.
GOSUB SCENREAD: ''Read in scenario costs.
GOSUB ORDERREAD: ''Read in ordering list.
GOSUB ORDERRPMREAD: ''Read in
    orderRPM list.
GOSUB READIWGT: ''Read in values for
    transition weights.
PRINT ''Computing transitions from MS=2
    RPM firms:''
msfirms = 2
iter = 0
GOSUB INITIALIZER: ''Microsoft split into 2
    RPM firms.
iter = 1
GOSUB TRANSITOR:
GOSUB PRINTPROBR:
FOR iter = 2 TO 10
GOSUB TRANSFERPROBR:
GOSUB TRANSITIR:
GOSUB PRINTPROBR:
```

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```
NEXT iter
CLOSE #2, #3
CLOSE
RETURN
''***** END OF MAIN MODULE *****
FILENAMES:
costs = ''c:\basic\ms—sim\costlist.txt'' ''Input
    scenario costs
orders = ''c:\basic\ms—sim\ordering.txt''
    ''Input firm re-orderings
orderrpm$ = ''c:\basic\ms—sim\orderrpm.txt''
    ''Input RPM firm-pair
re-orderings
prob0$ = ''c:\basic\ms—sim\out\prob00.txt''
```

```
    ''Input 2 RPM firms I- weight probs
probr$ = ''c:\basic\ms—sim\out\probr0.txt''
    ''Output 2 RPM firms
transition probs
IF speed = 1 THEN sp$ = ''1''
IF speed = 2 THEN sp$ = ''2''
IF speed = 3 THEN sp$ = ''3''
replaces = sp$ MID$(prob0$, 26, 1) = replaces
MID$(probr$, 26, 1) = replaces
RETURN
''***** END OF FileNames SUBMODULE
    *****
READIWGT:
''This submodule reads in the transition
    weights (iwgt)
'' previously computed by the
    ''MS2ProbA.bas'' program.
OPEN prob0$ FOR INPUT AS #1
LINE INPUT #1, temps
FOR scen = 1 TO 35
INPUT #1, iter2, scen2, iwgt0, prob1scen,
    prob2scen,
iwgt(scen)
IF scen2 <> scen THEN PRINT ''Scenario
    mismatch:''; scen; scen2
NEXT scen
CLOSE #1
RETURN
''***** END OF ReadIwgt SUBMODULE
    *****
INITIALIZER:
''Submodule to initialize Microsoft split into
    2 RPM firms.
```

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```
GOSUB INITPROB1R:
OPEN probr$ FOR OUTPUT AS #2
GOSUB PRINTPROBOR:
RETURN
''***** END OF InitializeR SUBMODULE
    *****
INITPROB1R:
''This submodule sets the prob1r variables to
    zero,
'' and then sets initial values for non-zero
    prob1.
FOR scen1 = 0 TO 35
FOR pair1 = 0 TO 15
prob1r(scen1, pair1) = 0
NEXT pair1
NEXT scen1
''This section sets initial scenario to
''Microsoft is split into two RPM firms,
'' Scenario 6, Cost levels 3(MS-1), 4(MS-2),
    5(comp).
scen0 = 6
firm1 = 1
firm2 = 2
pair = firm1 * 4 + firm2
prob1r(0, pair) = 1
FOR firm = 1 TO 3
cost(0, firm) = cost(scen0, firm)
NEXT firm
RETURN
''***** END OF InitProb12 SUBMODULE
    *****
SCENREAD:
''This submodule reads in the scenario costs
    list.
OPEN costs FOR INPUT AS #1
LINE INPUT #1, dummy$
''cost(s,f) = marginal cost of firm f in scenario
    s.
''finprob = final probability assumed for
    scenario s.
''wgt = number of permutations of scenario
    s.
FOR scen= 1 TO 35
INPUT #1, scen2, L1, L2, L3, L4, L5, wgt,
    finprob
IF scen <> scen2 THEN PRINT ''Scenario
    mismatch'', scen, scen2
INPUT #1, c1, c2, c3
FOR firm = 1 TO 3
INPUT #1, ctemp
cost(scen, firm) = ctemp / 60#
```

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```
NEXT firm
NEXT scen
CLOSE #1
RETURN
''***** END OF SCENREAD SUBMODULE
    *****
ORDERREAD:
''This Submodule reads in the ordering list,
''which is a list of 6 permutations by which
    firms 1–3
'' may become firms 1–3 in the same or a
    different order.
OPEN orders FOR INPUT AS #1
LINE INPUT #1, dummy$
''ordnum = number of ordering.
''order(o,f) = ordering number o for firm f,
''the firm number which firm f becomes in
    ordering o.
DIM order(6, 3)
FOR ordnum = 1 TO 6
INPUT #1, ordnum2
IF ordnum <> ordnum2 THEN PRINT ''Order
    Number mismatch'',
ordnum, ordnum2
FOR firm = 1 TO 3
INPUT #1, order(ordnum, firm)
NEXT firm
NEXT ordnum
CLOSE #1
RETURN
''***** END OF OrderRead SUBMODULE
    *****
ORDERRPMREAD:
This Submodule reads in the orderRPM list,
    which is a list of 6 permutations by
    which firms 1–3 may become firms 1–3
    in the same or a different order.
The orderRPM list simultaneously tracks the
    cost rankings of two RPM firms.
OPEN orderrpm$ FOR INPUT AS #1
LINE INPUT #1, dummy$
ordnum = number of ordering.
orderrpm(o,f) = ordering number o for pair of
    firms p,
the firm-pair number to which the firm-pair
    p
becomes in ordering o.
p is firm-pair where p=4*firm1+firm2.
Firm1 and firm2 take on values (0, 1, 2, 3).
```

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```
DIM orderrpm(6, 15)
FOR ordnum = 1 TO 6
INPUT #1, ordnum2
IF ordnum <> ordnum2 THEN PRINT ''Order
    Number mismatch'',
ordnum, ordnum2
FOR pair—0 TO 15
INPUT #1, orderrpm(ordnum, pair)
NEXT pair
NEXT ordnum
CLOSE #1
RETURN
''***** END OF OrderRPMread
    SUBMODULE *****
TRANSITOR:
This submodule controls the initial
    transitions.
Transitions are from scenario zero (scen1)
to the other possible scenarios (scen2).
GOSUB INITPROB2R: ''Initialize prob2
    variables.
PRINT speed; iter; ''*'';
scen1 = 0
PRINT ''.'';
FOR pair1 = 0 TO 15
iprob = prob1r (ecen1, pair1)
IF iprob = 0 THEN 10
FOR scen2 = 1 TO 35
GOSUB PVADDR:
NEXT scen2
GOSUB PVADJUSTR:
10 NEXT pair1
GOSUB MSEXITSR:
PRINT
RETURN
***** END OF Transit0R SUBMODULE
    *****
TRANSIT1R:
This submodule controls the subsequent
    transitions.
Transitions are from any scenario (scen1)
to any same or different scenario (scen2).
GOSUB INITPROB2R: ''Initialize prob2
    variables.
PRINT speed; iter; ''*'';
FOR scen1 = 1 TO 35
PRINT ''.'';
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FOR pair1 = 0 TO 15
iprob = prob1r(scen1, pair1)
IF iprob = 0 THEN 11
FOR scen2 = 1 TO 35
GOSUB PVADDR:
NEXT scen2
GOSUB PVADJUSTR:
11 NEXT pair1
NEXT scen1
GOSUB MSEXITSR;
PRINT
RETURN
***** END OF Transit1R SUBMODULE
    *****
INITPROB2R:
This submodule of TRANSIT sets the prob2r
    variables to zero.
FOR scen2 = 0 TO 35
FOR pair2 = 0 TO 15
prob2r(scen2, pair2) = 0
NEXT pair2
NEXT scen2
RETURN
***** END OF InitProb2R SUBMODULE
    *****
PVADDR:
This submodule initializes the variables in
    preparation
for submodule PVADD3R,
which adds up point values (pv) for
    transition
from a single scenario (scen1) and firm pair
    (pair1)
to a single scenario (scen2) and multiple
```

```
    pairs (pair2).
pvtot(s,p) = point value for probability of
    transition
from current scenario and current MS firm
    pair
to scenario s and to MS firm pair p.
FOR firm1 = 1 TO 3
FOR firm2 = 1 TO 3
diff(firm1, firm2) = ABS(cost(scen1, firm1)—
    cost(scen2,
firm2) )
NEXT firm2
NEXT firm1
FOR pair2 = 0 TO 15
pvtot(scen2, pair2) = 0
```

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```
NEXT pair2
sprob = iwgt(scen2)
sprob3 = sprob / 6#
GOSUB PVADD3R:
RETURN
***** END OF PVaddR SUBMODULE *****
PVADD3 R:
This submodule of PVADDR adds up point
    values for transition from a single
    scenario (seen1) and firm pair (pair1) to
    a single scenario (scen2) and multiple
    firm pairs (pair2).
FOR o = 1 TO 6
o1 = order(o, 1)
o2 = order(o, 2)
o3 = order(o, 3)
pv = 1
pvtemp = pvmax—diff(1, o1)
IF pvtemp < 0 THEN pvtemp = 0
pv = pv * pvtemp
pvtemp = pvmax—diff(2, o2)
IF pvtemp < 0 THEN pvtemp = 0
pv = pv * pvtemp
pvtemp = pvmax—diff(3, o3)
IF pvtemp < 0 THEN pvtemp = 0
pv = pv * pvtemp
orpm = orderrpm(o, pair1)
pvtot(scen2, orpm) = pvtot(scen2, orpm) + pv
    * iprob * sprob3
NEXT o
RETURN
***** END OF PVadd3R SUBMODULE
    *****
PVADJUSTR:
This module adjusts computed point values
    (pv) to reflect true probability measures
    (prob2).
pvtotal = 0
FOR scen = 1 TO 35
FOR pair2 = 0 TO 15
pvtotal = pvtotal + pvtot(scen, pair2)
NEXT pair2
EXT scen
```

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```
ratio = 0
20 IF pvtotal = 0 THEN 21
ratio = prob1r(scen1, pair1) / pvtotal
21 REM
FOR scen= 1 TO 35
FOR pair2 = 0 TO 15
probtemp = pvtot(scen, pair2) * ratio
prob2r(scen, pair2) = prob2r(scen, pair2) +
    probtemp
NEXT pair2
NEXT scen
RETURN
***** END OF PVadjustR SUBMODULE
    *****
MSEXITSR:
This submodule determines which
    prob2r(s,f) and cost(s,f) numbers imply
    exiting the industry for Microsoft or a
    Microsoft successor.
Where this occurs for firm1>0 (MS #1 still in
    market) or for firm2>0 (MS #2 still in
    market), the probability values are
    transferred respectively to firm1=0
    (Microsoft #1 not in market) or to
    firm2=0 (Microsoft #2 not in market).
The criterion for exit is that the firm in
    question has very high short-run costs.
FOR scen = 1 TO 35
FOR firm1 = 1 TO 3
FOR firm2 = 0 TO 3
pair = firm1 * 4 + firm2
IF cost(scen, firm1) > 4.999 THEN
pair0 = firm2'firm1=0
prob2r(scen, pair0) = prob2r(scen, pair0) +
    prob2r(scen,
pair)
prob2r(scen, pair) = 0
END IF
NEXT firm2
NEXT firm1
FOR firm1 = 0 TO 3
FOR firm2 = 1 TO 3
pair = firm1 * 4 + firm2
IF cost(scen, firm2) > 4.999 THEN
pair0 = firm1 * 4 ''firm2=0
```

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```
prob2r(scen, pair0) = prob2r(scen, pair0) +
    prob2r(scen, pair)
prob2r(scen, pair) = 0
END IF
NEXT firm2
NEXT firm1
NEXT scen
RETURN
***** END OF MSexitsR SUBMODULE
    *****
PRINTPROB0R:
This submodule prints the probabilities for
    each firm-pair number for scenario zero.
PRINT #2, ''Iter ''; ''Scen ''; ''Firm '';
PRINT #2, ''Prob(firm0) ''; ''Prob(firm1) '';
    ''Prob(firm2) '';
PRINT #2, ''Prob(firm3) ''
seen = 0
FOR firm1 m 0 TO 3
PRINT #2, USING ''#####''; iter; scen0; firm1;
FOR firm2 = 0 TO 3
pair = 4 * firm1 + firm2
PRINT #2, USING
''##.############''; prob1r(scen, pair);
NEXT firm2
PRINT #2,
NEXT firm1
RETURN
***** END OF PrintProb0 SUBMODULE
    *****
PRINTPROBR:
This submodule prints the probabilities for
    each MS firm-pair number for each
    subsequent scenario.
FOR scen= 1 TO 35
FOR firm1 = 0 TO 3
PRINT #2, USING ''#####''; iter; scen; firm1;
FOR firm2 = 0 TO 3
pair = 4 * firm1 + firm2
PRINT #2, USING ###.############'';
    prob2r(scen, pair);
NEXT firm2
PRINT #2,
NEXT firm1
```

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```
NEXT scen
RETURN
***** END OF PrintProb SUBMODULE
    *****
TRANSFERPROBR:
This submodule transfers the prob2 values to
    prob1, so that the next transition
    iteration can proceed.
FOR scen = 0 TO 35
FOR pair = 0 TO 15
prob1r(scen, pair) = prob2r(scen, pair)
NEXT pair
NEXT scen
RETURN
***** END OF TransferProbR SUBMODULE
    *****
**********END OF Program
    ''MS3ProbR.bas''.**********
```

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```
Attachment O.
BASIC Program ''MS4TranA.bas''.
Program Number 4 in a series of six programs
    designed to simulate alternative antitrust
    remedies for the Microsoft software
    industry.
Copyright, January 23, 2002, Carl Lundgren.
This program, ''MS4TranA.bas'', uses the
    probability data computed by
    ''MS2ProbA.bas'' to compute Consumer
    Surplus and Profits for both Microsoft
    and Microsoft's competitors.
In transition period zero (iter=0), Microsoft
    (and its successor firms after divestiture)
    are assumed to have no competitors.
In subsequent transition periods (iter=1 to
    10), Microsoft has (potentially) one or
    more competitors.
This program only calculates Absolute Profit
    Maximizing (''APM'') equilibria.
The program uses the computed probabilities
    for each scenario that was previously
    outputted by the ''MS2ProbA.bas''
    program as various ''PROB....txt'' files.
This program outputs as ''TRAN....txt'' files
    the computed transition factors for
    several alternative timepaths for the
    software industry, under several
    alternative assumptions.
These transition factors are computed as a
    fraction of the revenues which Microsoft
    would earn if it remained a monopoly.
    The assumptions for the transitions are:
(Tran1) Strong conduct remedy & Lawful
    Path: Microsoft is not broken up, but
    competitive conditions start in transition
    period zero. A companion program,
    ''MS6Summ.bas'', uses the transition
    factors to compute the lawful path
    (starting in 1995) and a conduct remedy
    (starting in 2002).
Tran2-Tran3) APM Structural remedies:
    Microsoft is broken up into two or three
    competing APM firms, beginning in
    transition period zero. The companion
    program uses these transition factors to
    compute the effects of structural
    remedies starting in 2005.
```

The 225 outputted transition (TRAN....txt) files are computed for three speeds of transition (speed=1,2,3),

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five cost ratios for short-run cost (cratio=1,2,3,4,5), five assumptions concerning the portion of long-run costs allocated to fixed costs (port=0,1,2,3,4), and three starting points (msfirms=1,2,3).

```
DEFDBL A-Z
DIM proh1(35, 3), herf(35), mshare(35, 3), pnum(35)
DIM quant(35, 3), cost(35, 3), pv(35, 3), price(35)
DIM pims(35, 3), picomp(35, 3)
CONTROL MODULE
CLS
timex = TIMER
GOSUB SCENREAD:
```

This section calls the main module 225 times.

```
This control module chooses market tendency:
cratio=1 Ratio for low/high short-run cost is 0.2500 (1/4.0).
cratio=2 Ratio for low/high short-run cost is 0.3333 (1/3.0).
cratio=3 Ratio for low/high short-run cost is 0.4000 (1/2.5).
cratio=4 Ratio for low/high short-run cost is 0.5000 (1/2.0).
cratio=5 Ratio for low/high short-run cost is 0.6667 (1/1.5).
This control module chooses speed for market share shifts:
speed = 1 Slow speed for market share shifts.
speed = 2 Moderate speed for market share shifts.
speed = 3 High speed for market share shifts.
This control module chooses # of msfirms at iteration zero.
msfirms = 1 Microsoft starts as a monopoly.
msfirms = 2 Microsoft split into 2 APM firms.
msfirms = 3 Microsoft split into 3 APM firms.
This control module chooses proportion of long-run cost which is assumed to be a fixed cost.
port = 0 Fixed cost is 0% of long-run cost.
port = 1 Fixed cost is 25% of long-run cost.
port = 2 Fixed cost is 50% of long-run cost.
port = 3 Fixed cost is 75% of long-run cost.
port = 4 Fixed cost is 100% of long-run cost.
```

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```
FOR cratio = 1 TO 5
FOR speed = 1 TO 3
FOR port = 0 TO 4
FOR msfirms = 1 TO 3
GOSUB MAINMODULE:
NEXT msfirms
NEXT port
NEXT speed
NEXT cratio
PRINT TIMER—timex
END
MAINMODULE:
GOSUB FILENAMES: ''Assign file names to input/output files.
GOSUB INITIALIZE:
FOR iter = 1 TO 10
GOSUB PROBREAD:
GOSUB PRINTTRAN:
NEXT iter
CLOSE
RETURN
***** END OF MAIN MODULE *****
FILENAMES:
prob$ = ''c:\basic\ms—sim\out\prob00.txt'' ''Input transition probabilities
trans = ''c:\basic\ms—sim\out\tran0000.txt'' ''Output transition factors
IF cratio = 1 THEN crt$ = ''1''
IF cratio = 2 THEN crt$ = ''2''
IF cratio = 3 THEN crt$ = ''3''
IF cratio = 4 THEN crt$ = ''4''
IF cratio = 5 THEN crt$ = ''5''
IF speed = 1 THEN sp$ = ''1''
IF speed = 2 THEN sp$ = ''2''
IF speed = 3 THEN sp$ = ''3''
IF msfirms = 1 THEN msf$ = ''1''
IF msfirms = 2 THEN msf$ = ''2''
IF msfirms = 3 THEN msf$ = ''3''
IF port = 0 THEN prt$ = ''0''
IF port = 1 THEN prt$ = ''1''
```

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```
IF port = 2 THEN prt$ = ''2''
IF port = 3 THEN prt$ = ''3''
IF port = 4 THEN prt$ = ''4''
replacep$ = msf$ + sp$
replacet$ = msf$ +crt$ + sp$ + prt$
MID$(prob$, 25, 2) = replacep$
MID$(tran$, 25, 4) = replacet$
PRINT replacet$; '''';
RETURN
***** END OF FileNames SUBMODULE *****
INITIALIZE:
```

Submodule to perform various initialization tasks.

```
OPEN prob$ FOR INPUT AS #2
OPEN trans FOR OUTPUT AS #3
GOSUB ZEROPROB:
GOSUB PROBREAD0:
GOSUB SCENREAD: ''Read scenario list.
GOSUB COSTCOMPUTE: ''Compute costs.
GOSUB PQZERO: ''Iteration 0 prices, quantities, profits & Consumer Surplus.
GOSUB PQCOMPUTE: ''Compute prices, quantities, profits & Consumer Surplus.
GOSUB HHI: ''Compute HHI and market shares.
GOSUB PROFITS: ''Assign profits to MS and competitors.
GOSUB PRINTTRAN0: ''Print transition files.
RETURN
***** END OF Initialize SUBMODULE *****
ZEROPROB:
```

This submodule sets the prob1(0, .) and mshare(0, .) variable values to zero.

```
FOR firm1 = 0 TO 3
prob1(0, firm1) = 0
NEXT firm1
RETURN
***** END OF ZEROPROB SUBMODULE *****
SCENREAD:
```

This submodule reads in the scenario costs list.

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```
costs = ''c:\basic\ms—sim\costlist.txt'' ''Input scenario costs
OPEN costs FOR INPUT AS #1
LINE INPUT #1, dummy$
cost(s,f) = short-run marginal cost of firm f in scenario s.
finprob(s) = final probability assumed for scenario s.
wgt(scen) = number of permutations of scenario s.
FOR scen = 1 TO 35
INPUT #1, scen2, L1, L2, L3, L4, L5, wgt, finprob
IF scen <> scen2 THEN PRINT ''Scenario mismatch'', scen, scen2
INPUT #1, c1, c2, c3
FOR firm = 1 TO 3
INPUT #1, pv(scen, firm)
NEXT firm
NEXT scen
CLOSE #1
RETURN
***** END OF SCENREAD SUBMODULE *****
COSTCOMPUTE:
```

Submodule to compute short-run costs, long-run costs, and assumed elasticity of demand.

This section computes parameters for long-run costs under the assumption that each firm has the same long-run cost function.

Assume that one portion of Microsoft's long-run cost (LRC) is a long-run fixed cost (FC), while the other portion is a long-run variable cost (VC), which is proportional to output.

```
1rc = .1855 ''computed as MS long-run cost divided by MS monopoly revenue.
IF port = 0 THEN portion = 01!
IF port = 1 THEN portion = .25
IF port = 2 THEN portion = .5
IF port = 3 THEN portion = .75
IF port = 4 THEN portion = 1!
fc = 1rc * portion
vc = 1rc * (1—portion)
```

This section computes elasticity of demand (Elas) at monopoly profit maximum, as a function of marginal cost, which is composed of short-run marginal cost (SRC)

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```
plus long-run variable cost (VC).
src = .4101 ''computed as MS short-run cost divided by MS monopoly revenue.
mc= src + vc
elas = 1/(mc—1)
elasminus = elas—1
elasplus = elas + 1
A = elasminus / elas ''Intercept of linear demand curve with price axis.
b = -1/elas ''Slope of linear demand curve.
cbase = src ''Base level of short-run marginal cost (cost level 2).
logcbase = LOG(cbase / (A—vc—cbase)) ''Chase converted to log-ratios.
```

This section computes short-run costs and marginal costs for a given cost spread.

```
IF cratio = 1 THEN cspread = .950980935#
IF cratio = 2 THEN cspread = .748669813#
IF cratio = 3 THEN cspread = .622288438#
IF cratio = 4 THEN cspread = .469161475#
IF cratio = 5 THEN cspread = .273626703#
FOR scen = 1 TO 35
FOR firm = 1 TO 3
pvtemp = (pv(scen, firm)—180) / 120
logpv = logcbase + pvtemp * cspread
pvratio = EXP(logpv)
```

```
cost(scen, firm) = vc + (A—vc) * pvratio / (1
    + pvratio)
NEXT firm
NEXT scen
RETURN
***** END OF CostCompute SUBMODULE
    *****
PQZERO:
Submodule to compute prices, quantities,
    profits, and consumer surplus for
    selected scenarios, for iteration zero,
    where 1, 2, or 3 Microsoft APM firms are
    assumed initially to have no competitors.
Pi(s,f) is long-run profit for firm f within
    scenario s.
CS(s) is Consumer Surplus parameter for
    scenario s.
DIM cs(35), pi(35, 3)
num = msfirms
```

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```
costsum = 0
FOR firm = 1 TO num
cost(0, firm) = cost(scen0, firm)
costsum = costsum + cost(0, firm)
NEXT firm
price = (A + costsum) /(num + 1)
qtot = 0
FOR firm = 1 TO num
qtemp = (price—cost(0, firm)) / b
qtot = qtot + qtemp
quant(0, firm) = qtemp
pitemp = (price—cost(0, firm)) * qtemp
pitemp = pitemp—fc
pi(0, firm) = pitemp
NEXT firm
FOR firm = num + 1 TO 3
quant(0, firm) = 0
pi(0, firm) = 0
NEXT firm
cs(0) = qtot * (A—price) / 2
pdummy = 1 ''Is last firm producing?
IF quant(0, num)< 0 THEN pdummy = 0
IF pi(0, num) < 0 THEN pdummy = 0
IF pdummy = 0 THEN scen = 0
IF msfirms = 3 THEN GOSUB PQSUB2:
IF msfirms = 2 THEN GOSUB PQSUB1:
IF msfirms = 1 THEN GOSUB PQSUB0:
END IF
price(0) = price
pnum(0) = num
RETURN
***** END OF PQzero SUBMODULE *****
PQCOMPUTE:
Submodule to compute prices, quantities,
    profits, and consumer surplus for each
    scenario.
Pi(s,f) is long-run profit for firm f within
    scenario s.
CS(s) is Consumer Surplus parameter for
    scenario s.
FOR scen = 1 TO 35
num = 3
costsum = 0
```

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```
FOR firm = 1 TO num
costsum = costsum + cost(scen, firm)
NEXT firm
price = (A + costsum) /(num + 1)
qtot = 0
FOR firm = 1 TO num
qtemp = (price—cost(seen, firm)) / b
qtot = qtot + qtemp
quant(scen, firm) = qtemp
pitemp = (price—cost(scen, firm)) * qtemp
pitemp = pitemp—fc
pi(scen, firm) = pitemp
NEXT firm
cs(scen) = qtot * (A—price) / 2
pdummy = 1 ''Is last firm producing?
IF quant(scen, num) < 0 THEN pdummy = 0
IF pi(scen, num) < 0 THEN pdummy = 0
IF pdummy = 0 THEN GOSUB PQSUB2:
price(scen) = price
pnum(scen) = num
NEXT scen
RETURN
***** END OF PQcompute SUBMODULE
    *****
PQSUB2:
Submodule of PQcompute/PQsub4/PQsub3
    submodule, to compute prices and
    quantities when fewer than 3 firms are
    producing.
num = 2
quant(scen, num + 1) = 0
pi(scen, num + 1) = 0
costsum = 0
FOR firm = 1 TO num
costsum = costsum + cost(scen, firm)
NEXT firm
price = (A + costsum) /(num + 1)
qtot = 0
FOR firm = 1 TO num
qtemp = (price cost(scen, firm)) / b
qtot = qtot + qtemp
quant(scen, firm) = qtemp
pitemp = (price—cost(scen, firm)) * qtemp
```

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```
pitemp = pitemp—fc
pi(scen, firm) = pitemp
NEXT firm
cs(scen) = qtot * (A—price) / 2
pdummy = 1 ''Is last firm producing?
IF quant(scen, num) < 0 THEN pdummy = 0
IF pi (scen, num) < 0 THEN pdummy = 0
IF pdummy = 0 THEN GOSUB PQSUB1:
RETURN
.***** END OF PQsub2SUEMODULE *****
PQSUB1:
''Submodule of PQcompute/PQsub4/PQsub3/
    PQsub2 submodule, ''to compute prices
    and quantities '' when fewer than 2 firms
    are producing.
num = 1
quant(scen, hum + 1) = 0
pi(scen, hum + 1) = 0
costsum = 0
FOR firm = 1 TO num
costsum = costsum + cost(scen, firm)
NEXT firm
price = (A + costsum) / (hum + 1)
qtot = 0
FOR firm = 1 TO num
qtemp = (price- cost(scen, firm)) / b
qtot = qtot + qtemp
quant(scen, firm) = qtemp
pitemp = (price—cost(scen, firm) ) * qtemp
pitemp = pitemp fc
pi (scen, firm) = pitemp
NEXT firm
cs(scen) = qtot * (A—price) / 2
pdummy = I ''Is last firm producing?
IF quant(scen, num)< 0 THEN pdummy = 0
IF pi(scen, num)< 0 THEN pdummy = 0
IF pdummy = 0 THEN GOSUB PQSUB0:
RETURN
''***** END OF PQsub1 SUBMODULE
    *****
PQSUB0:
```

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```
''Submodule of PQcompute/PQsub4,3,2,1
    submodules, '' to compute prices and
    quantities '' when no firms are
    producing.
num = 0
quant(scen, hum + 1) = 0
pi(scen, hum + 1) = 0
price = A
cs (scen) = 0
RETURN
''***** END OF PQsub0 SUBMODULE
    *****
HHI:
''Submodule to compute Herfindahl-
    Herschmann Indices ''for each given cost
    spread.
FOR scen = 0 TO 35 qtot = 0
FOR firm = 1 TO 3
qtot = qtot + quant(scen, firm)
NEXT firm
IF qtot = 0 THEN
HHI = 10000
mshare(scen, 1) = 1
mshare(scen, 2) = 0
mshare(scen, 3) = 0
GOTO 333
END IF
HHI = 0
FOR firm = 1 TO 3
mtemp = quant(scen, firm) / qtot
mshare(scen, firm) = mtemp
HHI = HHI + mtemp * mtemp * 10000
NEXT firm
herf(scen) = HHI
333 NEXT scen
RETURN
''***** END OF HHI SUBMODULE *****
PROFITS:
''This submodule assigns the previously
    computed '' long-run business profits for
    each firm '' to Microsoft and Microsoft's
    competitors.
```

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```
''PiMS(s,f) = Microsoft's profit in scenario s,
    ''assuming that Microsoft is firm f.
''PiComp(s,f) = Competitors'' profits in
    scenario s, ''assuming that Microsoft is
    firm f.
''If f=0, Microsoft has zero market share.
FOR scen = 0 TO 35
pitot = 0
FOR firm = 1 TO 3
pitot = pitot + pi(scen, firm)
NEXT firm
pims(scen, 0) = 0
picomp(scen, 0) = pitot
FOR firm = 1 TO 3
pitemp = pi (scen, firm)
pitemp = pitemp * msfirms
pins(scen, firm) = pitemp
picomp(scen, firm) = pitot pitemp
NEXT firm
NEXT scen
''Microsoft profit (pitemp) is multiplied by
    the number of Microsoft firms.
''When MSfirms=1, all profit calculations are
    accurate. ''When MSfirms=2 or 3, pims
    is accurate, but picomp is not accurate
```

for ''particular scenario/firm #, because this APM program ''does not simultaneously track more than one Microsoft firm.
''However, probability-weighted averages over all firm #s ''for a given scenario are an accurate average for both pims and picomp.
RETURN
''***** END OF PROFITS SUBMODULE *****
PRINTTRAN0:
''This submodule prints the transition factors for iteration zero, including average consumer surplus, average profits for Microsoft and its competitors, average market share for Microsoft, the industry-wide Herfindahl-Hershman Index (HHI), and the average number of main firms in the industry.
''These transition factors must be multiplied by Microsoft's ''annual monopoly revenues to determine dollar values.
cstot = 0

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pimstot = 0
picomptot = 0
mktshare = 0
herfindahl = 0
firmnum = 0
scen = 0 ''Choose scen=scen0 to assume competitors in period 0.
FOR firm = 0 TO 3
tempprob = prob1 (0, firm)
cstot = cstot + cs(scen) * tempprob
pimstot = pimstot + pims(scen, firm) * tempprob
picomptot = picomptot + picomp(scen, firm) * tempprob
mktshare = mktshare + mshare(scen, firm) * tempprob
herfindahl = herfindahl + herf(scen) * tempprob
firmnum = firmnum + pnum(scen) * tempprob
NEXT firm
PRINT #3, ''Iter'';
PRINT #3, ''ConsumerSurpls '';
PRINT #3, ''Profit (MS) '';
PRINT #3, ''Profit(comp) '';
PRINT #3, ''MktShare(1-MS)'';
PRINT #3, ''MktShare (n-MS) '';
PRINT #3, ''Herfindahl '';
PRINT #3, ''# firms
PRINT #3, USING ''###''; 0;
PRINT #3, USING ''###.############,,; cstot; pimstot; picomptot;
PRINT #3, USING ''####.##########,,; mktshare * 100; msfirms *
mktshare * 100;
PRINT #3, USING ''######.########.; herfindahl;
PRINT #3, USING ''##.############.; firmnum
RETURN
''***** END OF PRINTTRAN0 SUBMODULE *****
PRINTTRAN:
This submodule prints the transition factors for each subsequent iteration, including average consumer surplus, average profits for Microsoft and its competitors, average market share for Microsoft, the industry-wide Herfindahl-Hershman Index (HHI), and the average number of main firms in the industry.
These transition factors must be multiplied by Microsoft's annual monopoly revenues to determine dollar values.
cstot = 0

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pimstot = 0
picomptot = 0
mktshare = 0
herfindahl = 0
firmnum = 0
FOR scen = 1 TO 35
FOR firm = 0 TO 3
tempprob = prob1(scen, firm)
cstot = cstot + cs(scen) * tempprob
pimstot = pimstot + pims(scen, firm) * tempprob
picomptot = picomptot + picomp(scen, firm) * tempprob
mktshare = mktshare + mshare(scen, firm) * tempprob
herfindahl = herfindahl + herf(scen) * tempprob
firmnum = firmnum + pnum(scen) * tempprob
NEXT firm
NEXT scen
PRINT #3, USING ''###,,; iter;
PRINT #3, USING ''###.############,,; cstot; pimstot; picomptot;
PRINT #3, USING ''####.##########,,; mktshare * 100; msfirms *
mktshare * 100;
PRINT #3, USING ''######.########,,; herfindahl;
PRINT #3, USING ,,##.############,,; firmnum
RETURN
''***** END OF PRINTTRAN SUBMODULE *****
PROBREAD0:
''Submodule to read iteration 0 transition probabilities.
LINE INPUT #2, temps
INPUT #2, iter2, scen0
IF 0 <> iter2 THEN PRINT ''Iteration 0 mismatch:,; 0, iter2
FOR firm = 0 TO 3
INPUT #2, prob1(0, firm)
NEXT firm
RETURN
''***** END OF PROBREAD0 SUBMODULE *****
PROBREAD:
''Submodule to read subsequent iteration transition probabilities
FOR scen = I TO 35
INPUT #2, iter2, scen2
IF iter <> iter2 THEN PRINT ''Iteration S mismatch:,,; iter,

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iter2
IF scen <> scen2 THEN PRINT ''Scenario S mismatch:,; scen;
scen2
FOR firm = 0 TO 3
INPUT #2, prob1(scen, firm)
NEXT firm
NEXT scen
RETURN
''***** END OF PROBREAD SUBMODULE *****
''**********END OF Program ''MS4TranA.bas,,.**********

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Attachment P.

''BASIC Program ''MS5TranR.bas''. ''Program Number 5 in a series of six programs ''designed to simulate alternative antitrust ''remedies for the Microsoft software industry.
''Copyright, January 23, 2002, Carl Lundgren.
'' This program, ''MS5TranR.bas'', uses the probability data ''computed by ''MS3ProbR.bas'' to compute Consumer Surplus and ''Profits for both Microsoft and Microsoft's competitors.
''In transition period zero (iter=0), Microsoft (and its ''successor firms after divestiture) are assumed to have no competitors.
''In subsequent transition periods (iter=1 to 10), ''Microsoft has (potentially) one or more competitors.
''This program calculates both Relative Profit Maximizing (''RPM'') ''and Absolute Profit Maximizing (''APM'') equilibria.
'' The program uses the computed probabilities for each ''scenario that was previously outputted by the ''''MS3ProbR.bas'' program as various ''PROB .... txt'' files.
'' This program outputs as ''TRPM .... txt'' files the ''computed transition factors for several alternative timepaths ''for the software industry, under several alternative assumptions.
''These transition factors are computed as a fraction ''of the revenues which Microsoft would earn if it remained ''a monopoly.
'' This program computes transition factors ''for alternative timepaths for the software industry, ''under the assumption that Microsoft is split into two firms, ''and these two firms adopt relative profit maximizing (RPM) ''incentives in either a pure or impure form.
''The goal functions for the two RPM firms are:
Goal1 = Profit1—z * Profit2
Goal2 = Profit2 z * Profit1
''All other (non-Microsoft, competitor) firms are assumed ''to have absolute profit maximizing (APM) incentives.
''The assumed values for z in the transitions are:
'' TRPM0) The value of z=0.0 ''Same as Absolute Profit

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Maximizing (APM).
TRPM1) The value of z=0.1 ''10% RPM, 90% APM.
TRPM2) The value of z=0.2 ''20% RPM, 80% APM.
TRPM3) The value of z=0.3 ''30% RPM, 70% APM.
TRPM4) The value of z=0.4 ''40% RPM, 60% APM.
TRPM5) The value of z=0.5 ''50% RPM, 50% APM.

```
TRPM6) The value of z=0.6 ''60% RPM, 40% APM.
TRPM7) The value of z=0.7 ''70% RPM, 30% APM.
TRPM8) The value of z=0.8 ''80% RPM, 20% APM.
TRPM9) The value of z=0.9 ''90% RPM, 10% APM.
This program differs from the MS4TranA.bas program in that it considers only two successor firms for Microsoft, and simultaneously tracks the rankings of both firms.
The 750 outputted transition (TRPM .... txt) files are computed for three speeds of transition (speed=l,2,3), five cost ratios for short-run cost (cratio=l,2,3,4,5), five assumptions concerning the portion of long-run costs allocated to fixed costs (port=0,1,2,3,4), ten different values of z
(z = 0.0, 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9).
''The starting point for the transitions in this program ''always has Microsoft divided into two RPM firms (msfirms=2). ''An additional feature of the program allows the value of z to ''change in response to circumstances. If zbump=0.0, then z is fixed, ''and does not change in response to circumstances. If zbump > 0, ''then z changes in response to circumstances. In the program, ''z responds to the circumstance that one of the RPM firms ''is not producing, because it is achieving negative absolute profit.
''In this circumstance, the program automatically ''bumps down'' the value ''of z for both RPM firms by the amount of zbump. For example, ''if z=0.7 and zbump=0.3, then if one or both RPM firms would shut down, ''then the value of z is automatically bumped down to z=0.4.
''In many circumstances, this allows both RPM firms to continue producing.
''The user determines the value of zbump as part of the control module.
DEFDBL A-Z
```

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```
DIM problr(35, 15), herf(35, 15), sharems(35, 15), pnum(35, 15)
DIM qtotal(35, 15), cost(35, 3), pv(35, 3), price(35, 15)
DIM pims(35, 15), picomp(35, 15)
DIM cs(35, 15), pi(35, 15)
''CONTROL MODULE
CLS
timex = TIMER
''*****User Determines amount by which z should be bumped down, if RPM firm2 is not producing when z=zhold(zcount).*****
zbump = 0! ''*****User determines zbump.*****
''*****If zbump=0, then z is fixed and never changes.
''*****zbump >= 0. Recommended value is zbump=0.3.****
GOSUB PRINTZCOUNT:
GOSUB SCENREAD:
''This section calls the main module 750 times.
''This control module chooses market tendency:
''cratio=1 ''Ratio for low/high short-run cost is 0.2500 (1/4.0) .
''cratio=2 ''Ratio for low/high short-run cost is 0.3333 (1/3.0).
''cratio=3 ''Ratio for low/high short-run cost is 0.4000 (1/2.5) .
''cratio=4 ''Ratio for low/high short-run cost is 0.5000 (1/2.0).
''cratio=5 ''Ratio for low/high short-run cost is 0.6667 (1/1.5).
''This control module chooses speed for market share shifts:
''speed = 1 ''Slow speed for market share shifts.
''speed = 2 ''Moderate speed for market share shifts.
''speed = 3 ''High speed for market share shifts.
''In this program, # of msfirms at iteration zero is always two.
msfirms = 2
''This control module chooses z (weight on rival firm's profits).
zcount=0      ''z = 0.0
zcount=1      z = 0.1
zcount=2      z = 0.2
zcount=3      z = 0.3
zcount=4      z = 0.4
zcount=5      z = 0.5
zcount=6      z = 0.6
zcount=7      z = 0.7
zcount=8      z = 0.8
```

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```
''zcount=9      ''z = 0.9
''This control module chooses proportion of long-run cost '' which is assumed to be a fixed cost.
''port = 0   ''Fixed cost is 0% of long-run cost.
''port = I   ''Fixed cost is 25% of long-run cost.
''port = 2   ''Fixed cost is 50% of long-run cost.
''port = 3   ''Fixed cost is 75% of long-run cost.
''port = 4   ''Fixed cost is 100% of long-run cost.
FOR cratio = 1 TO 5
FOR speed = 1 TO 3
FOR port = 0 TO 4
FOR zcount = 0 TO 9
GOSUB MAINMODULE:
NEXT zcount
NEXT port
NEXT speed
NEXT cratio
PRINT TIMER—timex
END
PRINTZCOUNT:
''This submodule assigns values of z to each zcount, '' and prints these z values for transfer to '' the subsequent ''MS6Summ.bas'' program.
DIM zhold(9)
zcount$ = ''c:\basic\ms—sim\out\zcount.txt''  ''Output zcount data.
OPEN zcount$ FOR OUTPUT AS #1
PRINT #1, ''Zcount Z''
FOR zcount = 0 TO 9
IF zcount = 0 THEN z = 01
IF zcount = I THEN z = .1
IF zcount = 2 THEN z = .2
IF zcount = 3 THEN z = .3
IF zcount = 4 THEN z = .4
IF zcount = 5 THEN z = .5
IF zcount = 6 THEN z = .6
IF zcount = 7 THEN z = .7
IF zcount = 8 THEN z = .8
IF zcount = 9 THEN z = .9
zhold(zcount) = z
PRINT #1, USING ''######''; zcount;
PRINT #1, USING ''###.######''; z
```

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```
NEXT zcount
CLOSE #1
RETURN
''***** END OF PrintZcount SUBMODULE *****
MAINMODULE:
z = zhold(zcount)
GOSUB FILENAMES: ''Assign file names to input/output files.
GOSUB INITIALIZE:
FOR iter = I TO 10
GOSUB PROBREAD:
GOSUB PRINTTRAN:
NEXT iter
CLOSE
RETURN
''***** END OF MAIN MODULE *****
FILENAMES:
prob$ = ''c: \basic\ms—sim\out\probr0. txt''  ''Input RPM transition probabilities
tran$ = ''c:\basic\ms—sim\out\tRPM0000.txt''  ''Output RPM transition factors
IF cratio = I THEN crt$ = ''1''
IF cratio = 2 THEN crt$ = ''2''
IF cratio = 3 THEN crt$ = ''3''
IF cratio = 4 THEN crt$ = ''4''
IF cratio = 5 THEN crt$ = ''5''
IF speed = 1 THEN sp$ = ''1''
IF speed = 2 THEN sp$ = ''2''
IF speed = 3 THEN sp$ = ''3''
IF zcount = 0 THEN zc$ = ''0''
IF zcount = 1 THEN zc$ = ''1''
IF zcount = 2 THEN zc$ = ''2''
IF zcount = 3 THEN zc$ = ''3''
IF zcount—4 THEN zc$ = ''4''
IF zcount = 5 THEN zc$ = ''5''
IF zcount = 6 THEN zc$ = ''6''
IF zcount = 7 THEN zc$ = ''7''
IF zcount = 8 THEN zc$ = ''8''
IF zcount = 9 THEN zc$ = ''9''
IF port = 0 THEN prt$ = ''0''
IF port = 1 THEN prt$ = ''1''
```

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```
IF port = 2 THEN prt$ = ''2''
IF port = 3 THEN prt$ = ''3''
IF port = 4 THEN prt$ = ''4''
replacep$ = sp$
replacet$ = zc$ + crt$ + sp$ + prt$
MID$(prob$, 26, 1) = replacep$
MID$(tran$, 25, 4) = replacet$
PRINT replacet$; '''';
RETURN
''***** END OF FileNames SUBMODULE *****
INITIALIZE:
''Submodule to perform various initialization tasks.
OPEN prob$ FOR INPUT AS #2
OPEN tran$ FOR OUTPUT AS #3
GOSUB ZEROPROB:
GOSUB PROBREAD0:
GOSUB SCENREAD: ''Read scenario list.
```

```
GOSUB COSTCOMPUTE: ''Compute costs.
GOSUB PQZERO: ''Iteration 0 prices,
    quantities, profits a Consumer Surplus.
GOSUB PQCOMPUTE: ''Compute prices,
    quantities, profits & Consumer Surplus.
GOSUB PRINTTRAN0: ''Print transition files.
RETURN
''***** END OF Initialize SUBMODULE
    *****
ZEROPROB:
''This submodule sets the prob1r(0, .)
'' variable values to zero.
FOR pair = 0 TO 15
prob1r(0, pair) = 0
NEXT pair
RETURN
''***** END OF ZeroProb SUBMODULE
    *****
SCENREAD:
''This submodule reads in the scenario costs
    list.
cost$ = ''c:\basic\ms—sim\costlist.txt'' ''Input
    scenario costs
OPEN costs FOR INPUT AS #1
LINE INPUT #1, dummy$
```

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```
''cost(s,f) = short-run marginal cost of firm f
    in scenario s.
''finprob(s) = final probability assumed for
    scenario s.
''wgt(scen) = number of permutations of
    scenario s.
FOR scen = 1 TO 35
INPUT #1, scen2, L1, L2, L3, L4, L5, wgt,
    finprob
IF scen <> scen2 THEN PRINT ''Scenario
    mismatch'', scen, scen2
INPUT #1, c1, c2, c3
FOR firm = I TO 3
INPUT %1, pv(scen, firm)
NEXT firm
NEXT scen
CLOSE #1
RETURN
''***** END OF ScenRead SUBMODULE
    *****
COSTCOMPUTE:
''Submodule to compute short-run costs,
    long-run costs, '' and assumed elasticity
    of demand.
''This section computes parameters for long-
    run costs ''under the assumption that
    each firm has ''the same long-run cost
    function.
''Assume that one portion of Microsoft's
    long-run cost (LRC) is a long-run fixed
    cost (FC), while the other portion is a
    long-run variable cost (VC), which is
    proportional to output.
lrc = .1855 ''computed as MS long-run cost
    divided by MS monopoly revenue.
IF port = 0 THEN portion = 01
IF port = 1 THEN portion = .25
IF port = 2 THEN portion = .5
IF port = 3 THEN portion = .75
IF port = 4 THEN portion = 1!
fc = lrc * portion
vc = lrc * (1—portion)
''This section computes elasticity of demand
    (Elas) at monopoly profit maximum, as a
    function of marginal cost, which is
    composed of short-run marginal cost
    (SRC) plus long-run variable cost (VC).
src = .4101 ''computed as MS short-run cost
    divided by MS monopoly revenue.
mc = src + vc
```

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```
elas = 1 / (mc—1)
elasminus = elas 1
elasplus = elas + 1
A = elasminus / elas ''Intercept of linear
    demand curve with price axis.
b = -1 / elas ''Slope of linear demand curve.
cbase = src ''Base level of short-run marginal
    cost (cost level 2).
logcbase = LOG(cbase / (A—vc—cbase))
    ''Cbase converted to log- ratios.
''This section computes short-run costs and
    marginal costs ''for a given cost spread.
IF cratio = I THEN cspread = .950980935#
IF cratio = 2 THEN cspread = .748669813#
IF cratio = 3 THEN cspread = .622288438#
IF cratio = 4 THEN cspread = .469161475#
IF cratio = 5 THEN cspread = .273626703#
FOR scen = 1 TO 35
FOR firm = 1 TO 3
pvtemp = (pv(scen, firm)—180) / 120#
logpv = logcbase + pvtemp * cspread
pvratio = EXP(logpv)
cost(scen, firm) = vc + (A—vc) * pvratio / (1
    + pvratio)
NEXT firm
NEXT scen
RETURN
''***** END OF CostCompute SUBMODULE
    *****
PQZERO:
''Submodule to compute prices, quantities,
    profits, and consumer surplus for
    selected scenarios, for iteration zero,
    where two Microsoft RPM firms are
    assumed initially to have no competitors.
This program assumes that the two MS firms
    use relative profit maximizing (RPM)
    incentives, according to the goal
    functions for each firm:
Goal(firm1)=profit(firm1)-z*profit(firm2)
Goal(firm2)=profit(firm2)-z*profit(firm1)
scen = 0
firm1 = 1
firm2 = 2
pair1 = firm1 * 4 + firm2
```

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```
pair2 = firm2 * 4 + firm1
FOR firm = 1 TO 2
cost(0, firm) = cost(scen0, firm)
NEXT firm
FOR firm = 3 TO 3
qtemp(firm) = 0
pitemp(firm) = 0
cost(0, firm) = A
NEXT firm
bump = 0 ''Dummy variable to determine if
    z should be bumped down.
z = zhold(zcount)
GOSUB RPMSUB0:
IF bump = 1 THEN
z = z—zbump
GOSUB RPMSUB0:
END IF
GOSUB ASSIGN:
RETURN
''***** END OF PQzero SUBMODULE *****
PQCOMPUTE:
''Submodule to compute prices, quantities,
    profits, '' and consumer surplus for all
    scenarios and firm pairs.
FOR scen = 1 TO 35
FOR firm1 = 0 TO 3
firm2 = 0
pair1 = firm1 * 4 + firm2
pair2 = firm2 * 4 + firm1
delfirm = 0
bump = 0 ''Dummy variable to determine if
    z should be bumped
z = zhold(zcount)
GOSUB APMCOMPUTE:
GOSUB ASSIGN:
NEXT firm1
FOR firm1 = I TO 3
FOR firm2 = 1 TO 3
IF firm2 <= firm1 THEN 357
pair1 = firm1 * 4 + firm2
pair2 = firm2 * 4 + firm1
bump = 0 ''Dummy variable to determine if
    z should be bumped down.
z = zhold(zcount)
```

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```
GOSUB RPMCOMPUTE:
IF bump = I THEN
z = z—zbump
GOSUB RPMCOMPUTE:
END IF
GOSUB ASSIGN:
357 NEXT firm2
NEXT firm1
    NEXT scen
    RETURN
''***** END OF PQcompute SUBMODULE
    *****
ASSIGN:
''Submodule to assign computed numbers for
    each scenario '' and combination of
    firms.
qtotal(scen, pair1) = qtot
price(scen, pair1) = price
pnum(scen, pair1) = tnum
cs(scen, pair1) = cstemp
qtotal(scen, pair2) = qtot
price(scen, pair2) = price
pnum(scen, pair2) = tnum
cs(scen, pair2) = cstemp
IF qtot = 0 THEN
share (1) = 1
share(2) = 0
share(3) = 0
GOTO 333
END IF
FOR firm = 1 TO 3
share(firm) = qtemp(firm) / qtot
NEXT firm
333 pitot = 0
herf = 0
FOR firm = I TO 3
pitot = pitot + pitemp(firm)
herf = herf + share(firm) * share(firm)
NEXT firm
herf = herf * 10000
herf(scen, pair1) = herf
herf(scen, pair2) = herf
ms1share = share(firm1)
ms2share = share(firm2)
```

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```
msavgshare = (ms1share + ms2share) / 2
sharems(scen, pair1) = msavgshare
sharems(scen, pair2) = msavgshare
mspi1 = pitemp(firm1)
mspi2 = pitemp(firm2)
```

```
IF firm1 = 0 THEN mspi1 = 0
IF firm2 = 0 THEN mspi2 = 0
mspitot = mspi1 + mspi2
comppitot = pitot—mspitot
pims(scen, pair1) = mspitot
ims(scen, pair2) = mspitot
picomp(scen, pair1) = comppitot
picomp(scen, pair2) = comppitot
ms1goal = mspi1—z * mspi2 ''Firm 1's RPM
    goal function.
ms2goal = mspi2—z * mspi1 ''Firm 2's RPM
    goal function.
RETURN
''***** END OF Assign SUBMODULE *****
RPMCOMPUTE:
''Submodule to compute prices, quantities,
    profits, and consumer surplus for each
    RPM scenario. This submodule assumes
    that two RPM firms choose to produce.
anum = 1 ''anum = number of producing
    APM firms.
num = anum ''hum = last producing APM
    firm.
IF num = firm1 THEN num = hum + 1
IF num = firm2 THEN num = num + 1
IF num = firm1 THEN num = num + 1
tnum = anum + 2 ''tnum = total number of
    producing firms.
FOR firm = I TO 3
qtemp(firm) = 0
pitemp(firm) = 0
NEXT firm costsum = 0
FOR firm = I TO num
IF firm <> firm1 AND firm <> firm2 THEN
costsum = costsum + cost(scen, firm)
END IF
NEXT firm
costsum = (A + Costsum) * (1—z)
costsum = costsum + cost(scen, firm1) +
    cost(scen, firm2)
price = costsum / (3—anum* z + anum—z)
qtot = (A—price) / b
```

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```
qapm = 0
FOR firm = 1 TO num
IF firm <> firm1 AND firm <> firm2 THEN
qtemp(firm) = (price cost(scen, firm)) / b
qapm = qapm + qtemp (firm)
pitemp = (price cost(scen, firm)) *
    qtemp(firm)
pitemp(firm) = pitemp—fc
END IF
NEXT firm
qrpm = qtot—qapm
qgap = (cost(scen, firm2)—cost(scen, firm1))
    / b / (1 + z)
qtemp(firm1) = (qrpm + qgap) / 2
pitemp = (price cost(scen, firm1)) *
    qtemp(firm1)
pitemp(firm1) = pitemp—fc
qtemp(firm2) = (qrpm—qgap) / 2
pitemp = (price—cost(scen, firm2)) *
    qtemp(firm2)
pitemp(firm2) = pitemp—fc
cstemp = qtot * (A—price) / 2
    ''Must choose which firm (if any) to shut
    down,
'' based on quantities and profits.
    ''First, test for negative quantities.
    aq = 1 ''quantity dummy for APM firm.
IF qtemp(num) < 0 THEN aq = 0
rq = 1 ''quantity dummy for RPM firm.
IF qtemp(firm2) < 0 THEN rq = 0
    IF aq = 0 AND rq = I THEN
GOSUB RPMSUB0:
RETURN
END IF
IF aq = 1 AND rq = 0 THEN
IF bump = 0 THEN
bump = 1
RETURN
END IF
delfirm = firm2
GOSUB APMCOMPUTE:
RETURN
END IF
IF aq = 0 AND rq = 0 THEN
IF firm2 > hum THEN
IF bump = 0 THEN
bump = 1
RETURN
END IF
```

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```
delfirm = firm2
GOSUB APMCOMPUTE:
RETURN
END IF
IF firm2 < num THEN
GOSUB RPMSUB0:
RETURN
END IF
END IF
''Second, test for negative profits.
api = 1 ''profit dummy for APM firm.
IF pitemp(num) < 0 THEN api = 0
rpi = 1 ''profit dummy for RPM firm.
IF pitemp(firm2) < 0 THEN rpi = 0
IF api = 0 AND rpi = 1 THEN
GOSUB RPMSUB0:
RETURN
END IF
IF api = I AND rpi = 0 THEN
IF bump = 0 THEN
bump = 1
RETURN
END IF
delfirm = firm2
GOSUB APMCOMPUTE:
RETURN
END IF
IF api = 0 AND rpi = 0 THEN
IF pitemp(firm2) < pitemp(num) THEN
IF bump = 0 THEN
bump = 1
RETURN
END IF
delfirm = firm2
GOSUB APMCOMPUTE:
RETURN
ELSE
GOSUB RPMSUB0:
RETURN
END IF
END IF
''If program reaches here, then all firms are
    producing.
RETURN
''***** END OF RPMcompute SUBMODULE
    *****
```

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```
RPMSUB0:
Submodule of RPMcompute submodule, to
    compute prices and quantities when zero
    APM firms are producing.
num = 0
anum = hum ''anum = number of producing
    APM firms
tnum = anum + 2 ''tnum = total number of
    producing firms
FOR firm = 1 TO 3
qtemp(firm) = 0
pitemp(firm) = 0
NEXT firm
qtemp(num + 1) = 0
pitemp(num + 1) = 0
costsum = 0
costsum = (A + costsum) * (1—z)
costsum = costsum + cost(scen, firm1) +
    cost(scen, firm2)
price = costsum / (3—anum * z + anum—z)
qtot = (A—price) / b
qapm = 0
qrpm = qtot—qapm
qgap = (cost(scen, firm2)—cost(scen, firm1))
    / b / (1 + z)
qtemp(firm1) = (qrpm + qgap) / 2
pitemp = (price—cost(scen, firm1)) *
    qtemp(firm1)
pitemp(firm1) = pitemp—fc
qtemp(firm2) = (qrpm—qgap) / 2
pitemp = (price—cost(scen, firm2)) *
    qtemp(firm2)
pitemp(firm2) = pitemp fc
cstemp = qtot * (A—price) / 2
r2dummy = 1 ''Is RPM firm2 producing?
IF qtemp(firm2) < 0 THEN r2dummy = 0
IF pitemp(firm2) < 0 THEN r2dummy = 0
IF r2dummy = 0 THEN
IF firm1 = 1 THEN
IF bump = 0 THEN
bump = 1
RETURN
END IF
delfirm = 0
GOSUB APMSUB1:
RETURN
END IF
IF firm1 = 2 THEN
IF bump = 0 THEN
```

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```
bump = 1
RETURN
END IF
delfirm = 1
GOSUB APMSUB2:
RETURN
END IF
END IF
''If program reaches here, then both RPM
    firms are producing.
RETURN
''***** END OF RPMsub0 SUBMODULE
    *****
APMCOMPUTE :
'' Submodule to compute prices, quantities,
    profits, ''and consumer surplus for each
    APM scenario.
''The delfirm variable is used to determine
    whether to ''delete one of the firms from
    the APM scenario.
If delfirm=0, no firms are deleted from the
    computation.
If delfirm=1, then firm 1 is deleted from the
    computation.
If delfirm=2, then firm 2 is deleted from the
    computation.
'' If delfirm—3, then firm 3 is deleted from
    the computation. num = 3
IF delfirm s num THEN GOTO APMSUB2:
anum -num ,anum z number of producing
```

```
    APM firms.
IF delfirm > 0 THEN
IF delfirm <= num THEN anum =num—1
END IF
tnum—anum ''tnum = total number of
    producing firms
FOR firm = 1 TO 3
qtemp
(firm) = 0
pitemp (firm) = 0
NEXT firm costsum = 0
FOR firm = 1 TO hum
IF firm <> delfirm THEN
costsum—costsum + cost(scen, firm)
END IF
NEXT firm
price = (A + costsum) / (anum + 1)
qtot = 0
FOR firm = 1 TO num
IF firm <> delfirm THEN
qtemp(firm) = (price- cost(scen, firm)) / b
```

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```
qtot = qtot + qtemp (firm)
pitemp = (price- cost(scen, firm)) *
    qtemp(firm)
pitemp(firm) = pitemp—fc
END IF
IF firm = delfirm THEN
qtemp(firm) = 0
pitemp(firm) = 0
END IF
NEXT firm
cstemp = qtot * (A—price) / 2
pdummy = 1 ''Is last firm producing?
IF qtemp(num) < 0 THEN pdummy = 0
IF pitemp(num) < 0 THEN pdummy = 0
IF pdummy = 0 THEN GOSUB APMSUB2:
RETURN
''***** END OF APMcompute SUBMODULE
    *****
APMSUB2:
''Submodule of APMcompute submodule, ''
    to compute prices and quantities '' when
    fewer than 3 firms are producing.
num = 2
IF delfirm =num THEN GOTO APMSUB1:
anum =num ''anum = number of producing
    APM firms.
IF delfirm > 0 THEN
IF delfirm <5 num THEN anum = hum—1
END IF
tnum = anum ''tnum = total number of
    producing firms
FOR firm = 1 TO 3
qtemp(firm) = 0
pitemp (firm) = 0
NEXT firm costsum = 0
FOR firm = 1 TO num
IF firm <> delfirm THEN
costsum = costsum + cost(scen, firm)
END IF
NEXT firm
price = (A + costsum) / (anum + 1)
qtot = 0
FOR firm = 1 TO num
IF firm <> delfirm THEN
qtemp(firm) = (price—cost(scen, firm)) / b
```

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```
qtot = qtot + qtemp(firm)
pitemp—(price—cost(scen, firm)) *
    qtemp(firm)
pitemp(firm) = pitemp—fc
END IF
IF firm = delfirm THEN
qtemp(firm) = 0
pitemp(firm) = 0
END IF
NEXT firm
cstemp = qtot * (A—price) / 2
pdummy = 1 ''Is last firm producing?
IF qtemp(num) < 0 THEN pdummy = 0
IF pitemp(num) < 0 THEN pdummy = 0
IF pdummy = 0 THEN GOSUB APMSUB1:
RETURN
''***** END OF APMsub2SUBMODULE
    *****
*
*
APMSUB1:
''Submodule of APMcompute/APMsub2
    submodules, '' to compute prices and
    quantities '' when fewer than 2 firms are
    producing.
num = 1
IF delfirm -num THEN GOTO APMSUB0:
anum = hum ''anum = number of producing
    APM firms.
IF delfirm > 0 THEN
IF delfirm <= num THEN anum =num—1
END IF
tnum = anum ''tnum = total number of
    producing firms
FOR firm = 1 TO 3
qtemp(firm) = 0
pitemp(firm) = 0
NEXT firm costsum = 0
FOR firm = 1 TO hum
IF firm <> delfirm THEN
costsum = costsum + cost(scen, firm)
END IF
NEXT firm
price = (A + costsum) / (anum + 1)
qtot = 0
FOR firm = 1 TO num
IF firm <> delfirm THEN
qtemp(firm) = (price- cost(scen, firm)) / b
qtot = qtot + qtemp(firm)
pitemp = (price—cost(scen, firm)) *
    qtemp(firm)
pitemp(firm) = pitemp—fc
END IF
IF firm = delfirm THEN
qtemp(firm) = 0
pitemp(firm) = 0
END IF
NEXT firm
cstemp = qtot * (A—price) / 2
pdummy = 1 ''Is last firm producing?
IF qtemp(num) < 0 THEN pdummy = 0
IF pitemp(num) < 0 THEN pdummy = 0
IF pdummy—0 THEN GOSUB APMSUB0:
RETURN
''***** END OF APMsub1 SUBMODULE
    *****
APMSUB0:
''Submodule of APMcompute/APMsub2,1
    submodules, to compute prices and
    quantities when no firms are producing.
hum = 0
anum =num ''anum = number of producing
    APM firms.
tnum t anum ''tnum—total number of
    producing firms
FOR firm—1 TO 3
qtemp(firm)—0
pitemp(firm) = 0
NEXT firm
price = A
cstemp = 0
RETURN
''***** END OF APMsub0 SUBMODULE
    *****
PRINTTRAN0:
This submodule prints the transition factors
    for iteration zero, including average
    consumer surplus, average profits for
    Microsoft and its competitors, average
    market share for Microsoft, the industry-
    wide Herfindahl-Hershman Index (HHI),
    and the average number of main firms in
    the industry.
''These transition factors must be multiplied
    by Microsoft's ''annual monopoly
    revenues to determine dollar values.
```

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```
cstot = 0
pimstot = 0
picomptot = 0
mktshare = 0
herfindahl = 0
firmnum—0
scen = 0 .Choose scen=scen0 to assume
    competitors in period 0.
FOR firm1 = 0 TO 3
FOR firm2—0 TO 3
pair = 4 * firm1 + firm2
tempprob = problr(scen, pair)
cstot = cstot + cs(scen, pair) * tempprob
pimstot = pimstot + pims(scen, pair) *
    tempprob
picomptot = picomptot + picomp(scen, pair)
    * tempprob
mktshare s mktshare + sharems(scen, pair) *
    tempprob
herfindahl—herfindahl + herf(scen, pair) *
    tempprob
firmnum = firmnum + pnum(scen, pair) *
    tempprob
NEXT firm2
NEXT firm1
PRINT #3, ''Iter'';
PRINT #3, . ConsumerSurpls '';
PRINT #3, ''Profit(MS) '';
PRINT #3, ''Profit(comp) '';
PRINT #3, . MktShare(l-MS)'';
PRINT #3, . MktShare(n-MS)'';
PRINT #3, ''Herfindahl '';
PRINT #3, .. # firms ''
PRINT #3, USING ''###''; 0;
PRINT #3, USING
''###.############''; cstot; pimstot;
    picomptot;
PRINT #3, USING ''####.##########'';
    mktshare * I00; msfirms *
mktshare * I00;
PRINT #3, USING ''######.########'';
    herfindahl;
PRINT #3, USING ''##.############'';
    firmnum
RETURN
,***** END OF PrintTran0 SUBMODULE
    *****
PRINTTRAN:
''This submodule prints the transition factors
    for each subsequent iteration, including
    average consumer surplus, average
    profits for Microsoft and its competitors,
    average market share for Microsoft, the
    industry-wide Herfindahl-Hershman
    Index (HHI), and the average number of
    main firms in the industry.
```

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```
''These transition factors must be multiplied
     by Microsoft's '' annual monopoly
     revenues to determine true dollar values.
cstot = 0
pimstot—0
picomptot = 0
mktshare—0
herfindahl = 0
firmnum = 0
FOR seen = 1 TO 35
FOR firm1—0 TO 3
FOR firm2 = 0 TO 3
pair—4 * firm1 + firm2
tempprob = problr(scen, pair)
cstot = cstot + cs(scen, pair) * tempprob
pimstot = pimstot + pims (scen, pair) *
     tempprob
picomptot = picomptot + picomp(scen, pair)
     * tempprob
mktshare—mktshare + sharems (scen, pair) *
     tempprob
herfindahl—herfindahl + herf(scen, pair) *
     tempprob
firmnum = firmnum + pnum(scen, pair) *
     tempprob
NEXT firm2
NEXT firm1
NEXT scen
PRINT #3, USING ''###''; iter;
PRINT #3, USING
''###.############
m;#''; cstot; pimstot; picomptot;
PRINT #3, USING
''####.##########''; mktshare * i00; msfirms
     *
mktshare * 100t
PRINT #3, USING ''######.########'';
     herfindahl;
PRINT #3, USING ''##.############'';
     firmnum
RETURN
''***** END OF PrintTran0 SUBMODULE
     *****
PROBREAD0 :
LINE INPUT #2, temps
FOR firm1 = 0 TO 3
INPUT #2, iter2, scen0, firm
IF 0 <> iter2 THEN PRINT ''Iteration
     mismatch:''; 0; iter2
IF firm <> firm1 THEN PRINT ''Firm1
     mismatch:''; firm1; firm
FOR firm2 = 0 TO 3
pair = firm1 * 4 + firm2
INPUT #2, problr(0, pair)
NEXT firm2
NEXT firm1
RETURN
```

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```
''***** END OF ProbRead0 SUBMODULE
     *****
PROBREAD:
FOR scen- 1 TO 35
FOR firm1 = 0 TO 3
INPUT #2, iter2, scen2, firm
IF iter <> iter2 THEN PRINT ''Iteration
     mismatch:''; iter;
iter2
IF scen <> scen2 THEN PRINT ''Scenario
     mismatch:''; scen;
cen2
IF firm <> firm1 THEN PRINT ''Firm1
     mismatch:''; firm1; firm
''FOR firm2—0 TO 3
pair = firm1 * 4 + firm2
INPUT #2, problr(scen, pair)
NEXT firm2
NEXT firm1
NEXT scen
RETURN
,***** END OF ProbRead SUBMODULE
     *****
''**********END OF Program
     .MS5TranR.bas''.**********
```

ATTACHMENT Q

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Attachment Q.

''BASIC Program ''MS6Summ,bas''.
''Program Number 6 in a series of six programs ''designed to simulate alternative antitrust ''remedies for the Microsoft software industry.
''Copyright, January 23, 2002, Carl Lundgren.
'' This program, ,,MS6Summ.bas'', computes and summarizes the data ''produced by prior programs, including both ''MS4TranA.bas'' ''and ''MS5TranR.bas''.
'' This program summarizes in the form ''of aggregates and comparisons the economic meaning ''of the transitions data that were outputted by ''the ''MS4TranA.bas and ''MS5TranR.bas'' programs. ''This program reads in the various ''TRAN .... txt'' ''and ''TRPM .... txt'' files produced by the prior programs ''in order to create summary files for the aggregates:

(0) No remedy at all, continued monopoly by Microsoft.
(I) 100% effective conduct remedy starting in 2002.
(la) Intermediate conduct remedies, varying in effectiveness: 20%, 40%, 60%, 80%.
(1b) Structural two-monopolies remedy, computed as having outcomes equivalent to one-third value of 2-firm competitive APM structural remedy and two-thirds value of 1004 conduct remedy.
(2) Structural 2-firm APM remedy starting in 2005.
(3) Structural 3-firm APM remedy starting in 2005.

(4–15) Structural 2-firm RPM remedies for z=0.1 through z=0.9, starting in 2005.

(16) Lawful behavior since 1995. and for the comparisons:

(17) Aggregates for all the above alternatives, minus the aggregates for the lawful path.

The program uses the transition data to estimate consumer surplus and profits in each of the years 1995–2025. Transitions are assumed to take place over a period of 3, 5, or 8 years each. Years in between the transition years are linearly interpolated. These four time paths are aggregated and compared for three sums over three time periods: I) Sum of consumer surpluses.

(2) Sum of non-Microsoft profits.
(3) Sum of Microsoft profits.
(4) Sum of total surpluses.
(A) Time period 1995–2001.
(B) Time period 2002–2025.
(C) Time period 1995–2025.

The program reads in data for Microsoft's monopoly revenues by year, multiplies them by the relevant factor multipliers given by the Transition files (TRAN & TRPM), and computes interest or discounts at 7% real annual interest rate to billions of year 2002 real dollars.

The program produces data summarized for particular scenarios in files marked ''AGGC .... txt'', ''AGGR .... txt'', and ''YEAR .... txt''.

The ''AGGC .... txt'' files (which are most user friendly) summarize all past and future data, appropriately discounted, into a single set of figures which may be compared across remedy proposals.

The ''AGGR .... txt'' files categorize the aggregate data into past and future amounts of consumer surplus, profits, and total surplus for each remedy proposal, and how these amounts compare with the same amounts along the lawful path.

The ''YEAR .... txt'' files (which are least user friendly) output the calculated amounts, by year, for each remedy proposal and the lawful path.

```
   DEFDBL A-Z
DIM aggcs(16, 3), aggcomp(16, 3), aggms(16,
     3), aggts(16, 3)
Aggregates
DIM compcs(16, 3), compcomp(16, 3),
     compms(16, 3), compts(16, 3)
Comparisons
DIM aggcsmin(16, 3), aggcompmin(16, 3),
     aggmsmin(16, 3),
aggtsmin(16, 3) ,Minimums
DIM compcsmin(16, 3), compcompmin(16,
     3), compmsmin(16, 3),
comptsmin(16, 3) ''Minimums
DIM aggcsmax(16, 3), aggcompmax (16, 3),
     aggmsmax(16, 3),
aggtsmax(16, 3) ''Maximums
DIM compcsmax(16, 3), compcompmax(16,
     3), compmsmax(16, 3),
comptsmax(16, 3) ''Minimums
DIM aggcsavg(16, 3), aggcompavg(16, 3),
     aggmsavg(16, 3),
aggtsavg(16, 3) ,Averages
DIM compcsavg(16, 3), compcompavg(16, 3),
     compmsavg(16, 3),
IF port >= 0 THEN ''Always true; change to
     restrict statistics gathering.
pvtotal—pvtotal + pvtemp
avgtotal—avgtotal + 1
FOR p = 0 TO 14
FOR t = 1 TO 3
First put numbers into temporary variable
     slots.
   aggcstemp = aggcs (p, t)
   aggcomptemp—aggcomp(p, t)
   aggmstemp = aggms(p, t)
   aggtstemp = aggts(p, t)
   compcstemp—compcs (p, t)
   compcomptemp = compcomp(p, t)
   compmstemp = compms(p, t)
   comptstemp = compts(p, t)
Second compute minimum values
   IF aggcstemp < aggcsmin(p, t) THEN
      aggcsmin(p, t) = aggcstemp
   IF aggcomptemp < aggcompmin(p, t) THEN
      aggcompmin(p, t) aggcomptemp
   IF aggmstemp < aggmsmin(p, t) THEN
      aggmsmin(p, t) = aggmstemp
   IF aggtstemp < aggtsmin(p, t) THEN
      aggtsmin(p, t) = aggtstemp
   IF compcstemp < compcsmin(p, t) THEN
      compcsmin(p, t) compcstemp
```

```
   IF compcompttemp < compcompmin(p, t)
      THEN compcompmin(p, t) =
      compcompttemp
   IF compmstemp < compmsmin(p, t) THEN
      compmsmin(p, t) = compms temp
   IF comptstemp < comptsmin(p, t) THEN
      comptsmin(p, t) = comptstemp
Third compute maximum values
   IF aggcstemp * aggcsmax(p, t) THEN
      aggcsmax(p, t) s aggcstemp
   IF aggcomptemp * aggcompmax(p, t) THEN
      aggcompmax(p, t)— aggcomptemp
   IF aggmstemp * aggmsmax(p, t) THEN
      aggmsmax(p, t) -aggmstemp
   IF aggtstemp * aggtsmax(p, t) THEN
      aggtsmax(p, t) = aggtstemp
   IF compcstemp * compcsmax(p, t) THEN
      compcsmax(p, t) = compcstemp
   IF compcompttemp * compcompmax(p, t)
      THEN compcompmax(p, t) =
      compcompttemp
   IF compmstemp * compmsmax(p, t) THEN
      compmsmax(p, t)— compmstemp
   IF comptstemp > comptsmax(p, t) THEN
      comptsmax(p, t)— comptstemp
Fourth compute average values
comptsavg(16, 3), Averages
DIM aggcswtd(16, 3), aggcompwtd(16, 3),
      aggmswtd(16, 3), aggtswtd(16, 3)
      ''Weighted Averages
DIM compcswtd(16, 3), compcompwtd(16,
      3), compmswtd(16, 3), comptswtd(16, 3)
      ,Weighted Averages
CONTROL MODULE
CLS
timex = TIMER
   ystart = 1995 ''Start year for antitrust
      analysis.
   yend—2025 ''End year for antitrust
      analysis.
   cstart = 2002 ''Year to start conduct
      remedies.
   sstart = 2005 ''Year to start structural
      remedies.
GOSUB PVSETUP:
   revstream = 1 ,****User chooses revenue
      stream = 1,2,3,4.
GOSUB READREVENUES : ''Read in
      Microsoft'' s revenues by year.
GOSUB READZCOUNT:
This control module calls the main module
      75 times.
   FOR cratio—1 TO 5
   FOR speed = 1 TO 3
   FOR port—0 TO 4
GOSUB MAINMODULE :
NEXT port
NEXT speed
NEXT cratio
GOSUB PRINTSTATS: ''Print Macro
      Statistics
PRINT TIMER—timex
END
f
MAINMODULE:
GOSUB FILENAMES1: ''Assign file name to
      input & output files.
GOSUB TRANSREAD: ''Read in transitions
      data.
FOR length = 1 TO 3
   Tyears—Number of years between
      transitions.
   This program chooses Tyears=3, 5, or 8.
IF length—1 THEN tyears = 3
IF length = 2 THEN tyears = 5
IF length—3 THEN tyears z 8
GOSUB NOREMEDY: ,Compute outcomes for
      unlawful monopoly path.
GOSUB LAWFUL: ,Compute outcomes for
      lawful competitive path.
GOSUB CONDUCT: ''Compute outcomes for
      conduct remedy path.
GOSUB STRUCTURAL: ''Compute outcomes
      for structural remedy paths.
GOSUB PRINTYEARS: ,Compute and print
      year data into files.
GOSUB AGGREGATE: ''Aggregate years for
      each path.
GOSUB COMPARE: ,Compare aggregates
      between paths.
GOSUB MACROSTATS: ''Compute averages,
      weighted averages, minimums,
      maximums.
GOSUB PRINTAGGCOMP: ''Print individual
      aggregates and comparisons.
GOSUB PRINTAGGSHORT: ''Print one-page
      individual aggregates and comparisons.
GOSUB PRINTAGGSUMM: ''Print summary
      of all aggregates & comparisons
NEXT length
RETURN
***** END OF MAIN MODULE *****
PVSETUP:
Submodule to open file and set initial values
   for MACROSTATS submodule.
pvfile$ = ''c:/basic/ms __sim/PointVal.csv''
      Input Point Values for weighted
      averages.
OPEN pvfile$ FOR INPUT AS #21
LINE INPUT #21, temps
pvtotal = 0
avgtotal = 0
FOR p = 0 TO 14
FOR t =I TO 3
   Initialize minimum values at high number.
   aggcsmin(p, t) = 999999999999#
   aggcompmin(p, t)—999999999999#
   aggmsmin(p, t) = 999999999999#
   aggtsmin(p, t) = 999999999999#
   compcsmin(p, t) = 999999999999#
   compcompmin(p, t) = 999999999999#
   compmsmin(p, t) = 999999999999#
   comptsmin(p, t)—999999999999#
   Initialize maximum values at low number.
   aggcsmax(p, t) = -999999999999#
   aggcompmax(p, t) m-999999999999#
   aggmsmax(p, t) —999999999999#
   aggtsmax(p, t) = -999999999999#
   compcsmax(p, t) = -999999999999#
   compcompmax(p, t) = -999999999999#
   compmsmax(p, t) = -999999999999#
   comptsmax(p, t) —999999999999#
Initialize average values at zero.
   aggcsavg(p, t)—0
   aggcompavg(p, t) = 0
   aggmsavg(p, t) = 0
   aggtsavg(p, t) = 0
   compcsavg(p, t) , 0
   compcompavg(p, t) = 0
   compmsavg(p, t) = 0
   comptsavg(p, t) = 0
Initialize weighted average values at zero.
   aggcswtd(p, t) —0
   aggcompwtd(p, t) = 0
   aggmswtd(p, t) —0
   aggtswtd(p, t) -0
   compcswtd(p, t) = 0
   compcompwtd(p, t) = 0
   compmswtd(p, t) = 0
   comptswtd(p, t) -0
NEXT t
NEXT p
RETURN ,***** END OF PVsetup
      SUBMODULE ***** READREVENUES:
Read in Microsoft's revenues by year.
   Revenues should only pertain to the
      monopoly portions of Microsoft's
      revenues.
Revenues should be converted to real dollars
      (relative to general prices) prior to input.
      Future revenues are projections, under
      the assumption that Microsoft remains a
      monopoly. rev$ = .c:/basic/ms__sim/
      ms__rev.csv'' ''Input revenues data.
DIM rev(30), discount(30)
''First read in revenue data.
OPEN rev$ FOR INPUT AS #1
FOR n = 1 TO 5
   LINE INPUT #I, temp$
NEXT n
FOR year—ystart TO yend ysub = year—
      ystart
   INPUT #I, year2, rev1, rev2, rev3, rev4
   IF year2 <> year THEN PRINT ''Year
      mismatch for revenue data:'';
year; year2
IF revstream = 1 THEN rev(ysub) = rev1
IF revstream = 2 THEN rev(ysub) = rev2
IF revstream = 3 THEN rev(ysub) = rev3
IF revstream = 4 THEN rev(ysub) = rev4
NEXT year
CLOSE #I
''Second compute adjustments to revenue
      data for computing aggregates.
, adjustment uses 7% per annum real
      interest/discount rate,
, adjusted to 2002 (cstart) dollars.
adjust = 1
   ysub = (cstart—1)—ystart
   discount(ysub) = adjust
FOR year = cstart—2 TO ystart STEP -1
   ysub = year—ystart
   adjust—adjust * 1.07
   discount(ysub) = adjust
NEXT year
   adjust = 1
FOR year = cstart TO yend
   ysub = year—ystart
   adjust = adjust / 1.07
   discount(ysub) = adjust
   NEXT year
''Third (optional) output adjusted revenue
      data.
rev2$—,,c:/basic/ms__sim/out/
      disc__rev.txt''Output adjusted revenues
      data.
OPEN rev2$ FOR OUTPUT AS #I
FOR year—ystart TO yend ysub = year—
      ystart
   PRINT #1, USING ''####''; year;
   PRINT #1, USING ''#####.######'';
      rev(ysub);
   PRINT #1, USING ''#####.######'';
      discount(ysub);
   PRINT #1, USING ''#####.######'';
      rev(ysub) * discount(ysub)
NEXT year
CLOSE #I
RETURN
***** END OF ReadRevenues SUBMODULE
      *****
READZCOUNT:
Submodule to read in the relationship
      between
   zcount and z from previous program,
      ''MS5TranR.bas''.
   DIM zpath(14)
   zcount$ = ''c:/basic/ms sim/out/zcount.txt''
      ''Input zcount data.
```

```
OPEN zcount$ FOR INPUT AS #I
LINE INPUT #I, temps
FOR zcount = 0 TO 9
INPUT #1, zcount2, zpath(zcount + 4)
IF zcount2 <> zcount THEN PRINT
  ''Zcount mismatch''; zcount;
zcount2
NEXT zcount
CLOSE #I
RETURN
,***** END OF ReadZcount SUBMODULE
  *****
f
f
FILENAMES1:
tran1$ = ,,c:/basic/ms—sim/out/
  tranl000.txt'' ''Input 1-firm
transition summary
tran2$ = ,,c:/basic/ms—sim/out/
  tran2000.txt'' Input 2-firm
transition summary
tran3$ = ''c:/basic/ms—sim/out/
  tran3000.txt'' Input 3-firm
transition summary
tran4$ = ,,c:/basic/ms—sim/out/
  tran4000.txt'' Input 4-firm
transition summary
tran5$ = ,,c:/basic/ms—sim/out/
  tranS000.txt'' Input 5-firm
transition summary
trpm0$ = .c:/basic/ms—sim/out/
  trpm0000.txt'' Input z=0.0 RPM
transition summary
trpm1$ = ''c:/basic/ms—sim/out/
  trpml000.txt'' Input z=0.1 RPM
transition summary
trpm2$ = .c:/basic/ms—sim/out/
  trpm2000.txt'' Input z=0.2 RPM
transition summary
trpm3$ = .c:/basic/ms—sim/out/
  trpm3000.txt'' Input z=0.3 RPM
transition summary
trpm4$ = .c:/basic/ms—sim/out/
  trpm4000.txt'' Input z=0.4 RPM
transition summary
trpm5$ = ,,c:/basic/ms—sim/out/
  trpmS000.txt'' Input z=0.5 RPM
transition summary
trpm6$ = ,,c:/basic/ms—sim/out/
  trpm6000.txt'' Input z=0.6 RPM
transition summary
trpm7$ = .c:/basic/ms sim/out/
  trpmT000.txt'' Input z=0.7 RPM
transition summary
trpm8$ = .c:/basic/ms—sim/out/
  trpmS000.txt'' Input z=0.8 RPM
transition summary
trpm9$ = .c:/basic/ms—sim/out/
  trpmg000.txt'' ''Input z=0.9 RPM
```

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```
ATTACHMENT Q
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transition summary year3$ = ,,c:/basic/
  ms—sim/out/year0003.txt'' ''Output 3-
  year factors by year
year5$ = ''c:/basic/ms—sim/out/
  year0005.txt'' ''Output 5-year factors by
  year
year8$ = ,,c:/basic/ms—sim/out/
  year0008.txt'' ''Output 8-year factors by
  year
aggr3$ = ,,c:/basic/ms sim/out/
  aggr0003.txt'' ''Output aggregate 3- year
  factors
aggr5$ = .c:/basic/ms—sim/out/
  aggr0005.txt'' ''Output aggregate 5- year
  factors
aggr8$ = ,,c:/basic/ms—sim/out/
  aggr0008.txt'' ''Output aggregate 8- year
  factors
aggc3$ = ,,c:/basic/ms—sim/out/
  aggc0003.txt'' ''One-page aggregate 3-
  year factors
aggc5$—.c:/basic/ms—sim/out/
  aggc0005.txt'' ''One-page aggregate 5-
  year factors
aggc8$ = .c:/basic/ms sim/out/
  aggc0008.txt'' ''One-page aggregate 8-
  year factors
IF cratio = 1 THEN crt$ = ''1''
IF cratio = 2 THEN crt$ = ''2''
IF cratio = 3 THEN crt$ = ''3''
IF cratio—4 THEN crt$—''4''
IF cratio = 5 THEN crt$ = ''5''
IF speed = 1 THEN sp$ = ''1''
IF speed = 2 THEN sp$ = ''2''
IF speed = 3 THEN sp$ = ''3''
IF port = 0 THEN prt$ = ''0''
IF port = 1 THEN prt$ = ''I''
IF port = 2 THEN prt$ = ''2''
IF port = 3 THEN prt$ = ''3''
IF port = 4 THEN prt$ = ''4''
replaces =crt$ + sp$ + prt$
MID$(tran1$, 26, 3) = replace$
MID$(tran2$, 26, 3) = replace$
MID$(tran3$, 26, 3)—replace$
MID$(tran4$, 26, 3)—replace$
MID$(tran5$, 26, 3) = replace$
MID$(trpm0$, 26, 3) = replace$
MID$(trpm1$, 26, 3)—replace$
MID$(trpm2$, 26, 3)—replace$
MID$(trpm3$, 26, 3) = replace$
MID$(trpm4$, 26, 3) = replace$
MID$(trpm5$, 26, 3)—replace$
MID$(trpm6$, 26, 3) = replace$
MID$(trpm7$, 26, 3) = replace$
MID$(trpm8$, 26, 3)—replace$
MID$(trpm9$, 26, 3) = replace$
MID$(year3S, 25, 3) = replace$
MID$(year5$, 25, 3) = replace$
MID$(year8$, 25, 3) = replace$
MID$(aggr3$, 25, 3) = replace$
MID$(aggr5$, 25, 3)—replace$
MID$(aggr8$, 25, 3) = replace$
MID$(aggc3$, 25, 3) . replace$
MID$(aggc5$, 25, 3) = replace$
MID$(aggc8$, 25, 3) = replace$
PRINT replace$; '''';
RETURN
''***** END OF FileNames1 SUBMODULE
  *****
TRANSREAD:
,Submodule to read in transitions data for
  time paths:
'' 1) Microsoft starts as monopoly.
'' 2) Microsoft starts as two APM firms.
'' 3) Microsoft starts as three APM firms.
'' 4–13) Microsoft starts as two RPM firms (z
  varies).
FOR p = 1 TO 13
IF p = 1 THEN filein$—tran1$
IF p = 2 THEN filein$ = tran2$
IF p = 3 THEN filein$ = tran3$
IF p = 4 THEN filein$ = trpm0S
IF p = 5 THEN filein$ = trpm1$
IF p = 6 THEN filein$—trpm2$
IF p = 7 THEN filein$—trpm3$
IF p = 8 THEN filein$ = trpm4$
IF p—9 THEN filein$ = trpm5$
IF p = I0 THEN filein$—trpm6$
IF p = ii THEN filein$ = trpm7$
IF p = 12 THEN filein$—trpm8S
IF p = 13 THEN filein$ = trpm9$
OPEN filein$ FOR INPUT AS #30
LINE INPUT #30, temp$
DIM cstot(15, ii), pimstot(15, 11),
    picomptot(15, 11), herf(15, 11)
F0R iter = 0 TO I0
  INPUT #30, iter2, cstot(p, iter), pimstot(p,
    iter), picomptot(p, iter)
  INPUT #30, mktshare1, mktshare2, herf(p,
    iter), firmnum1
  IF iter <> iter2 THEN PRINT ''Iteration
    mismatch #'', p, iter, iter1
NEXT iter
CLOSE #30
cstot(p, ii) = 0
pimstot(p, ii) E 0
picomptot(p, 11) = 0
herf(p, 11) = 0
NEXT p
RETURN
***** END OF TransRead SUBMODULE
    *****
NOREMEDY:
Submodule to compute outcomes for
    unlawful monopoly path, where
    Microsoft begins as monopoly in 1995,
    and continues as a monopoly through
    2025. (Path p=0)
DIM csy(30, 14), pimsy(30, 14), picompy(30,
    14), hhi(30, 14)
FOR year—ystart TO yend
  ysub = year—ystart
  tsub = 0
  csy(ysub, 0) = cstot(l, tsub)
  pimsy(ysub, 0) -pimstot(l, tsub)
  picompy(ysub, 0) = picomptot(l, tsub)
  hhi(ysub, 0) = herf(l, tsub)
  NEXT year
  RETURN
  ***** END OF NoRemedy SUBMODULE
    *****
  LAWFUL:
  Submodule to compute outcomes for
    lawful competitive path, where
    Microsoft begins as monopoly in 1995,
    but competitive conditions exist
    whereby competitors are free to enter.
    (Path p=14)
  plaw = 14
FOR year—ystart TO yend
  ysub = year—ystart
  tsub—ysub / tyears
  tsub1 = INT(tsub)
  tsub2 = tsub1 + 1
  tfrac1 = tsub—tsub1
  tfrac2 = tsub2 tsub
  csy(ysub, plaw) = cstot(l, tsub1) * tfrac2 +
    cstot(l, tsub2) *
  tfrac1
  pimsy(ysub, plaw) = pimstot(l, tsub1) *
    tfrac2 + pimstot(1, tsub2) * tfrac1
  picompy(ysub, plaw) = picomptot(l, tsub1)
    * tfrac2 + picomptot(l, tsub2) * tfrac1
  hhi(ysub, plaw) = herf(1, tsub1) * tfrac2 +
    herf(l, tsub2) * tfrac1
NEXT year
RETURN
***** END OF Lawful SUBMODULE *****
CONDUCT:
Submodule to compute outcomes for conduct
    remedy path, where Microsoft exists as
    a monopoly in 1995–2001, but
    competitive conditions begin in 2002
    (cstart) whereby competitors are free to
```

```
    enter. (Path p=1)
FOR year = ystart TO cstart—1
  ysub = year—ystart
  tsub = 0
  csy(ysub, I) = cstot(l, tsub)
  pimsy(ysub, I) = pimstot(l, tsub)
  picompy(ysub, 1) = picomptot(1, tsub)
  hhi(ysub, 1) = herf(l, tsub)
NEXT year
  Cstart1—cstart—1
FOR year = cstart TO yend
  ysub = year—ystart
  tsub = (year—cstart1) / tyears
  tsub1 = INT(tsub)
  tsub2 = tsub1 + 1
  tfrac1= tsub—tsub1
  tfrac2 = tsub2—tsub
  csy(ysub, I) = cstot(l, tsub1) * tfrac2 +
    cstot(l, tsub2) * tfrac1
  pimsy(ysub, I) = pimstot(1, tsub1) * tfrac2
    + pimstot(1, tsub2) * tfrac1
  picompy(ysub, 1) = picomptot(1, tsub1) *
    tfrac2 + picomptot(l, tsub2) * tfrac1
  hhi(ysub, 1) = herf(l, tsub1) * tfrac2 +
    herf(l, tsub2) * tfrac1
NEXT year
```

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```
RETURN
***** END OF Conduct SUBMODULE *****
STRUCTURAL:
Submodule to compute outcomes for
    structural remedy paths, where Microsoft
    exists as a monopoly in 1995–2004, but
    Microsoft is divided into 2 or 3 firms in
    2005 and competitive conditions exist
    thereafter.
  Path p=2, Microsoft divided into 2 APM
    firms.
  Path p=3, Microsoft divided into 3 APM
    firms.
  Paths p=4 thru p=13, Microsoft divided
    into 2 RPM firms, where z is allowed to
    vary.
  FOR p = 2 TO 13
  FOR year = ystart TO sstart—1
  ysub = year—ystart
  tsub = 0
  csy(ysub, p) = cstot(l, tsub)
  pimsy(ysub, p) = pimstot(1, tsub)
  picompy(ysub, p) = picomptot(l, tsub)
  hhi (ysub, p) = herf (I, tsub)
  NEXT year
FOR year = sstart TO yend
  ysub = year—ystart
  tsub = (year—sstart) / tyears
  tsub1 = INT(tsub)
  tsub2 = tsub1 + 1
  tfrac1 = tsub—tsub1
  tfrac2 = tsub2—tsub
  csy(ysub, p) = cstot(p, tsub1) * tfrac2 +
    cstot(p, tsub2) * tfrac1
  pimsy(ysub, p) = pimstot(p, tsub1) * tfrac2
    + pimstot(p, tsub2) * tfrac1
  picompy(ysub, p) = picomptot(p, tsub1) *
    tfrac2 + picomptot(p, tsub2) * tfrac1
  hhi(ysub, p) = herf(p, tsub1) * tfrac2 +
    herf(p, tsub2) * tfrac1
NEXT year
NEXT p
RETURN
***** END OF Structural SUBMODULE
    *****
PRINTYEARS:
```

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```
  Submodule to compute and print the data
    by year into files.
  Computed data consists of consumer
    surplus (cs), profits for Microsoft (pims),
    profits for competitors (picomp), and
    Herfindahl-Hershman Index (HHI).
  Data is computed for several time paths:
No remedy (continued monopoly) path=0;
Perfect conduct remedy starting in 2002
    (path=l);
Structural remedies starting in 2005
    (paths=2–13);
Lawful path (competitive behavior) since
    1995 (path=f4).
First adjust year factors by multiplying with
    revenue data.
The computed year data is expressed in real
    terms, but is not adjusted for 7%
    interest/discount rate.
FOR year = ystart TO yend
  ysub = year—ystart
  FOR path = 0 TO 14
  csy(ysub, path) = csy(ysub, path) *
    rev(ysub)
  pimsy(ysub, path) = pimsy(ysub, path) *
    rev(ysub)
  picompy(ysub, path) = picompy(ysub,
    path) * rev(ysub)
  NEXT path
NEXT year
Second (optional) print the year data into
    files.
IF tyears = 3 THEN OPEN year3$ FOR
    OUTPUT AS #6
IF tyears = 5 THEN OPEN year5$ FOR
    OUTPUT AS #6
IF tyears = 8 THEN OPEN year8$ FOR
    OUTPUT AS #6
FOR year = ystart TO yend
  ysub = year—ystart
  PRINT #6, USING ''####''; year;
  FOR path = 0 TO 14
  PRINT #6, USING ''#####.#########'';
    csy(ysub, path);
  NEXT path
  PRINT#6,
NEXT year
  PRINT #6,
FOR year = ystart TO yend ysub = year—
    ystart
  PRINT #6, USING ''####''; year;
  FOR path = 0 TO 14
  PRINT #6, USING ''#####.#########'';
    pimsy(ysub, path);
  NEXT path
  PRINT #6,
NEXT year
  PRINT #6,
FOR year = ystart TO yend
  ysub = year—ystart
```

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```
PRINT #6, USING ''####''; year;
FOR path = 0 TO 14
  PRINT #6, USING ''#####.#########'';
    picompy(ysub, path);
NEXT path
PRINT #6,
NEXT year
PRINT #6,
FOR year = ystart TO yend ysub = year—
    ystart
PRINT #6, USING ''####''; year;
FOR path = 0 TO 14
  tstot = csy(ysub, path) + pimsy(ysub, path)
    + picompy(ysub, path)
PRINT #6, USING ''#####.#########''; tstot;
NEXT path
PRINT #6,
NEXT year
PRINT #6,
FOR year = ystart TO yend ysub = year—
    ystart
PRINT #6, USING ''####''; year;
FOR path = 0 TO 14
PRINT #6, USING ''######.########'';
    hhi(ysub, ;
NEXT path
PRINT #6,
NEXT year
CLOSE #6
RETURN
***** END OF PrintYears SUBMODULE
    *****
AGGREGATE:
  Submodule to aggregate years for each
    path.
  Agg.. (p,t) is the aggregate for path p, time
    period t.
  p=0, no remedy path;
  p=1, 1-firm conduct remedy path;
  p=2, 2-firm structural remedy path.
  p=3, 3-firm structural remedy path.
  p=4 to p=13, 2-firm RPM structural remedy
    path.
  p=14, lawful path;
  t=1, 1995–2001; t=2, 2002–2025; t=3,
    1995–2025.
  AggCS = Aggregate for consumer surplus.
  AggComp = Aggregate for non-Microsoft
    profits.
  AggMS = Aggregate for Microsoft's profits.
```

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```
  AggTS = Aggregate for total surplus.
  First adjust the year data for 7% discount/
    interest rate.
FOR year = ystart TO yend
  ysub = year—ystart
FOR path = 0 TO 14
  csy(ysub, path) = csy(ysub, path) *
    discount(ysub)
  pimsy(ysub, path) = pimsy(ysub, path) *
    discount(ysub)
  picompy(ysub, path) = picompy(ysub,
    path) * discount(ysub)
NEXT path
NEXT year
  Second aggregate the data for the three
    time periods.
FOR path = 0 TO 14
  cstemp = 0
  picomptemp = 0
  mstemp = 0
FOR year = ystart TO cstart—1
  ysub = year—ystart
  cstemp = cstemp + csy(ysub, path)
  picomptemp = picomptemp +
    picompy(ysub, path)
  mstemp = mstemp + pimsy(ysub, path)
NEXT year
  aggcs(path, 1) = cstemp
  aggcomp (path, 1) = picomptemp
  aggms (path, 1) = mstemp
  aggts(path, 1) = cstemp + picomptemp +
    mstemp
  cstemp = 0
  picomptemp = 0
  mstemp = 0
FOR year = cstart TO yend
  ysub = year ystart
  cstemp = cstemp + csy(ysub, path)
```

```
   picomptemp = picomptemp +
      picompy(ysub, path)
   mstemp = mstemp + pimsy(ysub, path)
NEXT year
   aggcs(path, 2) = cstemp
   aggcomp(path, 2) = picomptemp
   aggms(path, 2) = mstemp
   aggts(path, 2) = cstemp + picomptemp +
      mstemp
   aggcs(path, 3) = aggcs(path, I) + aggcs(path,
      2)
   aggcomp(path, 3) = aggcomp(path, 1) +
      aggcomp(path, 2)
   aggms(path, 3) = aggms(path, 1) +
      aggms(path, 2)
   aggts(path, 3) = aggts(path, I) + aggts(path,
      2)
NEXT path
RETURN
```

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```
END OF Aggregate SUBMODULE *****
COMPARE:
   Submodule to compare aggregates between
      different time paths.
   Comp.. (c,t) is comparison c for time period
      t.
   c=0, no remedy path minus lawful
      competitive path.
   c=1, 1-firm conduct remedy path minus
      lawful competitive path.
   c=2, 2-firm structural remedy path minus
      lawful competitive path.
   c=3, 3-firm structural remedy path minus
      lawful competitive path.
   c=4, 4-firm structural remedy path minus
      lawful competitive path.
   c=5, 5-firm structural remedy path minus
      lawful competitive path.
   t=1 1995–2001; t=2, 2002–2025; t=3, 1995–
      2025;
   CompCS = Comparison for consumer
      surplus.
   CompComp = Comparison non-Microsoft
      profits.
   CompMS = Comparison for Microsoft's
      profits.
   CompTS = Comparison for total surplus.
FOR c = 0 TO 13
FOR t = 1 TO 3
   compcs(c, t) = aggcs(c, t) -aggcs(plaw, t)
   compcomp(c, t) = aggcomp(c, t)
      aggcomp(plaw, t)
   compms(c, t) = aggms(c, t) -aggms(plaw, t)
   compts(c, t) = aggts(c, t)—aggts(plaw, t)
NEXT t
NEXT c
RETURN
***** END OF Compare SUBMODULE
      *****
MACROSTATS:
   Submodule to compute averages, weighted
      averages, minimums, maximums.
INPUT #21, cratio2, speed2, port2, tyears2,
      pvtemp
   IF cratio <> cratio2 THEN PRINT ''Cost-
      ratio mismatch:''; cratio; cratio2
   IF speed <> speed2 THEN PRINT ''Speed
      mismatch:''; speed; speed2
   IF tyears <> tyears2 THEN PRINT ''Tyears
      mismatch:''; tyears; tyears2
   IF port <> port2 THEN PRINT ''Portion
      mismatch:''; port; port2
```

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```
   IF port >= 0 THEN ''Always true; change
      to restrict statistics gathering.
   pvtotal = pvtotal + pvtemp
   avgtotal = avgtotal + 1
FOR p = 0 TO 14
FOR t = 1 TO 3
   First put numbers into temporary variable
      slots.
   aggcstemp = aggcs(p, t)
   aggcomptemp = aggcomp(p, t)
   aggmstemp = aggms(p, t)
   aggtstemp = aggts(p, t)
   compcstemp = compcs(p, t)
   compcomptemp = compcomp(p, t)
   compmstemp = compms(p, t)
   comptstemp = compts(p, t)
   Second compute minimum values
   IF aggcstemp < aggcsmin(p, t) THEN
      aggcsmin(p, t) = aggcstemp
   IF aggcomptemp < aggcompmin(p, t) THEN
      aggcompmin(p, t) = aggcomptemp
   IF aggmstemp < aggmsmin(p, t) THEN
      aggmsmin(p, t) = aggmstemp
   IF aggtstemp < aggtsmin(p, t) THEN
      aggtsmin(p, t) = aggtstemp
   IF compcstemp < compcsmin(p, t) THEN
      compcsmin(p, t)— compcstemp
   IF compcomptemp < compcompmin(p, t)
      THEN compcompmin(p, t) =
      compcomptemp
   IF compmstemp < compmsmin(p, t) THEN
      compmsmin(p, t) = compmstemp
   IF comptstemp < comptsmin(p, t) THEN
      comptsmin(p, t) = comptstemp
   Third compute maximum values
   IF aggcstemp > aggcsmax(p, t) THEN
      aggcsmax(p, t) = aggcstemp
   IF aggcomptemp > aggcompmax(p, t)
      THEN aggcompmax(p, t) = aggcomptemp
   IF aggmstemp > aggmsmax(p, t) THEN
      aggmsmax(p, t) = aggmstemp
   IF aggtstemp > aggtsmax(p, t) THEN
      aggtsmax(p, t) = aggtstemp
   IF compcstemp > compcsmax(p, t) THEN
      compcsmax(p, t) = compcstemp
   IF compcomptemp > compcompmax(p, t)
      THEN compcompmax(p, t) =
      compcomptemp
   IF compmstemp > compmsmax(p, t) THEN
      compmsmax(p, t) = compmstemp
   IF comptstemp > comptsmax(p, t) THEN
      comptsmax(p, t) = comptstemp
   Fourth compute average values
```

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```
   aggcsavg(p, t) = aggcsavg(p, t) + aggcstemp
   aggcompavg(p, t) = aggcompavg(p, t) +
      aggcomptemp
   aggmsavg(p, t) = aggmsavg(p, t) +
      aggmstemp
   aggtsavg(p, t) = aggtsavg(p, t) + aggtstemp
   compcsavg(p, t) = compcsavg(p, t) +
      compcstemp
   compcompavg(p, t) = compcompavg(p, t) +
      compcomptemp
   compmsavg(p, t) = compmsavg(p, t) +
      compmstemp
   comptsavg(p, t) = comptsavg(p, t) +
      comptstemp
   Fifth compute weighted average values
   aggcswtd(p, t) = aggcswtd(p, t) + aggcstemp
      * pvtemp
   aggcompwtd(p, t) = aggcompwtd(p, t) +
      aggcomptemp * pvtemp
   aggmswtd(p, t) = aggmswtd(p, t) +
      aggmstemp * pvtemp
   aggtswtd(p, t) = aggtswtd(p, t) + aggtstemp
      * pvtemp
   compcswtd(p, t) = compcswtd(p, t) +
      compcstemp * pvtemp
   compcompwtd(p, t) = compcompwtd(p, t)
      + compcomptemp * pvtemp
   compmswtd(p, t) = compmswtd(p, t) +
      compmstemp * pvtemp
   comptswtd(p, t) = comptswtd(p, t) +
      comptstemp * pvtemp
NEXT t
NEXT p
END IF
RETURN
''***** END OF MacroStats SUBMODULE
      *****
PRINTAGGCOMP :
''Submodule to print aggregates and
      comparisons.
IF tyears = 3 THEN OPEN aggr3$ FOR
      OUTPUT AS #7
IF tyears = 5 THEN OPEN aggr5$ FOR
      OUTPUT AS #7
IF tyears = 8 THEN OPEN aggr8$ FOR
      OUTPUT AS #7
''First print aggregates.
FOR path = 0 TO 14
   IF path = 0 THEN PRINT #7, ''Aggregates
      for
No Remedy Path: ''
   IF path = 1 THEN PRINT #7, ''Aggregates
      for
Conduct Remedy: ''
   IF path = 2 THEN PRINT #7, ''Aggregates
      for
APM, 2- firms Remedy : ''
   IF path = 3 THEN PRINT #7, ''Aggregates
      for
APM, 3 -firms Remedy: ''
   IF path >= 4 AND path <= 13 THEN
   PRINT #7, ''Aggregates for RPM, z='';
   PRINT #7, USING ''#.###''; zpath(path);
   PRINT #7, ''Remedy: ''
   END IF
```

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```
   IF path = 14 THEN PRINT #7, ''Aggregates
      for
   Lawful Path: ''
   PRINT #7, ''Time ''; ''CS ''; ''nonMSpi ,,;
      ,,
MSpi ''; ''TS ''
   FOR t = 1 TO 3
   IF t = 1 THEN PRINT #7, ''Past: '';
   IF t = 2 THEN PRINT #7, ''Future: '';
   IF t = 3 THEN PRINT #7, ''Total: -;
   PRINT #7, USING ''#####.#######,,;
      aggcs(path, t) ; aggcomp(path, t) ;
      aggms(path, t) ; aggts(path, t)
NEXT t
PRINT #7,
NEXT path
   ''Second print comparisons.
FOR c = 0 TO 13
   IF c = 0 THEN PRINT #7, ''Comparing No
      Remedy minus LawfulPath: ''
   IF c = 1 THEN PRINT #7, ''Comparing
      Conduct minus LawfulPath: ''
   IF c = 2 THEN PRINT #7, ''Comparing
      APM, 2-firms minus LawfulPath: ''
   IF c = 3 THEN PRINT #7, ''Comparing
      APM, 3-firms minus LawfulPath: ''
   IF c >= 4 AND c <= 13 THEN
   PRINT #7, ''Comparing RPM, z='' ;
   PRINT #7, USING ''#.###''; zpath(c);
PRINT #7, ''minus LawfulPath: ''
END IF
PRINT #7, ''Time ''; ''CS ''; ''nonMSpi ''; ,,
```

```
MSpi ''; ''TS ''
FOR t = 1 TO 3
  IF t = 1 THEN PRINT #7, ''Past: '',;
  IF t = 2 THEN PRINT #7, ''Future: '';
  IF t = 3 THEN PRINT #7, ''Total: '';
  PRINT #7, USING ''#####.#######.;
    compcs(c, t); compcomp(c, t); compms(c,
    t); compts(c, t)
NEXT t
PRINT #7,
NEXT c
CLOSE #7
RETURN
''***** END OF PrintAggComp
    SUBMODULE *****
```

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```
PRINTAGGSHORT:
  ''Submodule to print one-page summary of
  ''aggregates and comparisons.
IF tyears = 3 THEN OPEN aggc3$ FOR
    OUTPUT AS #7
IF tyears = 5 THEN OPEN aggc5$ FOR
    OUTPUT AS #7
IF tyears = 8 THEN OPEN aggc8$ FOR
    OUTPUT AS #7
''First print totals for alternative remedies.
PRINT #7, ''Total Aggregates Remedies:''
PRINT #7, ''Remedy ''; ''CS ''; ,,
MSpi ''; ''TS ''
FOR path = 0 TO 14
  IF path = 0 THEN PRINT #7, ''No-Remedy:
    '';
  IF path = 1 THEN GOSUB AGGSUB:
  IF path = 1 THEN path = 2
  IF path = 2 THEN PRINT #7, ''APM, 2-
    firms: ,;
  IF path = 3 THEN PRINT #7, ''APM, 3-
    firms: '';
  IF path >= 4 AND path <= 13 THEN
  PRINT #7, ''RPM, z='';
  PRINT #7, USING ''#.###''; zpath(path);
  PRINT #7, '': '';
END IF
IF path = 14 THEN PRINT #7, ''Lawful Path:
    '';
PRINT #7, USING ''#####.#######'';
    aggcs(path, 3); aggcomp(path, 3);
    aggms(path, 3); aggts(path, 3)
NEXT path
PRINT #7,
  ''Second print comparisons.
PRINT #7, ''Comparing Remedies minus
    Lawful Path:''
PRINT #7, ''Remedy ''; ''CS ''; ''nonMSpi ,,;
    ,,
  MSpi ''; ''TS ''
FOR c = 0 TO 13
  IF c = 0 THEN PRINT #7, ''No-Remedy: '';
  IF c = 1 THEN GOSUB COMPSUB:
  IF c = 1 THEN c = 2
  IF c = 2 THEN PRINT #7, ''APM, 2-firms:
    '';
  IF c = 3 THEN PRINT #7, ''APM, 3-firms:
    '';
  IF c >= 4 AND c <= 13 THEN
  PRINT #7, ''RPM, z='';
  PRINT #7, USING ''#.###''; zpath(c);
  PRINT #7, '': '';
  END IF
  PRINT #7, USING ''#####.#######'';
    compcs(c, 3); compcomp(c, 3);
  Alternative
nonMSpi ''; ''
```

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```
compms(c, 3); compts(c, 3)
NEXT c
CLOSE #7
RETURN
''***** END OF PrintAggShort SUBMODULE
    *****
AGGSUB:
  ''Submodule of PRINTAGGSHORT
    Submodule,
  '' to print out variations on conduct
    remedy.
  temp0cs = aggcs(0, 3)
  temp0comp = aggcomp(0, 3)
  temp0ms = aggms(0, 3)
  temp0ts = aggts(0, 3)
  temp1cs= aggcs(l, 3)
  temp1comp = aggcomp (1, 3)
  temp1ms = aggms(l, 3)
  temp1ts = aggts(l, 3)
  temp2cs = aggcs(2, 3)
  temp2comp = aggcomp(2, 3)
  temp2ms = aggms(2, 3)
  temp2ts = aggts(2, 3)
GOSUB PRINTSUB:
RETURN
''***** END OF AggSub SUBMODULE
    *****
COMPSUB:
''Submodule of PRINTAGGSHORT
    Submodule,
  '' to print out variations on conduct
    remedy.
  temp0cs = compcs(0, 3)
  temp0comp = compcomp(0, 3)
  temp0ms = compms(0, 3)
  temp0ts = compts(0, 3)
  temp1cs = compcs(1, 3)
  temp1comp = compcomp(l, 3)
  temp1ms = compms(1, 3)
  temp1ts = compts(l, 3)
  temp2cs = compcs(2, 3)
  temp2comp = compcomp(2, 3)
  temp2ms = compms(2, 3)
  temp2ts = compts(2, 3)
GOSUB PRINTSUB:
RETURN
```

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```
''***** END OF CompSub SUBMODULE
    *****
PRINTSUB:
''Submodule of two submodules of the
    PRINTAGGSHORT
  '' submodule, to print variations on
    conduct remedy.
''Compute and print 20% effective conduct
    remedy. PRINT #7, ''20% Conduct:'';
PRINT #7, USING ''#####.#######''; temp0cs
    * .8 + temp1cs * .2;
PRINT #7, USING ''#####.#######'';
    temp0comp * .8 + temp1comp * .2;
PRINT #7, USING ''#####.#######'';
    temp0ms * .8 + temp1ms * .2;
  PRINT #7, USING ''#####.#######'';
    temp0ts * .8 + temp1ts * .2
''Compute and print 40% effective conduct
    remedy. PRINT #7, ''40% Conduct:'';
PRINT #7, USING ''#####.#######''; temp0cs
    * .6 + temp1cs * .4;
PRINT #7, USING ''#####.#######'';
    temp0comp * .6 + temp1comp * .4;
PRINT #7, USING ''#####.#######'';
    temp0ms * .6 + temp1ms * .4;
  PRINT #7, USING ''#####.#######'';
    temp0ts * .6 + temp1ts * .4
''Compute and print 60% effective conduct
    remedy. PRINT #7, ''60% Conduct:'';
PRINT #7, USING ''#####.#######''; temp0cs
    * .4 + temp1cs * .6;
PRINT #7, USING ''#####.#######'';
    temp0comp * .4 + temp1comp * .6;
PRINT #7, USING ''#####.#######'';
    temp0ms * .4 + temp1ms * .6;
  PRINT #7, USING ''#####.#######'';
    temp0ts * .4 + temp1ts * .6
''Compute and print 80% effective conduct
    remedy. PRINT #7, ''80% Conduct:'';
PRINT #7, USING ''#####.#######''; temp0cs
    * .2 + temp1cs * .8;
PRINT #7, USING ''#####.#######'';
    temp0comp * .2 + temp1comp * .8;
PRINT #7, USING ''#####.#######'';
    temp0ms * .2 + temp1ms * .8;
  PRINT #7, USING ''#####.#######'';
    temp0ts * .2 + temp1ts * .8
''Compute and print 100% effective conduct
    remedy. PRINT #7, ''100% Conduct:'';
PRINT #7, USING ''#####.#######'';
    temp1cs;
PRINT #7, USING ''#####.#######'';
    temp1comp;
PRINT #7, USING ''#####.#######'';
    temp1ms;
PRINT #7, USING ''#####.#######''; temp1ts
''Compute and print the two-monopolies
    structural remedy. PRINT #7, ''2-
    Monopolies:'';
PRINT #7, USING ''#####.#######''; temp2cs
    / 3 + temp1cs * 2 / 3Q;
```

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```
PRINT #7, USING ''#####.#######-;
    temp2comp / 3 + temp1comp * 2 / 3;
PRINT #7, USING ''#####.#######'';
    temp2ms / 3 + temp1ms * 2 / 3;
PRINT #7, USING ''#####.#######''; temp2ts
    / 3 + temp1ts * 2 / 3
RETURN
''***** END OF PrintSub SUBMODULE
    ***** t
PRINTSTATS :
  ''Submodule to print averages, weighted
    averages, minimums, maximums.
CLOSE #21
''First print out minimums.
MID$(aggr8$, 25, 3) = ''MIN''
MID$(aggc8$, 25, 3) = ''MIN''
FOR p = 0 TO 14
FOR t = 1 TO 3
  aggcs(p, t) = aggcsmin(p, t)
  aggcomp(p, t) = aggcompmin(p, t)
  aggms (p, t) = aggmsmin (p, t)
  aggts(p, t) = aggtsmin(p, t)
  compcs(p, t) = compcsmin(p, t)
  compcomp(p, t) = compcompmin(p, t)
  compms(p, t) = compmsmin(p, t)
  compts(p, t) = comptsmin(p, t)
NEXT t
NEXT p
GOSUB PRINTAGGCOMP :
GOSUB PRINTAGGSHORT :
''Second print out maximums.
MID$(aggr8$, 25, 3)—''MAX''
MID$(aggc8$, 25, 3) = ''MAX''
FOR p = 0 TO 14
FOR t = 1 TO 3
  aggcs(p, t) = aggcsmax(p, t)
  aggcomp(p, t) = aggcompmax(p, t)
  aggms(p, t) = aggmsmax(p, t)
  aggts(p, t) = aggtsmax(p, t)
  compcs(p, t) = compcsmax(p, t)
  compcomp(p, t) = compcompmax(p, t)
  compms(p, t) = compmsmax(p, t)
```

compts(p, t) = comptsmax(p, t)
NEXT t

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NEXT p
GOSUB PRINTAGGCOMP :
GOSUB PRINTAGGSHORT:
MID$(aggr8$, 25, 3) = ''AVG''
MID$(aggc8$, 25, 3)—''AVG''
FOR p = 0 TO 14
FOR t = 1 TO 3
aggcs(p, t) = aggcsavg(p, t) / avgtotal
aggcomp(p, t) = aggcompavg(p, t) / avgtotal
aggms(p, t) = aggmsavg(p, t) / avgtotal
aggts(p, t) = aggtsavg(p, t) / avgtotal
compcs(p, t) = compcsavg(p, t) / avgtotal
compcomp(p, t) = compcompavg(p, t) / avgtotal
compms(p, t) = compmsavg(p, t) / avgtotal
compts(p, t) = comptsavg(p, t) / avgtotal
NEXT t
NEXT p
GOSUB PRINTAGGCOMP :
GOSUB PRINTAGGSHORT:
''Fourth print out weighted averages.
MID$(aggr8$, 25, 3) = ''WTD''
MID$(aggc8$, 25, 3) = ''WTD''
FOR p = 0 TO 14
FOR t = 1 TO 3
aggcs(p, t) = aggcswtd(p, t) / pvtotal
aggcomp(p, t) = aggcompwtd(p, t) / pvtotal
aggms(p, t) = aggmswtd(p, t) / pvtotal
aggts(p, t) = aggtswtd(p, t) / pvtotal
compcs(p, t) = compcswtd(p, t) / pvtotal
compcomp(p, t) = compcompwtd(p, t) / pvtotal
compms(p, t) = compmswtd(p, t) / pvtotal
compts(p, t) = comptswtd(p, t) / pvtotal
NEXT t
NEXT p
GOSUB PRINTAGGCOMP:
GOSUB PRINTAGGSHORT:
RETURN
,***** END OF PrintStats SUBMODULE *****
''**********END OF Program ..MS6Summ.bas''.**********
.**********LAST OF SERIES OF SIX PROGRAMS**********

MTC–000361—0199

Attachment R.

Contents of File ''MS—Rev.csv''.

The ''MS—Rev.csv'' file is a needed input file for the ''MS6Summ.bas'' computer program.

Microsoft Corporation,,,,

''Real Annual Revenue, 2001 dollars (billions).'' ....

,,,,''Platforms,''

Calendar,Desktop,Platforms &,Platforms &,Applications

Year,Platforms,Enterprise,Applications,& Enterprise

1995, 3.0035316, 4.207892342, 6.855180159, 8.059540901

1996, 3.727131393, 5.347349902, 8.460443423, 10.08066193

1997, 5.035883238, 7.458570139, 11.21720468, 13.63989158

1998, 6.454595209, 9.391381895, 14.2045433, 17.14132999

1999, 7.693463232, 12.21087139, 17.14963014, 21.6670383

2000, 8.186611784, 13.1922708, 17.72984147, 22.73550048

2001, 7.2043035, 11.34811009, 16.7864329, 20.93023949

2002, 9.14247463, 14.95519357, 19.79287211, 25.60559105

2003, 10.58883605, 17.7114904, 22.8211218, 29.94377615

2004, 12.00140966, 20.45382314, 25.77105291, 34.22346639

2005, 13.36456237, 23.13621511, 28.61300897, 38.38466171

2006, 14.67011841, 25.72877347, 31.33233776, 42.39099283

2007, 15.91566918, 28.21539046, 33.92583204, 46.22555332

2008, 17.10294472, 30.59079228, 36.39838725, 49.88623481

2009, 18.23641933, 32.85759662, 38.760186, 53.38136329

2010, 19.3222093, 35.02373565, 41.02449912, 56.72602548

2011, 20.36725465, 37.10038404, 43.20607024, 59.93919963

2012, 21.3787453, 39.10039929, 45.31999424, 63.04164823

2013, 22.36374177, 41.03721389, 47.38098491, 66.05445702

2014, 23.32894261, 42.92409405, 49.40293308, 68.99808453

2015, 24.28055711, 44.77367791, 51.39867211, 71.89179291

2016, 25.22425072, 46.59771715, 53.37988484, 74.75335127

2017, 26.1651381, 48.40695999, 55.35710303, 77.59892492

2018, 27.107806, 50.21112823, 57.33976344, 80.44308567

2019, 28.05635302, 52.01895334, 59.33629582, 83.29889613

2020, 29.01443792, 53.83824715, 61.35422596, 86.17803519

2021, 29.98533062, 55.6759901, 63.40028299, 89.09094247

2022, 30.97196248, 57.5384259, 65.48050406, 92.04696748

2023, 31.97697372, 59.43115563, 67.60033258, 95.05451449

2024, 33.002757, 61.35922702, 69.76470794, 98.12117797

2025, 34.0514965, 63.32721672, 71.97814598, 101.2538662

2026, 35.1252027, 65.3393044, 74.24481019, 104.4589119

2027, 36.22574276, 67.39933867, 76.56857413, 107.74217

2028, 37.35486715, 69.51089506, 78.95307569, 111.i091036

2029, 38.51423258, 71.67732649, 81.40176416, 114.5648581

2030, 39.70542191, 73.90180714, 83.91794075, 118.114326

MTC–00030631—0200

Attachment S.

Contents of File ''PointVal.csv''.

The ''PointVal.csv'' file is a needed input file for the ''MS6Summ.bas'' computer program.

Cost-ratio,Speed,Portion,T-years,Point Values

1,1,0,3,1
1,1,0,5,1
1,1,0,8,1
1,1,1,3,2
1,1,1,5,2
1,1,1,8,2
1,1,2,3,2
1,1,2,5,2
1,1,2,8,2
1,1,3,3,2
1,1,3,5,2
1,1,3,8,2
1,1,4,3,1
1,1,4,5,1
1,1,4,8,1
1,2,0,3,1
1,2,0,5,1
1,2,0,8,1
1,2,1,3,2
1,2,1,5,2
1,2,1,8,2
1,2,2,3,2
1,2,2,5,2
1,2,2,8,2
1,2,3,3,2
1,2,3,5,2
1,2,3,8,2
1,2,4,3,1
1,2,4,5,1
1,2,4,8,1
1,3,0,3,1
1,3,0,5,1
1,3,0,8,1
1,3,1,3,2
1,3,1,5,2
1,3,1,8,2
1,3,2,3,2
1,3,2,5,2
1,3,2,8,2
1,3,3,3,2
1,3,3,5,2
1,3,3,8,2
1,3,4,3,1
1,3,4,5,1
1,3,4,8,1

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2,1,0,3,1
2,1,0,5,1
2,1,0,8,1
2,1,1,3,2
2,1,1,5,2
2,1,1,8,2
2,1,2,3,2
2,1,2,5,2
2,1,2,8,2
2,1,3,3,2
2,1,3,5,2
2,1,3,8,2
2,1,4,3,1
2,1,4,5,1
2,1,4,8,1
2,2,0,3,1
2,2,0,5,1
2,2,0,8,1
2,2,1,3,2
2,2,1,5,2
2,2,1,8,2
2,2,2,3,2
2,2,2,5,2
2,2,2,8,2
2,2,3,3,2
2,2,3,5,2
2,2,3,8,2
2,2,4,3,1
2,2,4,5,1
2,2,4,8,1
2,3,0,3,1
2,3,0,5,1
2,3,0,8,1
2,3,1,3,2
2,3,1,5,2
2,3,1,8,2

2,3,2,3,2
2,3,2,5,2
2,3,2,8,2
2,3,3,3,2
2,3,3,5,2
2,3,3,8,2
2,3,4,3,1
2,3,4,5,1
2,3,4,8,1

MTC–0003061–0202

3,1,0,3,2
3,1,0,5,2
3,1,0,8,2
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3,1,1,8,4
3,1,2,3,4
3,1,2,5,4
3,1,2,8,4
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3,1,3,8,4
3,1,4,3,2
3,1,4,5,2
3,1,4,8,2
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3,2,0,5,2
3,2,0,8,2
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3,2,1,5,4
3,2,1,8,4
3,2,2,3,4
3,2,2,5,4
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3,2,3,8,4
3,2,4,3,2
3,2,4,5,2
3,2,4,8,2
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3,3,0,8,2
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3,3,1,5,4
3,3,1,8,4
3,3,2,3,4
3,3,2,5,4
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3,3,4,5,2
3,3,4,8,2

MTC–00030631—0203

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4,1,0,8,2
4,1,1,3,4
4,1,1,5,4
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4,1,2,5,4
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4,1,3,8,4
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4,1,4,8,2
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4,2,1,5,4
4,2,1,8,4
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4,2,2,5,4
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4,2,3,8,4
4,2,4,3,2
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4,2,4,8,2
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4,3,0,5,2
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4,3,1,5,4
4,3,1,8,4
4,3,2,3,4
4,3,2,5,4
4,3,2,8,4
4,3,3,3,4
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4,3,4,3,2
4,3,4,5,2
4,3,4,8,2

MTC–00030631–0204

5,1,0,3,2
5,1,0,5,2
5,1,0,8,2
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5,1,1,5,4
5,1,1,8,4
5,1,2,3,4
5,1,2,5,4
5,1,2,8,4
5,1,3,3,4
5,1,3,5,4
5,1,3,8,4
5,1,4,3,2
5,1,4,5,2
5,1,4,8,2
5,2,0,3,2
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5,2,0,8,2
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5,2,1,8,4
5,2,2,3,4
5,2,2,5,4
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5,2,3,8,4
5,2,4,3,2
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5,3,2,5,4
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5,3,3,3,4
5,3,3,5,4
5,3,3,8,4
5,3,4,3,2
5,3,4,5,2
5,3,4,8,2

Review of Industrial Organization 11: 533–550, 1996.

??? 1996 Kluwer Academic Publishers. printed in the Netherlands.

Using Relative Profit Incentives to Prevent Collusion

CARL LUNDGREN*

1212 W. Jefferson, Apt. A, Springfield, IL 62702, U.S.A. Abstract. This paper describes a new economic method for preventing oligopoly collusion. The method eliminates incentives for collusion by making managerial compensation depend on relative profits rather than absolute profits. This alteration of managerial incentives sets up a zero-sum game among the firms in an industry, yielding the result that firms no longer have incentive to collude, either actually or tacitly, with regard to prices or outputs. The method also ameliorates the imperfectly competitive outcomes which can result from even noncooperative oligopoly interactions.

Key words: Oligopoly, collusion, relative profits, zero-sum game, managerial incentives. Introduction The purpose of this paper is to present an alternative method for preventing collusion,[1] The method eliminates incentives for both actual and tacit collusion, and ameliorates the imperfectly competitive outcomes which can result from even noncooperative oligopoly interactions. The method prevents exploitation of oligopoly power, but is not a general cure for the market power problems of either strict monopoly or monopolistic competition.

Section I introduces and verbally describes the basic method of providing relative profit maximizing incentives for owners and managers of business firms. Section I/reviews some related literature. Section HI illustrates the method using a particular mathematical example. Section IV discusses some practical concerns related to implementing the method. Section V focuses on how firm owners can be prevented from making management stress absolute profits over relative profits. Section VI concludes. Three mathematical appendices derive: (A) the optimal weighting of rival firms'' profits under a relative profit incentive scheme; 03) short-run equilibrium; and ((2) Bertrand equilibrium for differentiated products.

ldquo;The author would like to thank numerous individuals for their comments on previous versions of this paper.

I. Basic Method

In an industry structure with only a few firms, collusion is a serious possibility, even when it is illegal. Tacit collusion, which does not require illegal communication among conspirators, can also occur.

The basic concept which underlies this proposed method is the perception that causing managers of firms to participate in a zero-sum game, or its equivalent or near-equivalent, will hinder or prevent cooperation or collusion among the managers

[1] NOTICE OF PATENT PENDING: This paper describes a method of economic regulation for preventing collusion upon which the author and inventor has applied for a patent. A patent on this invention, if such should be granted, would only restrict actual use of the described invention; it would not restrict in any way the verbal or written discussion, description, or criticism of that invention.

of different firms. In a zero-sum game it is possible for one firm's manager to gain only if another firm's manager loses, since there is only a fixed quantity of rewards to go around. In a nonzero-sum game it is frequently possible for everyone to gain through cooperation (collusion) as opposed to noncooperation, since cooperation may increase the total quantity of rewards available to go around.

A zero-sum game for industry may be instituted by forcing firms as a whole to participate in a zero-sum game and/or by arranging zero-sum compensation arrangements for the managers of different firms. When the goal of firms is maximizing profits, instituting a zero-sum game in profits means that firms are motivated to maximize relative profits rather than absolute profits. That is, firms attempt to maximize the difference of their own firm's absolute profits relative to an average of other firms'' absolute profits. Alternatively and equivalently, firms attempt to maximize the difference of their own firm's absolute profits relative to the average absolute profits era group of competing firms, of which group the firm is a member.

A good way to institute a zero-sum game among firms in an industry is by motivating managers to seek relative profits rather than absolute profits. The usual way to motivate managers to pursue a particular goal is to pay managers in accordance with success in achieving that goal. If the goal is to maximize absolute profits, managers should expect to receive more compensation, the higher profits turn out to be. By altering the rules for managerial compensation in the appropriate way, we can make sure that managers are motivated to maximize relative profits rather than absolute profits.

The key to understanding this method rests upon the seemingly trivial observation that successful collusion increases the absolute profits of firms, but does not increase the relative profits of firms. When firms collusively raise prices, the relative profits of each firm cannot increase on average. Only one of two things can happen: Either (1) absolute profits of each firm rise equally and relative profits of each firm stay the same, or (2) the absolute profits of each firm do not rise equally, in which case some firms gain relative profit and some firms lose relative profit. If the second case holds true, any firm which loses relative profit from the collusive agreement will want to cheat (assuming it seeks relative profit), since it gains relative profit in the short run by cheating and it gains relative profit in the long run by breaking up the collusive agreement. If the first case holds true, no firm gains relative profit by maintaining the collusive agreement in the 13ng run, and every farm gains relative profit by cheating in the short run. In a relative profit maximizing industry there is no incentive for all the firms to enter into or maintain any collusive agreement. Competitive behavior must result,

Setting up a zero-sum game in profits does not in any way require placing any cap or limitation on the amount of absolute or relative profit which any individual firm may earn. Rather, there is simply a definitional change in the type of profit which a firm or firm manager is expected to maximize. The main difference between absolute profit maximizing (APM) firms and relative profit maximizing (RPM) firms is that RPM firms are not motivated to collude. In the absence of collusion, absolute profit and relative profit are very similar. RPM firms are just as strongly motivated as APM firms to seek other sources of profit, such as reducing costs of production or improving product quality. RPM firms are not deliberately inefficient nor do they try to slow down technical progress. They merely refuse to collude, even tacitly.
.

Government is assumed able to observe costs and revenues ex post, but is not assumed able to observe either demand curves or cost functions. The proposed regulation is not heavy-handed. Price controls, profit controls, central command and the like are no part of the proposal. Under the relative profit scheme of regulation, firms are perfectly free to try to make as much profit as they can, set whatever prices they wish, sell whatever Products they wish, and to enter or exit industries and product lines as they please. Application of the RPM regulatory scheme need not extend beyond those firms which are most likely to collude (i.e., the ?? firms within an oligopoly industry). Competitive industries, of course, do not ?? to be included (though no harm would come if they were).

II. Review of Some Related Literature

Only in Donaldson and Neary (1984) does there first appear a suggestion that the principles of relative profit maximizing might be put to practical use by altering the incentives of firms or managers. Donaldson and Neary suggest that relative profit maximizing managers in a ''socialist industry'' composed wholly of govern?? owned firms can achieve efficient outcomes with a minimum of administrative supervision by a central planner. They also prove numerous game theory propositions in this connection. Although they indirectly allude to the anti-?? features of the incentive scheme, they never directly state this property outright. Consequently, they appear to have overlooked the possibility of extending the scheme to prevent collusion in Privately-owned or ''capitalist'' industries. Also, they appear to impose the unwarranted restriction that each manager must be paid dollar-for-dollar for each dollar of relative profit which a firm earns (p. 102).

Two basic propositions in the Donaldson and Neary (1984) paper are worth special mention. The first is that RPM firms producing multiple or joint products will tend to produce at minimum cost and price efficiently (pp. 104–5, 109–10). This means that the incentive scheme is capable of being applied, not only to single-product firms and industries, but also to multi-product firms and industries.

Secondly, RPM firms, unlike their APM counterparts, have little or no strategic incentive to increase their market shares in a cost-inefficient manner by installing excess capital (pp. 105, 107–9).

The theoretical suggestion that firms with absolute profit incentives might under certain (presumably rare) circumstances try to behave as if they desired to maximize relative profits appears to have been made as early as 1960. Bishop (1960), describing the alleged ''warfare'' of oligopolists in the absence of collusion, Shubik and Levitan (1980), describing ''beat-the-average'' games, and Jones (1980), describing the outcome era classroom game, each derive first-order conditions for a constant-sum game in relative profits. Jones also derives second-order conditions. Two reasons are suggested for such behavior: (I) Businessmen might be naturally rivalrous, caring more about relative position than absolute position, or (2) bus/- nessmen may be carrying out threats in order to elicit more favorable collusive agreements from their rivals in the future. These three works do not suggest any practical application for the mathematical principles of relative profit maximizing.

Although they do not anticipate the present subject matter, several other papers are worth mentioning. Holmstrom (1982) and Aron (1988) explore the use of relative performance evaluations for the quite distinct purpose of attempting more accurate evaluations of managerial performance. Gibbons mad Murphy (1990) ask whether, in fact, managers tend to be paid according to relative performance. Fouraker and Siegel (1963) and Vickers (I 985) consider relative profit goals and incentives of a different type, namely maximization of the difference between absolute profits of own firm and total absolute profits of rival firms, rather than average absolute profits of rival firms. Fershtman and Judd (1987) and Sklivas 0987) also consider alternative managerial incentives, but not relative profit incentives. Shleifer (1985) and Tam (1988) describe what may be the best currently known alternatives for regulating oligopoly markets, aside from antitrust enforcement or structural reform. Both of these alternatives require the regulation of prices, whereas the present method does not.

In summary, none of the previous literature suggests that relative performance incentives can be used as a general method for preventing collusion.

III. An Illustrative Example

Let G be some statistic which describes something about a firm. If the firm's managers arc rewarded for achieving higher levels of G, then maximizing G will be the firm's goal or objective.

For purposes of this example, assume that there are N (N —> 2) identical firms. Each firm produces a single, homogenous product at a constant marginal cost of C. The market demand is linear, with P = A—bQ, where Q = ??Qi and Qi is firm output. Assume that each firm pursues an identical goal function, which has a coefficient of unity in own firm profits and a coefficient of W in rival firm profits. The goal function for firm i and rival firm(s) j looks as follows:

Gi=??i+W????j
J??1
=??i+W(N-1)??
= (PQi-CQi)+ W(N-1)(PQj-CQj)

If W = 0, then the firm's goal is simply to maximize its own economic profit. This is the absolute profit maximizing (APM) goal. If W = 1, then the firm has a joint profit maximizing (JPM) goal. If all N firms have JPM goals, the industry will surely collude.

On the other hand, if W = -1/(N—1), then the firm has a relative profit maximizing (RPM) goal. The RPM goal is calculated by stetting with own firm profits and subtracting off a weighted average of the N—1 rival firm profits.

If we assume noncooperative behavior and Cournot conjectures, firm i maximizes its goal function by choosing Qi such that:
?Gi/??Qi = (P-C)+(??P/??Qi)[Qi+ w(N- 1)Qj =
0
= (A-bQi-b(N- 1)Qj-C)
-b(Qi + W(N—1)Qj) = 0
(2)

For a symmetric, noncooperative equilibrium, assume that Qn = Qi = Qj. Define WM = 1 + W(N—1). We can calculate the following quantities, price-cost margins, absolute profits, and goal fulfillments for each firm:
(A-C)/[b(N + WM)]
(A-C)W/(IV + Wm)]
(A-C)2W2M/[b(N + WM)2]
(l- C)'-W2m/[b(N + WM)2]
(3)

Now, assume instead that each firm pursues a collusive (''monopoly'') equilibrium, in which each firm attempts to maximize its goal function under the assumption that all firms cooperate by setting the same level of output (QM) and receiving the same level of profit (??M). The goal function takes the form: .
GM—[1 + W(N- 1)]??M = WM??M
= WM(PQM—CQM)
(4)

When W > -1/(N—1), WM > 0, so that joint goal fulfillment is equivalent to maximizing joint absolute profits. When W <—1 / (N—I), WM < 0, j cint goal fulfillment requires the minimization of joint absolute profits, or the maximization of joint losses. When W = -1/(N—1), WM = O, we have a zero-stun game in relative profits. When WM—O, collusion can in no way improve the sum of relative profits for all N firms, since these must always add to zero. When WM = 0, there is no incentive for all N firms to collude either to raise prices or m lower prices from the prices that would exist in a noncooperative equilibrium.

In what follows, assume that W >—. -1/(N—1), so that WM >— 0 and joint maximization of absolute profits is a (weakly) plausible goal of collusion. (When WM = 0, firms are collectively no better off, but neither are they collectively worse off, from collusion.) Then the collusive equilibrium has the following solution:
??GM/??QM = WM(P—C).+ (??P/
??QM)WMQM ''- 0
= WM(A—bNQM—C)- bNWMQM = 0
QM= (A—e)/[2bN]
PM-c = (A-c)/2
??M = (A—C)2/[4bN]
GM =(A—C)2WM/[4bN]
(5)

We now consider the one-period incentive for a firm to cheat on a collusive agreement. This can be calculated under the assumption that a single firm chooses its output to maximize its own goal function, taking as given that rival firms choose the agreed-upon collusive output level:

This has solution:
(6)
= (P—C) + (??P/??Qi)(Qi + W(N—1)QM) = 0
= (A-bQi-b(N-1)QM-C) b(Qi+W(N-1)QM)=O
Qc = (A- c)(N + 2- WM)/[4bN]
Pc—c = (A c)(N + WM)/[4N]
- C)2(N + 2- WM)(N + WM)I[16bN2
- C) 2(N + WM)//[8bN2]
-C)2(N +WM)21[16bN2]
??c = (A
??j = (A
Gc = (A
(7)
...
??
k.
L
*

The reward to a firm which colludes in a repeated game with its rivals is:
CO
R?? = GM + ?? GM/(1 + r)t = GM + GM/r (8)
t=l

The value of r depends not simply on the cost of capital and risk premia, but also includes the probability that collusion may break down, perhaps because of industry changes or government intervention. The length of the time period, t, depends on the time it takes for rivals to discover that cheating has occured, after which collusion breaks down. The shorter the time period needed to detect cheating, the lower the value of r. The reward to a firm which cheats in period t = 0 and sees the noncooperative equilibrium in subsequent periods is:
Rc = Gc + ?? Gn/(l + r)t = Gc +Gn/r (9)

RM > RC (so that collusion is sustainable) whenever the collusion/cheating ratio shown below exceeds r:
(GM—Gn)/(Gc—GM) = 4NWM/(N + WM)2 >
r (I0)

For a given N within the relevant range, this ratio reaches its maximum value of 1 when WM = N (JPM) and reaches its minimum value of 0 when WM = 0 (RPM). The ratio rises monotonically when WM increases from 0 to N. As aright be expected, when WM = 1 (APM), this ratio falls (i.e., collusion is harder to sustain) when the number of firms (N) increases.

To summarize, when firms are given RPM incentives and placed in a zero-sum game, the incentive to collude is eliminated, but the incentive to cheat on collusion is maintained. No collusive agreement can benefit all firms in a zero-sum game, and any such agreement would in any case be subject to overwhelming incentives for most or all firms to cheat. This was shown verbally in Section I and is illustrated in this section using a particular mathematical model. The details of a mathematical model can be varied endlessly, but the qualitative conclusion will always be the same, given the verbal proof in Section I.

IV. Practical Implementation

Economists traditionally present theory and presume (sometimes unrealistically) that the manner of its practice will be immediately apparent. With respect to many practical concerns which some economists and laymen have raised, some brief answers are indicated below.

1. Would government regulators need extensive and expensive data to enforce the proposed scheme? No. The only data needed are data on costs, revenues, profits, and managerial compensation. Since this data must be collected in any case, either by government for tax purposes, or by accountants as a prudent way for managers and stockholders to keep tabs on a firm's activities and cash flows, it follows that the method can be implemented at little or no extra cost.

This data is readily observable, so governmental omniscience is not required to implement the method. In particular, it is not assumed that government can observe either cost functions or demand curves, nor is it assumed that government can calculate optimal prices, profits, or output levels. Hence, the RPM method can be practiced, even if government is unable (because of information lira/tat ions) to set optimal prices or quantities directly.

2. Would the use of accounting data to measure costs, revenues, and profit's cause economic distortions? Perhaps, but a more relevant question might be, would such distortions be any greater under RPM than under APM? The purpose of the method is to prevent collusion, not to calculate true economic costs or profits. Even under current arrangements, inability to measure true economic cost prevents stockholders from motivating managers with proper incentives to maximize absolute profits. Whatever may be (for motivational purposes) the most accurate way to measure absolute profits can also be used as a good way to measure relative profits. Regardless of whether profits are calculated using accounting data or other imperfect data, collusion will be prevented, and there is unlikely to be any significant incremental effect in causing additional misallocation of resources.

3. How does one measure ''relative profit''? Aside from accounting measures, one way to estimate absolute profit is to look at changes in the value of a firm's total outstanding stock over a period of t/me and make adjustments at an appropriate interest rate for dividends paid or new stock shares issued over the same period of time. Since changes in both short-term and long-term profit potential affect the firm's value, this method of ascertaining profit gives managers the least incentive to manipulate accounting procedures, or to manipulate events in response to mistaken accounting rules. To calculate relative profits by this method, one simply looks at the change in value for one firm and subtracts off a ' weighted average of the change in value for rival firm(s).

alternative method for measuring relative profit makes use of a new forecasting method, described by Lundgren (1995). This method provides efficient incentives for unbiased human forecasts of any variable value, including the future absolute profits or relative profits of any firm or any subcomponent of a firm, and such forecasts can be made as free of accounting biases as stock values. An advantage of the forecasting method is that it can be used to separate out the industry-specific profits of a conglomerate operating in several industries.

4. How does one apply the relative profit concept to industries which contain multi-industry conglomerates? Most multi-industry conglomerates adopt the multi-division form of organization, in which each industry

division is operated essentially as a separate profit center, with separate accounting for each industry of operation. If the conglomerate operates/I1 unrelated industries, there is unlikely to be any economy of scale or scope that would be wasted if the conglomerate were required to break itself into single-industry parts. If a break-up is deemed undesirable because of economies of scale or scope, and if it is infeasible to issue separate securities for each industry subsidiary of the firm, then one can either use accounting techniques or use the forecasting technique described in Lundgren (1995). If a firm simply produces multiple (but closely related) products, the firm is best understood as producing in a single industry—a circumstance which requires no special treatment, as shown in Donaldson and Neary (1984, pp. 104–5, lO9–110).

5. How does one define the ''market'' or '''industry'' for purposes of imposing the zero-sum game? Since it is not the purpose of the scheme to determine legal culpability for monopolization, but simply to eliminate incentives for collusion, it is not necessary to answer the tricky question of how broadly or narrowly the market should be defined. It is generally preferable to define the industry/market rather narrowly, so that only a very few, very similar firms are placed in each zerosum game. That is, if there is a broadly defined industry with several firms, it is generally preferable to impose more than one zero-sum game on the several firms, by grouping the firms into more narrowly defined sub-industries, and imposing a zero-sum game on each of the smaller groups. Unlike under current antitrust law, it is not necessary to inquire whether more distantly related firms are actually part of the same ''market''.

6. How does one sustain incentives for innovation and technological progress ? Innovations may be either costless or costly, and may be either patentable or unpatentable. If innovations are costless, we may presume that relative profit maximizers will adopt them, since profit maximization implies cost minimization. If innovations are costly, but patentable, the patent law provides incentive for innovation. Since RPM incentives are designed to induce competition, they should not be applied to situations where monopoly, and hence absolute profit maximizing, is the preferred public policy. Fortunately, both absolute profit and relative profit are measured in compatible money units, so there is nothing to prevent the institution of APM incentives for patented activities and RPM incentives for unpatented activities, even with respect to the same manager in the same firm.[2]

If innovations are costly, but unpatentable, RPM firms still have an incentive to reduce costs, if gains from innovation can be captured for a period o t'' time until competitors follow suit. This incentive is proportional to firm output. The conventional Schumpeterian ''wisdom'' that a competitive industry is less innovative than an oligopolistic industry confounds the influence of firm size with the competitive/noncompetitive nature of firm interaction. It is mainly the size of firm output, not the size of a collusive price-cost margin, which determines the size of the incentive to reduce unit costs.

7. How does one prevent RPM industries from sustaining chronic losses? Chronic losses would occur only if marginal cost lies consistently below average cost for a particular industry. In such case, the industry can be made viable by offering an industry lump-sum subsidy in the exact amount of the industry's economic losses. Lump-sum subsidies may be distributed equally to all firms in a zero-sum group without affecting relative profits, and hence without inducing behavior to manipulate the size of the subsidy. Financing the subsidy through general revenues yields marginal cost pricing. Financing through a special industry tax yields average cost pricing.

8. How does one ensure that RPM firms do not sabotage rival firms ''operations? Since relative profits rise when rival firm profits fall, there is arguably an increased incentive to sabotage rival firm operations. An increased incentive to cause sabotage need not imply a significant increase in actual sabotage. A situation of mutual sabotage can only arise if legal penalties are very weak, since rival firms have incentive to investigate, report, and prosecute sabotage activities which reduce their levels of profit.

Nevertheless, even if we were to suppose that serious sabotage problems would arise from an unmodified RPM incentive scheme, it is possible to modify the incentive scheme slightly so as to eliminate the sabotaging incentives. This modification would require a deduction in managerial compensation which offsets (or further penalizes) any gain in managerial compensation resulting from any gain in relative profits due to sabotage occurring in rival firms, even if legal culpability for the sabotage cannot be established. In other words, one may convert the zero-sum game into a negative-sum game, if sabotage is observed. (One can apply the same reasoning to lawsuits.)

9. How does one ensure that corporate managers will not evade the regulation of salary policies? The regulation of managerial compensation has nothing to do with the total amount of the salary and bonuses, but only the methods)f their calculation. Even if we suppose that the value of relative profits is lower, on average, than the value of absolute profits, the noncontingent salary component of a manager's compensation can always be raised to compensate. No reduction in the average levels of managerial compensation is required. For the same level of risk and expected compensation, managers do not care whether bonuses are contingent on relative profit or absolute profit.

10. Does the scheme represent an unwarranted intrusion into managerial compensation policies which have heretofore been unregulated? The proposal does not actually require government to determine the managerial incentive schemes. It simply requires that the contingent part of any managerial incentive scheme must be based on relative firm performance, rather than absolute firm performance. In order to prevent the incentive for managerial collusion, it is not necessary that government determine the overall level of managerial compensation, nor is it necessary that government determine and implement any, particular method for measuring relative firm performance. The minor intrusion, if it be such, is justified by the important public purpose at stake: Preventing collusion.

11. How does one prevent collusion among managers to reduce managerial effort levels? Instituting a zero-sum game in managerial income does not mean instituting a zero-sum game in managerial effort levels, so collusion to reduce managerial efforts is at least conceivable. However, collusion to reduce effort levels is not a serious threat, since a) managers of firms typically work in separate locations, and b) the work of managers consists mainly of mental efforts. Therefore, since managerial effort is essentially unobservable, any agreement to reduce effort levels cannot be easily monitored or enforced by colluding managers.

However, Simply for argument's sake, suppose that managerial effort is actually (at least partly) observable. For example, suppose effort can be measured based on hours spent ''on the job''. In that case, one can pay managers based both on absolute effort and on relative performance. If the compensation rate for effort is made high enough, managers will no longer have incentive to collude to reduce effort levels, even if such collusion could be made perfectly enforceable.

12. How does one ensure that firm owners will not find ways of making man- agement stress absolute profits over relative profits? This is the subject of the next section.

V. Owners, Managers, and Incentives

There are at least two ways of instituting relative profit incentives for firms First, top management (including the board of directors) can be given long-tern< compensation contracts based on relative performance. Secondly, one can impose the zero-sum game in profits on whole firms (owners), and not just managers. Government may adopt only the first set of measures, only the second set, or both sets simultaneously.

The second method can be implemented by 100% taxing (subsidizing) the combined economic profits (losses) of an industry and allocating the tax (subsidy) equally to each firm. The tax (subsidy) would be on industry profits, not individual firm profits. As a result of the industry tax/subsidy scheme, after-tax profits to owner-shareholders are equivalent to pre-tax relative profits, which means owners will try to maximize relative profits rather than absolute profits. Although this method appears economically viable, it may not be politically palatable, given the potential for redistributions of income between stockholders and the government.

In firms or industries where owners and managers are one and the same these two methods are essentially equivalent. No choice is possible. However, most important oligopoly industries are probably composed of large corporatiotions which maintain a separation between ownership and direct managerial control. This well-known aspect

[2] There are various ways this can be done. For example, if firm A has a patent and firm B is a rival, any royalty payment from firm B to firm A would not be counted against either firm p. or firm B in the calculation of relative profits. A complete exposition would require a separate paper.

of the internal structure of the modern corporation presents an interesting avenue by which government can enforce antitrust policy. Rather than impose relative profit incentives directly upon owners through taxes end subsidies, government can influence firm behavior simply by altering the incentives of management.

However, if owners are not made the direct subjects of taxes and subsidies which impose relative profit incentives, this raises the issue of whether absolute wealth maximizing stockholders can somehow reimpose APM incentives on RPM managers. The current state of corporate affairs is that managers, not stockholders, basically control the large corporation. Managers effectively appoint the boards of directors, to whom they are ostensibly responsible. Indirectly, through their choice of board members, managers set their own salaries. Managers have no incertive to change this state of affairs.

Stockholders are numerous and dispersed. Individually, most stockholders do not have enough votes to unseat management. Obtaining collective action to unseat management requires significant expense, which most stockholders find too costly to undertake. Controlling management is a ''public good'' for all stockholders, which most stockholders find rational to ''free ride'' upon by not attempting to provide it. The only stockholders who might have an incentive to undo management policies are the largest or principal stockholders. The remaining stockholders are of no consequence, except as voters who might side with the principal stockholder in any fight against management.

Consider, therefore, an industry in which the top two, three, or four firm s have been placed into a zero-sum game in terms of managerial incentives. Each firm has a different principal owner. If the same person or entity is a principal owner in two or more of the top firms in an oligopoly industry, this should be regarded as an antitrust violation, just the same as interlocking directorates are so regarded. Hence, we assume different principal owners. Any conspiracy to undo the relative incentive scheme must involve the principal owners, since the managers themselves have no such incentive.

To be effective, the conspiracy must convert all or most managers from relative profit goals to absolute goals. To convert only one manager to absolute profit goals would not generate the kind of collusion among business firms which could substantially raise prices and profits, and thereby make the conspiracy (with its attendant risks) worthwhile from a private perspective. The conspiracy must therefore involve the principal owners of different firms acting in combination. The principal owners, being already wealthy, will not rationally risk jail time simply to increase their wealth still further. Suppose, nevertheless, that the principal owners attempt a conspiracy. What means would they use to influence management?

There are basically only two avenues by which the principal owners might try to influence management: compensation and employment. Either avenue may be pursued overtly or covertly.

First consider overt operations. The principal owner persuades stockholder voters to alter the conditions of employment or compensation. For example, the principal owner might use the annual stockholder meetings to directly hire or fire the manager, according to whether the manager pursued or failed to pursue collusive policies alongside other firms. Alternatively, the annual meetings might be used to raise or lower the base salary for future employment in a manner designed to undo the relative profit incentives paid in previous years.

Use of the annual stockholder meetings for either purpose would be an unusual or abnormal business practice. Use of the annual meetings for these purposes by an RPM firm would clearly be a suspect practice, prompting an antitrust investigation. More simply, use of a stockholder meeting to directly determine managerial employment or compensation might be made a per se antitrust violation, when performed by an RPM firm.

Thus, the following is recommended for instituting RPM incentives on management: Both the managers and the boards of directors are given long-term contracts containing relative performance incentives, which are not altered from year to year in a manner that might allow owner to undo the RPM incentives. Any part of the compensation (including stock holdings or stock options) which is contingent on the firm's performance must be based on relative performance, not absolute performance. All compensation and compensation arrangements of managers and directors of RPM firms are disclosed to the antitrust authorities. Managerial employment is determined by the board of directors (all of whom are paid according to RPM incentives), not by either stockholders or principal owners, unless the principal owners have been converted to RPM incentives. The directors have overlapping terms, and are not all elected at once.

In situations where a principal owner (or other stockholder) wishes to have an active role in management or on the board of directors of an RPM firm, such owner or stockholder must have his stockholdings convened into assets which provide RPM incentives. This can be accomplished either by shorting the stock of rival RPM firms, and/or by imposing a tax/subsidy on the stockholder which mirnicks the change in value of the stock in rival RPM firms. If the principal stockholder desires to be a passive investor, this change in incentive is not required.

Consider now possible covert operations. Assume that the principal owner has not acknowledged any active interest in the corporation, and has not been converted to RPM incentives. How can a principal owner with APM incentives undo the RPM incentives of firm managers? There are only two possibilities: threats and bribes. Threats are particularly likely to be reported to the antitrust authorities, could result m extra jail time, and will presumable not be resorted to. This leaves bribery

The rich stockholder may choose to bribe either the manager or the directors. The manager might be bribed to behave collusively. The directors might be bribed to hire and fire managers based on willingness to collude. Bribing the directors is likely to be cheaper, but also less effective and more likely to be reported. Even if successful, bribing the directors to fire a manager is particularly likely to be reported by the manager. This leaves only bribing the manager directly.

A conspiracy by principal owner(s) will not stop at trying to institute ??M incentives on RPM managers. Rather, the rational goal would be to attempt to institute joint-profit maximizing (JPM) incentives on the managers. Bribing the managers of all the important firms in the industry to institute JIM incentives is the only procedure that would guarantee collusion. Re-instituting APM incentives merely provides the opportunity for collusion, but does not guarantee its occurrence.

The possibility that principal owner(s) might bribe the manager(s) of APM firms to collude, or provide them with JPM incentives exists even today. Yet one rarely (or never?) hears of principal owner(s) attempting to bribe or covertly pay firm managers in this manner. If such behavior does not happen when firm managers are paid according to APM incentives, why should it happen if managers are paid according to RPM incentives?

In short, an illegal conspiracy of stockholders to re-impose absolute profit incentives onto firm managers is unlikely. The small stockholder has little influence and insufficient incentive to launch such a conspiracy. The large stockholder is too wealthy to want to risk jail time. Any such conspiracy would have to be explicit (and therefore detectable), not merely tacit.

VI. Conclusion

It has been shown that institution of a zero-sum game among a group of firms by means of relative profit maximizing incentives is capable of reducing or eliminating incentives for firms to collude, either actually or tacitly. This mild change in managerial incentives can be imposed at essentially zero public or private cost, yet it reaps potentially huge benefits.[3]

Appendix A. Optimal Weighting of Goal Functions

This appendix derives the conditions for goal functions needed to achieve a zero-sum game with desirable long-run properties. Suppose there are N (N ?? 2) firms in an industry. Let ??1, ??2,..., ??N be the profits earned by these firms; and let G1, G2, ..., GN be the goal functions for these firms. Let be the weight placed on firm j's profits infirm i's goal function, and let Ki be an arbitrary constant which adjusts firm i's goal satsifaction upwards or downwards (e.g., a fixed salary component in managerial pay). Goal functions which are linear in profits have the form:

N

j=l

for all i E [1, N], where all w's and K's are fixed constants.

[3] One famous estimate of the deadweight cost of monopoly power (including oligopoly) is between 1/2% and 2% of G.N.P. (Scherer and Ross, 1990, p. 667).

The zero-sum conditions require:

N
??, wi.i = 0, (A.2)
i=1

Suppose each firm sells a standardized product and that price depends solely on industry output: P = P(Q), where Q = ??Qi. Assume further (which is likely in the long run) that cost functions are identical for each firm: TCi = C(Q1). Hence,

??i = POi—C(Oi), so that we obtain:

N
Gi = ?? wij(PQj—c(Qj)) + Ki
j=1
(A.3)

Define aji = ??Qj/??Qi as any arbitrary conjecture which firm i entertains about the reaction function of firm j (aii= 1). Thus:

N N
(??Gi/??O,) = ?? ajiwij[P- c'(Qj)] + p(O)
??wijQj = o
j=1 j=1
(A.4)

Assuming that N firms in the industry is a given and that marginal cost is increasing, then the optimal industry outcome occurs only when firm outputs are identical (Qj = Q/N) and price equals marginal cost [P—C'(Qj) = 0] for each firm. These conditions are met only when the weights on profits meet the following conditions:

N
?? to0'' = 0 (A.5)
j=1

These N conditions for long-run industry optimality are in addition to 1tie N conditions in (A.2) on weights needed to insure the zero-sum nature of the game. Short-run effects [4] not analyzed here may perhaps place additional restrietions on the optimal values for weights in the goal functions of firms.

Appendix B. Short-run Cost Differences

This appendix employs a 2-firm game to model the consequences of short-run cost differences between firms. Let G1(Q1) and C2(Q2) be the cost functions of firms 1 and 2, and let a12 -'' ??Q1/??Q2 and o121—??Q2/0QI be any arbitrary conjectures which each farm entertains about the reaction functions of the other firm. The problem itself may be stated thus:

G1 = ??l—7o2 = p(Q)Q1- C1(Q1)- p(Q)Q2 + C2(Q2),
(B.1)
G'2 = r2—??1 = p(,Q)Q2—C2(Q2)—p(Q)Q1+ C1(Q1). 03.2)

The first=t order conditions are:

??G1/??Q1- p'(Q)(1 + a21)(Ql-Q2) + p(Q)(I-a21)
-C1(Q1) + a21C12(Q2) = o
03.3)
??G2/??Q2 = p'(Q)(1 + a12)(Q2—Q1) + p(Q)(1—a12)
-C(Q2) + al2c'1(Qt) = 0
03.4)

It can be shown that the only solution which satisfies Equations 03.3) at,d (B.4) has the form:

p(Q) = C1(Q??) + ?/Q,)
2
03.5)
(Q,—Q??) = ??Q??)—c(O2)
2f(Q) 03.6)

Equation 03.5) tells us that price will be set equal to the average of the marginal costs of the two firms. Equation (B.6) tells us that the more efficient firm will produce morn output than the less efficient firm, since f(Q) < 0.

Appendix C. Differentiated Products

This appendix models what happens when products are differentiated and firms compete in prices ('Bertrand conjectures). Let the demand structure for the two firms be defined in terms of quantities demanded as a function of two prices: Q I = Ql(Pl, P2) and Q2 = Q2(Pi, P2). It is reasonable to assume (??Qj/??Pj) < 0 and (??Qi/??Pi) > 0 for all i and j, j ?? i, The problem is stated thus:

G1 = ??1—??2 = Q1(P1, P2)P1—C1(Q1(PI, P2))
-Q2(P1, P2)P2 + C2(Q2(P1,P2))
G2 = ??c2—??1 = Q2(P1,P2)P2—C2(Q2(P1,P2))
-Q1(P1,P2)P1 + C1(Q1(P1,P2))

The first-order conditions are:

(C.2)
I,
(??G1/??P1) = Q1 + P1(??Q1/??P1)—C1(Q1)(??Q1/P1)
-P2(??Q2/??P1) + C2(Q2)(??Q2/??P1) = 0
(c.3)
(??G2/??P2) = Q2 + P2(??Q218P2)—C(Q2)(??Q2/??P2)
-P1(??Q1/??P2)+C1(Q1)(??Q1/??P2)=0 (c.4)

We may rearrange these conditions as expressing the determinants of ??.eost margins:

-Q1 + [/>2—C2(Q2)](??Q2/??P1) C.5)
P1- C1(Q1) = (t)Q,l??P1)
-Q2 + [P1—Ci(Q1)](aQ1/aP2) (c.6)
P2—C2(Q2) = (??Q2/??P2)

The corresponding conditions for APM firms with Bertrand conjectures are:

-Q1 (c.7)
P1—C1(Q1) = (??Q1/??P1)
-Q2 (c.8)
P2—C2(Q2) = COO21or,??)

Suppose we have a situation where two monopolistically competitive finns satisfy equations (12.7) and ((2.8) because both firms are maximizing absolute profits. Assume that both firms have positive price-cost margins. Now suppose that one (or both) of the firms is converted into being a relative profit maximizer. If firm one is so converted, its price-cost margin is reduced, because the difference between the fight-hand-side terms in equations ((2.5) and (C.7) is negative:

[P2 -C2(Q2)](??Q2/??P1) < 0 (C.9)
(??Qt/??P1)

Similarly, if firm 2 is convened m relative profit maximizing (assuming firm 1 maintains a positive price-cost margin), it too will wish m reduce its price-cost margin by expanding output and lowering price: Bertrand competition is absolutely the most competitive behavior which it is reasonable to postulate about APM firms, yet RPM firms compete even harder.

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EXHIBIT 2
TO THE COMMENTS
OF RELPROMAX ANTITRUST INC.
i
UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA
UNITED STATES OF AMERICA,
Plaintiff,
V.
MICROSOFT CORPORATION,
Defendant.
CIVIL ACTION NO. 94–1564 (SS)
FINAL JUDGMENT

WHEREAS Plaintiff, United States of America, having filed its Complaint in this action on July 15, 1994, and Plaintiff and Defendant, by their respective attorneys, having consented to the entry of this Final Judgment without trial or adjudication of any issue of fact or law; and without this Final Judgment constituting any evidence or admission by any party with respect to any issue of fact or law;

NOW, THEREFORE, before any testimony is taken, and without trial or adjudication of any issue of fact or law, and upon consent of the partial

[4] These short-ran effects include possible incentives for pair-wise or subset collusion, or possible concerns about distribution of output among firms, if short,run costs differ significantly among firms and there are three or more firms in the same zero-sum game.

ORDERED, ADJUDGED AND DECREED a:

I. JURISDICTION

This Court has jurisdiction of the subject matter of this action and of the person of the Defendant, Microsoft Corporation (''Microsoft''). The Complaint states a claim upon which relief may be granted against the Defendant under Sections 1 and 2 of the Sherman Act, 15 U.S.C. 1,2.

II. DEFINITIONS

(A) ''Covered Product(s)'' means the binary code of (1) MS-DOS 6.22, (2) Microsoft Windows 3.11, (3) Windows for Workgroups 3.11, (4) predecessor versions of the aforementioned products, (5) the product currently code-named ''Chicago,'' and (6) successor versions of or replacement products marketed as replacements for the aforementioned products, whether or not such successor versions or replacement products could also be characterized as successor versions or replacement products of other Microsoft Operating System Software products that are made available (a) as stand-alone products to OEMs pursuant to License Agreements, or (b) as unbundled products that perform Operating System Software functions now embodied in the products listed in subsections (1) through (5). The term ''Covered Products'' shall not include ''Customized'' versions of the aforementioned products developed by Microsoft; nor shall it apply to Windows NT Workstation and its successor versions, or Windows NT Advanced Server.

(B) ''Customized'' means the substantial modification of a product by Microsoft to meet the particular and specialized requirements of a final customer of a computer system. It does not include the adaptation of such a product in order to optimize its performance in connection with a Personal Computer System manufactured by an OEM.

(C) ''Duration'' means, with respect to a License Agreement, the period of time during which an OEM is authorized to license, sell or distribute any of the Covered Products.

(D) A ''License Agreement'' means any license, contract, agreement or understanding, or any amendment thereto, written or oral, express or implied, pursuant to which Microsoft authorizes an OEM to license, sell or distribute any Covered Product with its Personal Computer System(s).

(E) A ''Minimum Commitment'' means an obligation of an OEM to pay Microsoft a minimum amount under a License Agreement, regardless of actual sales.

(F) ''Lump Sum Pricing'' means any royalty payment for a Covered Product that does not vary with the number of copies of the Covered Product that are licensed, sold or distributed by the OEM or of Personal Computer Systems distributed by the OEM.

(G) ''New System'' means a system not included or designated in a Per System License.

(H) ''NDA'' means any non-disclosure agreement for any pre-commercial release of a Covered Product that imposes any restriction on the disclosure or use of any such pre- commercial release of any Covered Product or any information relating thereto.

(I) ''OEM'' means an original equipment manufacturer or assembler of Personal Computer Systems or Personal Computer System components (such as motherboards or sound cards) or peripherals (e.g., printers or mice) that is a party to a License Agreement. MTC–00030631 0227

(J) ''Per Copy License'' means any License Agreement pursuant to which the OEM's royalty payments are calculated by multiplying (1) the number of copies of each Covered Product licensed, sold or distributed during the term of the License Agreement, by (2) a per copy royalty rate agreed upon by the OEM and Microsoft, which rate may be determined as provided in Section IV (H).

(K) ''Per Processor License'' means a License Agreement under which Microsoft requires the OEM to pay Microsoft a royalty for all Personal Computer Systems that contain the particular microprocessor type(s) specified in the License Agreement.

(L) ''Per System License'' means a License Agreement under which Microsoft requires the OEM to pay Microsoft a royalty for all Personal Computer Systems which bear the particular model name(s) or number(s) which are included or designated in the License Agreement by the OEM to Microsoft, at the OEM's sole option and under the terms and conditions as set forth herein.

(M) ''Personal Computer System'' means a computer designed to use a video display and keyboard (whether or not the video display and keyboard are actually included) which contains an Intel x86, or Intel x86-compatible microprocessor.

(N) ''Operating System Software'' means any set of instructions, codes, and ancillary information that controls the operation of a Personal Computer System and manages the interaction between the computer's memory and attached devices such as keyboards, display screens, disk drives, and printers.

III. APPLICABILITY

This Final Judgment applies to Microsoft and to each of its officers, directors, agents, employees, subsidiaries, successors and assigns; and to all other persons in active concert or participation with any of them who shall have received actual notice of this Final Judgment by personal service or otherwise.

IV. PROHIBITED CONDUCT

Microsoft is enjoined and restrained as follows:

(A) Microsoft shall not enter into any License Agreement for any Covered Product that has a total Duration that exceeds one year (measured from the end of the calendar quarter in which the agreement is executed). Microsoft may include as a term in any such License Agreement that the OEM may, at its sole discretion, at any time between 90 and 120 days prior to the expiration of the original License Agreement, renew such License Agreement for up to one additional year on the same terms and conditions as those applicable in the original license period.

The License Agreement shall not impose a penalty or charge of any kind on an OEM for its election not to renew all or any portion of a License Agreement. In the event that an OEM does not exercise the option to renew a License Agreement as provided above, and a new License Agreement is entered between Microsoft and the OEM, the arm's length negotiation of different terms and conditions, specifically including a higher royalty rate(s), will not by itself constitute a penalty or other charge within the meaning of the foregoing sentence.

The Duration of any License Agreement with any OEM not domiciled in the United States or the European Economic Area that will not be effective prior to regulatory approval in the country of its domicile may be extended at the option of Microsoft or the OEM during the time required for any such regulatory approval.

License Agreement provisions that do not bear on the licensing or distribution of the Covered Products may survive expiration or termination of the License Agreement.

(B) Microsoft shall not enter into any License Agreement that by its terms prohibits or restricts the OEM's licensing, sale or distribution of any non-Microsoft Operating System Software product.

(C) Microsoft shall not enter into any Per Processor License.

(D) Except to the extent permitted by Section IV (G) below, Microsoft shall not enter into any License Agreement other than a Per Copy License.

(E) Microsoft shall not enter into any License Agreement in which the terms of that agreement are expressly or impliedly conditioned upon:

(1) the licensing of any other Covered Product, Operating System Software product or other product (provided, however, that this provision in and of itself shall not be construed to prohibit Microsoft from developing integrated products); or

(2) the OEM not licensing, purchasing, using or distributing any non-Microsoft product.

(F) Microsoft shall not enter into any License Agreement containing a Minimum Commitment. However, nothing contained herein shall prohibit Microsoft and any OEM from developing non-binding estimates of projected sales of Microsoft's Covered Products for use in calculating royalty payments.

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(G) Microsoft's revenue from a License Agreement for any Covered Product shall not be derived from other than Per Copy or Per System Licenses, as defined herein. In any Per System License:

(1) into any License Agreement, or for purposes of applying any volume discount, or otherwise, that any OEM include under its Per System License more than one of its Personal Computer Systems;

(2) Microsoft shall not charge or collect royalties for any Covered Product on any Personal Computer System unless the Personal Computer System is designated by the OEM in the License Agreement or in a written amendment. Microsoft shall not require an OEM which creates a New System to notify Microsoft of the existence of such a New System, or to take any particular actions regarding marketing or advertising of that New System, other than creation of a unique model name or model number that

the OEM shall use for internal and external identification purposes. The requirement of external identification may be satisfied by placement of the unique model name or model number on the machine and its container (if any), without more. The OEM and Microsoft may agree to amend the License Agreement to include any new model of Personal Computer System in a Per System License. Nothing in this clause shall be deemed to preclude Microsoft from seeking compensation from an OEM that makes or distributes copies of a Covered Product in breach of its License Agreement or in violation of copyright law;

(3) The License Agreement shall not impose a penalty or charge on account of an OEM's choosing at any time to create a New System. Addition of a New System to the OEM's License Agreement so that Covered Products are licensed for distribution with such New Microsoft shall not explicitly or implicitly require as a condition of entering System and royalties are payable with respect thereto shall not be deemed to constitute a penalty or other charge of any kind within the meaning of the foregoing sentence;

(4) All OEMs with existing Per System Licenses, or Per Processor Licenses treated by Microsoft under Section IV (J) as Per System Licenses, will be sent within 30 days following entry of this Final Judgment in a separately mailed notice printed in bold, boxed type which shall begin with the sentence ''You are operating under a Microsoft Per System License,'' and shall continue with the language contained in the first four quoted paragraphs below. All new or amended Per System Licenses executed after September 1, 1994 shall contain a provision that appears on the top half of the signature page in bold, boxed type shall begin with the sentence ''This is a Microsoft Per System License,'' and which shall continue with the language contained in the first four quoted paragraphs below. ''

As a Customer, you may create a Hew System'' at any time that does not require the payment of a royalty to Microsoft unless the Customer and Microsoft agree to add it to the License Agreement.''

''Any New System created may be identical in every respect to a system as to which the Customer pays a Per System royalty to Microsoft provided that the New System has a unique model number or model name for internal and external identification purposes which distinguishes it from any system the Customer sells that is included in a Per System License. The requirement of external identification may be satisfied by placement of the unique model name or model number on the machine and its container (if any), without more.''

''If the customer does not intend to include a Microsoft operating system product with a New System, the Customer does not need to notify Microsoft at any time of the creation, use or sale of any such New System, nor does it need to take any particular steps to market or advertise the New System.'' ''Under Microsoft's License Agreement, there is no charge or penalty if a Customer chooses at any time to create a New System incorporating a non- Microsoft operating system. If the Customer intends to include a Microsoft operating system product with the New System, the Customer must so notify Microsoft, after which the parties may enter into arm's length negotiation with respect to a license to apply to the New System.''

In the case of OEMs with Per Processor Licenses treated as Per System Licenses pursuant to Section IV (J), the notice shall include the following paragraph at the beginning of the notice:

''All models covered by your Per Processor License are now treated as subject to a Per System License. You may exclude any such model from being treated as subject to a Per System License by notifying Microsoft in writing. Such notice to Microsoft must include the model designation to be excluded from the Per System License. Such exclusion shall take effect on the first day of the calendar quarter next following Microsoft's receipt of such notice.''

(H) Microsoft may not use any form of Lump Sum Pricing in any License Agreement for Covered Product(s) executed after the date of this Final Judgment. It is not a violation of this Final Judgment for Microsoft to use royalty rates, including rates embodying volume discounts, agreed upon in advance with respect to each individual OEM, each specific version or language of a Covered Product, and each designated Personal Computer System model subject to the License Agreement.

(I) OEMs that currently have a License Agreement that is inconsistent with any provision of this Final Judgment may, without penalty, terminate the License Agreement or negotiate with Microsoft to amend the License Agreement to eliminate such inconsistent provisions. An OEM desiring to terminate or amend such a License Agreement shall give Microsoft ninety (90) days written notice at any time prior to January 1, 1995.

(J) If an OEM has a License Agreement that is inconsistent with any provision of this Final Judgment, Microsoft may enforce that License Agreement subject to the following:

(1) If the License Agreement is a Per Processor License, Microsoft shall treat it as a Per System License for all existing OEM models that contain the microprocessor type(s) specified in the License Agreement except those models that the OEM opts in writing to exclude and such exclusion shall take effect on the first day of the calendar quarter next following Microsoft's receipt of such notice; and

(2) Microsoft may not enforce prospectively any Minimum Commitment.

(K) Microsoft shall not enter into any NDA:

(1) whose duration extends beyond (a) commercial release of the product covered by the NDA, (b) an earlier public disclosure authorized by Microsoft of information covered by the NDA, or (c) one year from the date of disclosure of information covered by the NDA to a person subject to the NDA, whichever comes first; or

(2) that would restrict in any manner any person subject to the NDA from developing software products that will run on competing Operating System Software products, provided that such development efforts do not entail the disclosure or use of any Microsoft proprietary information during the term of the NDA; or

(3) that would restrict any activities of any person subject to the NDA to whom no information covered by the NDA has been disclosed.

(L) The form of standard NDAs will be approved by a Microsoft corporate officer and all non-standard language in NDAs that pertains to matters covered in Section (K) above will be approved by a Microsoft senior corporate attorney.

(M) Within thirty (30) days of the entry of this Final Judgment, Microsoft will provide a copy of this Final Judgment to all OEMs with whom it has License Agreements at that time except for those with licenses solely under the Small Volume Easy Distribution (SVED) program or the Delivery Service Partner (DSP) program. V.

connection with its monitoring or securing of compliance with any Undertaking by or Decision against Microsoft that relates to Microsoft's licensing of any Covered Product. In addition, Defendant shall not object to disclosure to Plaintiff by DG-IV of any other information provided by defendant to DG-IV, or to cooperation between DG-IV and Plaintiff in the enforcement of this Judgment, provided that Microsoft shall receive in advance a detailed description of the information to be provided and the Plaintiff will accord any Microsoft information received from DG-IV the maximum confidentiality protection available under applicable law. Specifically, Plaintiff will treat Microsoft information that it receives from DG-IV as ''confidential business information'' within the meaning of the Freedom of Information Act, 5 U.S.C. §552, with Microsoft deemed a ''submitter'' of the information under the statute. Plaintiff shall take precautions to ensure the security and confidentiality of Microsoft information provided in electronic form.

(E) If at the time information or documents are furnished by Defendant to Plaintiff, Defendant represents and identifies in writing the material in any such information or document to which a claim of protection may be asserted under Rule 26(c)(7) of the Federal Rules of Civil Procedure, and Defendant marks each pertinent page of such material ''Subject to claim of protection under Rule 26(c)(7) of the Federal Rules of Civil Procedure,'' then ten days notice shall be given by Plaintiff to Defendant prior to divulging such material in any legal proceeding (other than a grand jury proceeding) to which Defendant is not a party.

VI. FURTHER ELEMENTS OF JUDGMENT

(A) This Final Judgment shall expire on the seventy eighth month after its entry.

(B) Jurisdiction is retained by this Court over this action and the parties thereto for the purpose of enabling any of the parties thereto to apply to this Court at any time for further orders and directions as may be necessary or appropriate to carry out or construe this Final Judgment, to modify or terminate any of its provisions, to enforce compliance, and to punish violations of its provisions.

VII. PUBLIC INTEREST

Entry of this Final Judgment is in the public interest.

Entered:

UNITED STATES DISTRICT JUDGE
EXHIBIT 3
TO THE COMMENTS
OF RELPROMAX ANTITRUST INC.
IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF THE DISTRICT OF COLUMBIA
UNITED STATES OF AMERICA,
Plaintiff,
V.
MICROSOFT CORPORATION,
Defendant.
COMPETITIVE IMPACT
Pursuant to Section 2(b) of the Antitrust ?? (h), the United States submits this Competitive Impact
Civil Action No. 94–1564 (SS)
Competitive Impact Statement
Judgment submitted for entry with the consent of defen
antitrust proceeding.
NATURE AND PURPOSE OF T

On July 15, 1994, the United States filed a civil antitrust Complaint to prevent and restrain Microsoft Corporation (''Microsoft'') from using exclusionary and anticompetitive contracts to market its personal computer operating system software, in violation of Sections 1 and 2 of the Sherman Act, 15 U.S.C.[1],[2]. As alleged in the Complaint, Microsoft has used these contracts to restrain trade and to monopolize the market for operating systems for personal computers using the x86 class of microprocessors, which comprise most of the world's personal computers. As used herein, ''PC'' refers to personal computers that use this class of microprocessor.

The Complaint alleges that Microsoft has used its monopoly power to induce PC manufacturers to enter into anticompetitive, long-term licenses under which they must pay Microsoft not only when they sell PCs containing Microsoft's operating systems, but also when they sell PCs containing non-Microsoft operating systems. These anticompetitive, long-term licenses have helped Microsoft to maintain its monopoly. By inhibiting competing operating systems'' access to PC manufacturers, Microsoft's exclusionary licenses slow innovation, raise prices, and deprive consumers of an effective choice among competing PC operating systems.

The Complaint also alleges that in connection with pre-release testing of a new Microsoft operating system code-named ''Chicago,'' Microsoft sought to impose unreasonably restrictive and anticompetitive non-disclosure agreements on a number of leading developers of applications software products. These non-disclosure agreements would have unreasonably restricted the ability of software developers to work with competing operating systems or to develop competitive products or technologies.

The Complaint seeks to prevent Microsoft from continuing or renewing any of the anticompetitive practices alleged to violate the Sherman Act, and thus to provide fair opportunities for other firms to compete in the market for PC operating systems.

The United States and Microsoft have agreed that the proposed Final Judgment may be entered after compliance with the Antitrust Procedures and Penalties Act.1 Entry of the Final DESCRIPTION OF THE PRACTICES INVOLVED IN THE ALLEGED VIOLATIONS

If this case were to proceed to trial, the United States would prove the following: Microsoft develops, licenses, sells, and supports several types of software products for personal computers, including operating systems and applications. An operating system is software that controls the basic operations of the personal computer. Applications software, such as word processing programs and spread sheets, runs ''on top of'' an operating system to enable the computer to perform a broad range of useful functions. Operating systems are designed to work with specific microprocessors, the integrated circuits that function as the ''brain'' of the computer. Most of the personal computers in the world today use the x86 class of microprocessors, originally designed by Intel, and now including microprocessors manufactured by other companies that use a substantially similar architecture and instruction set. Original equipment manufacturers (''OEMs'') that sell PCs and customers who buy such machines cannot use operating systems written for other microprocessors.

In 1981, Microsoft introduced a PC operating system called the Microsoft Disk Operating System (''MS-DOS''), the original version of which Microsoft licensed to IBM for use in IBM's PC. As IBM's PC experienced considerable commercial success, other OEMs also used MS- DOS in order better to emulate the IBM PC. In 1985, Microsoft introduced ''Windows,'' a more sophisticated PC operating system product designed for use in conjunction with MS-DOS. Windows allowed users to give instructions with a ''mouse'' or similar device and also to run more than one application at a time. Microsoft quickly gained a monopoly in the market for PC operating systems worldwide. For almost a decade, Microsoft's market share has consistently exceeded 70%.[2]

Development, testing, and marketing of a new PC operating system involves considerable time and expense. A new operating system faces additional barriers to entry, including the absence of a variety of high quality applications to run on the system; the small number of people trained on and using the system, which discourages customers from buying it and software companies from writing applications to run on it; and, since the overwhelming majority of PCs are sold with a pre-installed operating system, the difficulty of convincing OEMs to offer and promote the system.

Microsoft has used exclusionary and anticompetitive contract terms to maintain its monopoly. OEMs believe that a substantial portion of their customers will want a PC with MS- DOS and Windows, and therefore feel that they must be able to offer their customers MS-DOS and Windows. With thin profit margins, OEMs want to obtain these products at the lowest possible cost.

Beginning in 1988, and continuing until July 15, 1994, Microsoft induced many OEMs to execute anticompetitive ''per processor'' licenses. Under a per processor license, an OEM pays Microsoft a royalty for each computer it sells containing a particular microprocessor, whether the OEM sells the computer with a Microsoft operating system or a non-Microsoft operating system. In effect, the royalty payment to Microsoft when no Microsoft product is being used acts as a penalty, or tax, on the OEM's use of a competing PC operating system. Since 1988, Microsoft's use of per processor licenses has increased. In fiscal year 1993, per processor licenses accounted for an estimated 60% of MS-DOS sales to OEMs and 43% of Windows sales to OEMs.[3] Collectively, the OEMs who have such per processor contracts are critical to the success of competing operating system vendors, but those OEMs effectively are foreclosed to Microsoft's competitors.

Microsoft has further foreclosed the OEM channel through the use of long-term contracts with major OEMs, some expiring as long as five years from their original negotiation date. In some cases, these contracts have left OEMs with unused balances on their minimum commitments, which Microsoft can allow to be used if the contract is extended, but which would be forfeited if the OEM does not extend the contract. These practices have allowed Microsoft to extend the effective duration of its OEM contracts, further impeding the access of PC operating system competitors to the OEM channel.

In addition to using anticompetitive OEM licenses, Microsoft has also employed anticompetitive restrictions in certain of its non-disclosure agreements (''NDAs''). Microsoft

[1] The proposed Final Judgment that was filed with the Complaint on July 15, 1994 contained several omissions and inconsistencies in the numbering of paragraphs and sub-paragraphs. With the Defendant's consent, a corrected version of the Final Judgment is being filed with this Competitive Impact Statement. See Attachment. Paragraph and sub-paragraph numbers in this Competitive Impact Statement refer to the numbers used in the corrected version of the Final Judgment.

[2] Judgment will terminate this civil action, except that the Court will retain jurisdiction for further proceedings that may be required to interpret, enforce, or modify the Judgment, or to punish violations of any of its provisions.

[2] In 1993, Microsoft's MS-DOS operating system constituted approximately 79 % of the operating systems sold to PC manufacturers. PC-DOS accounted for approximately 13 % of such sales, OS/2 constituted approximately 4 %, DR-DOS constituted approximately 3 %, and Unix operating systems constituted approximately 1%. A chart showing these market shares is attached as Exh. 1.

[2] In 1993, Microsoft's MS-DOS operating system constituted approximately 79 % of the operating systems sold to PC manufacturers. PC-DOS accounted for approximately 13 % of such sales, OS/2 constituted approximately 4 %, DR-DOS constituted approximately 3 %, and Unix operating systems constituted approximately 1%. A chart showing these market shares is attached as Exh. 1.

[3] 3 Per processor licenses accounted for an increasing proportion of Microsoft's operating system sales in the 1988—1993 period. Twenty per cent of all units of MS-DOS that were sold to OEMs in FY 1989 were sold pursuant to per processor licenses. That percentage increased to 22 % in FY 1990; 27 % in FY 1991; 50 % in FY 1992; and to 60 % in FY 1993. A chart showing this increasing use of per-processor licenses is attached as Exh. 2.

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anticipates commercially releasing Chicago, the next version of Windows, in late 1994 or early 1995. In preparation for its release, Microsoft has allowed certain third parties, including independent software vendors (''ISVs'') who write applications, to have access to pre-release versions of Chicago, a process known in the software industry as ''beta testing.'' This permits Microsoft to receive feedback from the beta testers, and the ISVs to begin writing applications for Chicago prior to its release.

In connection with beta testing Chicago, Microsoft employed, as it has in prior beta tests, NDAs prohibiting disclosure of confidential information. In this instance, however, Microsoft sought to impose on certain leading software companies far more restrictive NDAs than it had previously used. These NDAs would have precluded developers from working on competitive products and technologies for an unreasonably long period of time.

Through these practices, Microsoft has excluded competitors by unreasonable and anticompetitive means, thereby lessening competition and maintaining a monopoly in the PC operating system market. Microsoft's licensing practices deter OEMs from entering into licensing agreements with operating system rivals and discourage OEMs who agree to sell non-Microsoft operating systems from promoting those systems. By depriving rivals of a significant number of sales that they might otherwise secure, Microsoft makes it more difficult for its rivals to convince ISVs to write applications for their systems, for OEMs to offer and promote their systems, and for users to believe that their systems will remain viable alternatives to MS-DOS and Windows.

Microsoft's exclusionary contracts harm consumers. OEMs that sign Microsoft's exclusionary licenses but offer consumers a choice of operating systems may charge a higher price, in order to cover the double royalty, for PCs using a non-Microsoft operating system. Even consumers who do not receive a Microsoft operating system still pay Microsoft indirectly. Thus, Microsoft's licensing practices have raised the cost of personal computers to consumers.

Microsoft's conduct also substantially lengthens the period of time required for competitors to recover their development costs and earn a profit, and thereby increases the risk that an entry attempt will fail. In combination, all these factors deter entry by competitors and thus harm competition. By deterring the development of competitive operating systems, Microsoft has deprived consumers of a choice of potentially superior products. Similarly, the slower growth of competing operating systems has retarded the development of applications for such systems.

EXPLANATION OF THE PROPOSED FINAL JUDGMENT

The proposed Final Judgment will end Microsoft's unlawful practices that restrain trade and perpetuate its monopoly power in the market for PC operating systems. In addition, the proposed Final Judgment contains provisions that are remedial in nature and designed to assure that Microsoft will not engage in the future in exclusionary practices designed to produce the same or similar effects as those set forth in the Complaint.

In particular, Sections IV (A), (C), and (F) prohibit Microsoft's use of the specific exclusionary practices alleged in the complaint—''per processor'' contracts, lengthy terms, and minimum commitments—that foreclose competing PC operating system vendors from much of the OEM channel. Sections IV (K)–(L) prohibit the use of anticompetitive non-disclosure agreements in conjunction with Microsoft's distribution of pre-commercial releases of operating system software products. Sections IV (B), (E), (G), and (H) impose prohibitions that go beyond the alleged exclusionary practices in order to ensure that Microsoft's future contracting practices—not challenged here because not yet used—do not unreasonably impede competition. Sections IV (J) and (M) are designed to bring existing contracts into immediate compliance with the proposed Final Judgment.

Scope of the Final Judgment

The injunctions in Section IV generally apply to ''covered products'' which are defined, in Section II (A), as the binary code of MS–DOS 6.22; Microsoft Windows 3.11; Windows for Workgroups 3.11; predecessor versions of those products; the product currently code-named ''Chicago'' (the planned successor to Microsoft Windows 3.11); and other successor versions of or products marketed as replacements for the aforementioned products. This definition includes all Microsoft's PC operating system products in which the defendant currently possess a substantial degree of market power. The definition does not encompass, and specifically excludes, Windows NT Workstation and Windows NT Advanced Server, neither of which has a significant share of a relevant market at this time.

The definition of ''covered product'' was drafted with the recognition that Microsoft will continue to modify its operating system products throughout the duration of the Final Judgment. The prohibitions in the decree will apply to the successor and replacement products of those existing operating system products that have substantial market power. The decree will govern the licensing of such products if they are made available as stand-alone products to OEMs pursuant to license agreements, or as unbundled products that perform operating system software functions now embodied in the specifically listed existing products. Moreover, the decree will govern the licensing of successor versions of or products marketed as replacements for MS-DOS 6.22, Microsoft Windows 3.11, Windows for Workgroups 3.11, and ''Chicago,'' even if such successor or replacement products could also be characterized as successors or replacements of operating system software products that are not covered, such as Windows NT Workstation or Windows NT Advanced Server.

Prohibition of the Licensing Violations

The three anticompetitive features of Microsoft's license agreements that are challenged in the complaint—the excessive duration of those agreements, the requirement of royalty payments on a ''per processor'' basis, and large minimum commitments—are addressed principally in Sections IV (A), IV (C) and IV (F) of the Final Judgment.

Duration: Section IV (A) limits the duration of Microsoft's license agreements with OEMs to one year, with OEMs having the option to renew a license for one additional one year term on the same terms and conditions as in the first year. This limitation on the duration of license agreements, along with the safeguards provided in Section IV (G), will ensure that vendors of competing operating systems will have regular and frequent opportunities to attempt to market their products to OEMs. Absent such opportunities, Microsoft's competitors might be unable to reach the level of market penetration needed for profitable operation in a reasonable period of time, even if they are offering products that are deemed superior by those customers who have an opportunity to buy them. Per Processor Licenses: Section IV (C) prohibits the use of per processor licenses.[4] Section II (K) defines per processor licenses as licenses that require the OEM to pay a royalty for all personal computer systems that contain specified microprocessors. As noted above, the requirement to pay a royalty to Microsoft on the sale of a PC that has a non-Microsoft operating system is comparable, in its economic effect, to the imposition of a ''tax'' on the competing operating system. Per processor licenses are also very similar to exclusive dealing or requirements contracts; the OEM in effect is obtaining the right to use Microsoft's operating system, and is paying an operating system royalty, for all of its operating system ''requirements'' for use on PCs using the designated microprocessors.

Minimum Commitments: Section IV (F) will bar Microsoft from entering into any license agreement containing a minimum commitment.[5] While minimum commitments are not in and of themselves illegal, they can be used to achieve a similar effect as that accomplished through per processor licenses or exclusive dealing contracts. If the minimum commitment is greater than the number of units of Microsoft software that the OEM expects or would otherwise desire to use at any time during the term of the contract, the minimum commitment creates a disincentive for an OEM to make incremental purchases of non-Microsoft operating systems. In that context, the minimum commitment also operates in effect to require a royalty payment to Microsoft, even for PCs that use a non-Microsoft operating system. This effect will be ended by Section IV (F).

Restoring Competition To The Market Through Prophylactic Additional Relief The proposed Final Judgment not only bans Microsoft's unlawful practices, but also

[4] Section IV (J) (1) converts all per processor licenses to per system licenses, except those models which an OEM excludes, which will thereafter be subject to the limitations imposed on Microsoft by Section IV (G).

[5] Section IV (J) (2) prohibits Microsoft from prospectively enforcing minimum commitments in existing license agreements.

contains additional provisions which are prophylactic in nature, and are intended to ensure that the anticompetitive effects of those practices are not replicated through use by Microsoft of other exclusionary practices.

Microsoft Prohibited From Limiting OEM Sales of Competing Operating System Products: Section IV (B) bars Microsoft from entering into license agreements that prohibit or restrict an OEM from licensing, selling, or distributing competing operating system products. In addition, Section IV (E) prohibits Microsoft from expressly or impliedly conditioning its licenses of operating systems on the licensing, purchase, use or distribution not only of other covered products, but also any other Microsoft product, or non-Microsoft product. Without these provisions Microsoft could force OEMs to purchase covered products and thus accomplish anticompetitive effects similar to those achieved through its unlawful licensing practices, or attempt to extend or protect its monopoly in any covered product by conditioning its licenses on the licensing, purchase or use of other products.

Microsoft Limited to Per Copy and Per System Licenses: Sections IV (D) and IV (G) require Microsoft to use either ''per copy'' or ''per system'' licenses. Per copy licenses, if used in conjunction with pro-competitive volume discounts, pose few competitive concerns. Per system licenses, if not carefully fenced in, could be used by Microsoft to accomplish anticompetitive ends similar to ''per processor'' licenses. However, if an OEM easily can designate models not subject to a per system license, it can use non-Microsoft operating systems on those models without incurring a royalty obligation to Microsoft. If an OEM need not pay a royalty to Microsoft for anything but the number of copies of the Microsoft operating system that it actually uses, that OEM will not be deterred from licensing, purchasing or using competing operating system products.

Restrictions on Per System Licenses: The Final Judgment also places restrictions on the use of per system licenses to ensure that they are not used in an exclusionary manner. In particular, Section IV (G) specifies that per system licenses must allow the licensee to create ''new systems'' that can be sold without incurring a royalty obligation to Microsoft if they do not utilize a Microsoft product. Under Section IV (G), an OEM need only designate a new model name or number to create a ''new system.'' Microsoft may not require the OEM even to notify Microsoft of the creation of a new system; nor may Microsoft impose requirements relating to the marketing or advertising of a new system, or penalize an OEM for creating a new system.

Section IV (G) (4) requires Microsoft to notify within 30 days following entry of this Final Judgment all existing OEM licensees under per system licenses and all OEM licensees with per processor licenses who choose to let them be converted to per system licenses (a provision discussed below) of their rights to create new systems that will not be subject to any existing per system license. This notice provision ensures that existing licensees promptly know of their rights to avoid royalty payments under per system contracts if they choose to create new systems.

Microsoft Prohibited From Using Lump Sum Pricing: Section IV (H) also serves a prophylactic function, prohibiting the use of lump sum pricing in license agreements for covered products. As defined in Section II (F), lump sum pricing is any royalty payment that does not vary with the number of copies of the covered product (under per copy licenses) or the number of personal computer systems (under per system licenses) that are licensed, sold, or distributed by the OEM. This restriction, like the prohibitions on minimum commitments and requirements contracts, restricts conduct that could be used by Microsoft to achieve effects comparable to the effects of the conduct challenged by the government, and for that reason is enjoined.[6]

Neither Section IV (H) nor any other provision of the proposed Final Judgment prohibits the use of royalty rates, including rates embodying volume discounts, agreed upon in advance with respect to each individual OEM, each specific version or language of a covered products, and each designated personal computer system model. Nothing in the Final Judgment, however, in any way sanctions Microsoft structuring any volume discount whose purpose or effect is to impose de facto requirements contracts or exclusive arrangements on the OEM. As discussed below in connection with alternatives to the proposed Final Judgment, given Microsoft's monopoly power in operating systems, such practices can violate the antitrust laws.

Transition Rules

In the Stipulation consenting to the entry of the proposed Final Judgment, Microsoft agreed to abide by the provisions of the proposed Final Judgment immediately upon the filing of the Complaint, i.e., as of July 15, 1994. Among other things, the transition provisions described herein will require Microsoft to abide by the foregoing limitations and prohibitions when entering into any license agreements with OEMs after July 15, 1994. Certain additional provisions of the proposed Final Judgment also apply to existing license agreements that are inconsistent with the proposed Final Judgment's requirements for new license agreements.

Under Section IV (I), existing OEM licensees may terminate or negotiate with Microsoft to amend their agreements to make them consistent with the requirements of the Final Judgment.

Section IV (J) provides that if an OEM chooses not to exercise either of these options, Microsoft must abide by the following rules. First, under Section IV (J) (1), a per processor license must be treated as a ''per system'' license; OEM models that contain the microprocessor(s) specified in such a per processor license will be considered to be covered by the ''per system'' license unless the OEM opts in writing to exclude such model from coverage. As already noted, OEMs may freely sell PCs with non-Microsoft operating systems, and avoid any obligation to pay royalties to Microsoft under a per system license, simply by designating such PCs as a new system with a separate model number or name. Second, under Section IV (J) (2), Microsoft may not enforce any minimum commitment in an existing license agreement.

These provisions further two consistent goals. Opportunities for competition in the PC operating system market are fostered by a rapid end to the unlawful practices embodied in existing licenses. At the same time, the transition rules avoid creating hardships for OEMs by not unnecessarily disrupting established commercial relationships with Microsoft. Indeed, OEMs are not required to terminate or amend their existing contracts with Microsoft; the choice to do so is theirs alone. Microsoft, however, may not enforce the per processor or minimum commitment features of any existing contract. Providing OEMs with this choice minimizes the costs of the transition from existing license agreements that are inconsistent with the decree to new license agreements, while ensuring that any unavoidable transition costs be borne largely by Microsoft.

To ensure that existing licensees learn of their rights under the proposed Final Judgment, Section IV (M) requires Microsoft to provide a copy of the Final Judgment to all OEMs with which it has license agreements, except for those who have licenses only under Microsoft's Small Volume Easy Distribution program or the Delivery Service Partner program.

Non-Disclosure Agreements

Finally, the proposed Final Judgment contains provisions that prevent Microsoft from imposing unlawfully restrictive NDAs on developers of applications software.

Sections IV (K) (1) limits the duration of any NDA to the earliest of (a) the commercial release of the product covered by the NDA, (b) an earlier public disclosure of the information covered by the NDA, or (c) one year after the information is disclosed to the person subject to the NDA. Section IV (K) (2) provides that NDAs may not restrict subject parties from developing software products that will run on competing operating systems, if such development does not entail the use or disclosure of Microsoft proprietary information during the term of the NDA.

In combination, these provisions recognize that whatever Microsoft's legitimate interest in protecting the confidentiality of proprietary information covered by the NDAs, the need for any such protection must be balanced against the competitive

[6] If a license agreement established a minimum commitment greater than the OEM's requirements for operating systems (an agreement that would be prohibited under this decree), the minimum commitment would constitute, in effect, a lump sum payment. Regardless of the number of copies distributed by the OEM, its royalty payment to Microsoft would not vary. A lump sum pricing arrangement imposed by a monopolist that allowed unlimited use of the licensed product for a single fee calibrated to the anticipated total operating system needs of a particular OEM would also produce a similar economic effect as a requirements contract or a per processor license: the OEM would owe the same royalty to Microsoft whether it chose to use a Microsoft operating system on all of the PCs it sold, or only on some of the PCs it sold, and would, in effect, ''pay twice'' if it chose to purchase a non-Microsoft operating system for some of its PCs.

consequences of any restriction imposed on others concerning disclosure and use of the information. The proposed Final Judgment ensures that any NDA imposed by Microsoft will not extend beyond the point that the requirements of the Antitrust Procedures and Penalties Act have been satisfied. The Court then must determine whether the proposed decree is in the public interest, pursuant to Section 5 (e) of the Clayton Act, 15 U.S.C. 16 (e).[7]

ALTERNATIVES TO THE PROPOSED FINAL JUDGMENT

In addition to the remedies provided in the proposed Final Judgment, the Department also considered whether to require limitations on the manner in which Microsoft could structure volume discount pricing arrangements for covered products. While the Department recognizes that volume discount pricing can be and normally is pro-competitive, volume discounts also can be structured by a seller with monopoly power (such as Microsoft) in such a way that buyers, who must purchase some substantial quantity from the monopolist, effectively are coerced by the structure of the discount schedule (as opposed to the level of the price) to buy all or substantially all of the supplies they need from the monopolist. Where such a result occurs, the Department believes that the volume discount structure would unlawfully foreclose competing suppliers from the marketplace—in this case, competing operating systems—and thus may be challenged.

The Department ultimately concluded that it would not require provisions in the Final Judgment to attempt to proscribe in advance the various means by which Microsoft could attempt to structure volume discounts as a means to thwart competition rather than as a means of promoting competition. The Department reached this conclusion because it does not have evidence that Microsoft has, to date, in fact structured its volume discounts to achieve anticompetitive ends. The Department did, however, communicate to Microsoft its concern and stated its intent to initiate an investigation and antitrust enforcement proceeding, if warranted, should Microsoft adopt anticompetitive volume discount structures in its future license agreements. Given the procompetitive impact of the provisions of the proposed Final Judgment, the normally procompetitive nature of volume discount pricing, and the absence of any evidence that Microsoft has used volume discounting in an anticompetitive manner to date, the Department believes that this resolution is appropriate on the record at this time.

Another alternative to the proposed Final Judgment would be a full trial of this case. The Department of Justice believes that such a trial would involve substantial cost to the United States and is not warranted since the proposed Final Judgment provides all of the relief that the United States seeks in its Complaint and includes substantial additional prophylactic measures as well.

Determinative Materials and Documents

No materials or documents of the type described in Section 2(b) of the Antitrust Procedures and Penalties Act, 15 U.S.C. 16(b), were considered in formulating the proposed Final Judgment.

Dated: July 27, 1994

Respectfully submitted,

Anne K. Bingaman
Assistant Attorney General
Antitrust Division
Donald J. Russell
U.S. Department of Justice Antitrust Division
Communications & Finance Section
Judiciary Center Building
555 Fourth Street, NW
Washington, DC 20001
(202) 514–5814

EXHIBIT 4
TO THE COMMENTS
OF RELPROMAX ANTITRUST INC.

MTC–00030631—0256

GARY L. REBACK (Bar No. 218594)
SUSAN A. CREIGHTON
DAVID A. KILLAM
NEIL M. NATHANSON
IRWIN R. GROSS
WILSON, SONSINI, GOODRICH & ROSATI
Professional Corporation
650 Page Mill Road
Palo Alto, California 94304–1050
Telephone: (415) 493–9300

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA UNITED STATES

Plain vs. ?? No. 94–1564 (SS) MICROSOFT COR?? FILED Defend FEB 14 1995 Clerk U.S. District Court District of Columbia.

MEMORA?? The economic arguments in ?? were prepared m extensive consultation with the following economists. However, because of the shortness of time, counsel retained complete responsibility for the contents of this document.

Garth Saloner
W. Brian Arthur
Magowan Professor of Economics Citibank Professor and Strategic Management Santa Fe Institute and and Associate Dean for Morrison Professor of Academic Affairs Population Studies and Graduate School of Business Economics Stanford University Stanford University

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[7] In making this public interest determination, ''[t]he balancing of competing social and political interests affected by a proposed antitrust consent decree must be left, in the first instance, to the discretion of the Attorney General. The court's role in protecting the public interest is one of insuring that the government has not breached its duty to the public in consenting to the decree. The court is required to determine not whether a particular decree is the one that will best serve society, but whether the settlement is ''within the reaches of the public interest.''' United States v. Bechtel Corp., 648 F.2d 660,666 (9th Cir.), cert. denied, 454 U.S. 1083 (1981) (citations and internal omitted), Accord United States v. Western Electric Co., 993 F.2d 1572, 1576 (D.C. Cir. 1993); United States v. American Tel. and Tel. Co., 552 F. Supp. 131,151 (D.D.C. 1982), aff'd suc nom. Maryland v. United States, 460 U.S. 1001 (1983).

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The Department of Justice has determined that from 1988 through July 1994, a period during which the number of personal computers in the United States virtually exploded. Microsoft Corporation successfully used a variety of unlawful and ''anticompetitive'' practices to maintain its monopoly position in the market for ''operating systems'' for use with personal computers. As a result of these unlawful practices, Microsoft has been able to preclude any meaningful competition in the market while increasing the installed base of Microsoft operating systems from well under 20 million in 1988 to approximately 120 million in 1994.

This memorandum [1] will show that under established economic theory, this now-massive installed base will enable Microsoft, if unchecked, both to maintain its monopoly in the operating systems market, and to leverage its installed base to dominate and monopolize the markets for applications and other software products. This brief also will show that the Department's proposed decree completely fails to address the consequences of the huge increase in installed base that Microsoft has procured through illegal practices. Instead, the Department simply proposes to shut the barn door now that the horse has already gone.

Under established economic theory, it is clear that the proposed decree will neither

[1] This memorandum amici curiae is submitted by Wilson, Sonsini, Goodrich & sati on behalf of certain clients that prefer to retain their confidentiality. Hence, they are not identified in this submission.

result in an increase in competition in the operating systems market, nor prevent Microsoft from monopolizing the remainder of the software industry. These amici accordingly urge the Court to require further submissions from the Department, both by way of expert affidavits and the production of documents, to explain how permitting Microsoft to profit from its illegal conduct not just by continuing, but by expanding, its monopolization of the software industry can be argued to be in the ''public interest.''

Introduction and Summary

This Court has been asked to endorse the proposed Consent Decree between the Department of Justice and Microsoft without being provided with any of the information upon which a meaningful determination under the Tunney Act could be based. Thus, for example, the Department's investigation ostensibly inquired regarding ''alleged false product preannouncements'' by Microsoft. 59 Fed. Reg. 59,426, 59,427 (Nov. 17, 1994). At the September 29, 1994 hearing on this matter, the Court referred to this issue, noting that in the book Hard Drive,:[2] Microsoft was said ''time after time'' to predatorially preannounce products ''th the intent [to] freeze other people from coming out with their product.'' Tr. of Status Call, Sept. 29, 1994, at 16:21–22. The following colloquy then took place between Microsoft's counsel and the Court:

The Court: [H]ow do you answer those charges?

Mr. Urowsky: Those charges we believe are entirely false.

The Court: In other words, the vaporware charge is false?

Mr. Urowsky: That's correct.

Id. at 15:7–12, 16:18–17:1.

Microsoft's representations, however, are belied by Microsoft's own documents, produced to the Government during the course of its investigation. (Examples of such documents are attached hereto at Appendix Exs. 21 and 22.)[3] Thus, for example, a Microsoft manager was involved in spearheading two product preannouncements during one six-month period. In one instance, the manager wrote that in response to ''Borland's announce[ment of] TurboBASIC at the November Comdex,'' he simultaneously worked ''to develop a [Microsoft] spec[ification] that could beat TurboB,'' while also formulating a promotional campaign ''that could hold our position until [QB3, the Microsoft product] hit the market.''[4] He stated that he ''reviewed [this] promotion plan with Bill G. before implementation.'' Id. The Microsoft documents state that Steve Ballmer, one of Microsoft's top executives, favorably commented on this strategy, saying that the ''best way to stick it'' to Borland was such a ''QB3 preannounce to hold off Turbo buyers.''[5]

In the same document, the Microsoft manager wrote that Microsoft was ''not as far along on the response to [Borland's] Turbo C,'' a second product, because Microsoft was ''further from product announcement.'' According to the Microsoft document, the Microsoft manager: developed a rollout plan for [Microsoft's products] QuickC and CS that focused on minimizing Borland's first mover advantage by preannouncing with an aggressive communication campaign.[6]

The manager was given the highest possible rating on his performance review (a ''5-'') for his ''public relations'' handling of this ''C preannouncement.''[7]

Perhaps even more striking than the incongruence between Microsoft's representations and its own documents is the silence by the Department, both in its written submissions and in its oral presentation to the Court, regarding its findings on this and other matters. The Department has not taken the position (nor, presumably, could it, without some explanation of the documents that have been submitted to it) that Microsoft has not engaged in practices such as predatory, preannouncements, or the seeding of what are referred to as ''undocumented calls'' (secret elements in an operating system that make a competitor's applications program operate less well than a rival Microsoft program),[8] Instead, the Department simply has asserted that it had determined that ''no further action was warranted'' on these matters—presumably a conclusion that it asks this Court to take completely on faith, since it has provided the Court with literally no explanation for its decision.

Most remarkable of all, however, is the absence of any information in any of the Department's submissions regarding the adequacy of its proposed remedy for Microsoft's illegal monopolistic conduct. Based on the Department's own allegations, from 1988 to 1994 Microsoft used a variety of illegal tactics to maintain its monopolistic share in the rapidly growing operating systems market—and thus increased the size of its installed base through the use of illegal tactics from no more than 18 million[9] to approximately 120 million users.[10] Having acknowledged that Microsoft thus illegally acquired its massive installed base, the Department nonetheless has failed to proffer any basis for concluding that simply prohibiting these practices in the future will remedy the unassailable position that Microsoft has gained as a result of its unfair and illegal practices.

Certainly no one in the industry believes that the Department's proposed remedies will have the slightest effect in unseating Microsoft from the position that it now illegally occupies. As one competitor observed after the consent decree was announced, ''[t]he consent decree seems to have set [Microsoft] free .... Now, they are running rampant over everything.''[11] Microsoft entirely agrees. As Bill Gates observed in his response to the proposed decree:

None of the people who run [Microsoft's seven] divisions are going to change what they do or think or forecast. Nothing. There's one guy in charge of [hardware company] licenses. He'll read the agreement.—Elizabeth Corcoran, Microsoft Deal Came Down to a Phone Call, Washington Post, July 18. 1994, at Al (Ex. 42).

Nor have events since the decree was proposed provided the slightest basis for believing that the Department's proposed remedy will have any effect. In a nationally televised press conference on July 16, 1994, Attorney General Janet Reno predicted that the Department's settlement with Microsoft would have two results: it ''will save consumers money [and] enable them to have a choice when selecting operating systems.''[12] In fact, however, in the six months since the proposed settlement was announced, press reports indicate that Microsoft has literally doubled the price of its operating system to computer manufacturers.[13]

Moreover, far from the decree leading to an increase in competition in the operating

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[2] James Wallace & Jim Erickson, Hard Drive: Bill Gates and the Making of the Microsoft Empire (1992).

[3] Exhibit numbers refer to selected supporting documents which have been included in the Appendix to this Memorandum of Amici, filed herewith. For the Court's convenience, documents in the Appendix have been organized alphabetically by publication title.

[4] Microsoft Corp. Employee Performance Review, dated May 4, 1987, at 3 (Ex. 21). (Although this review has become a public document, these amici have redacted the review to safeguard the employee's privacy interests.)

[5] Microsoft Corp. Employee Performance Review, dated Nov. 2, 1987, at 8 (Ex. 21). (Although this review has become a public document, these amici have redacted the review to safeguard the employee's privacy interests,)

[6] Id. at 6.

[7] Microsoft Corp. Employee Performance Review, dated May 4, 1987, supra, at 3 (Ex. 21).

[8] Examples of such ''undocumented calls'' will be described in Section IV, infra.

[9] According to industry consultant Jerry Schneider, Microsoft's installed base in March 1988 was only nine to twelve million. Dump DOS? No Way, Not Yet, Computer Decisions, March 1988 at 50 (''between nine and twelve million DOS machines''). Indeed, according to Business Week, no more than twelve million PCs had been sold by April 1988. Will Sun Melt the Software Barrier, Business Week, April 18, 1988, at 72 (''Sun aims to coax a portion of the 12 million owners of PCs and clones into the UNIX camp.'') The more expansive measure taken by industry analysts at International Data Corp. indicated there were ''approximately 18 million IBM PCs and compatibles worldwide,'' in March 1988. Alan Radding, IBM PC Orphans Hang On To A Good Thing, Computerworld, March 7, 1988, at 81. Therefore, even under the assumption that Microsoft's operating system software had been installed in every IBM PC or compatible sold by 1988, Microsoft's installed base at that time was no larger than eighteen million. Cf. Christopher O'Malley, The New Operating Systems, Personal Computing, October 1986, at 181 (''better than 95 percent [of then-existing] PC's and compatibles use] Microsoft's disk operating system.'').

[10] Amy Cortese, Next Stop, Chicago, Business Week, Aug. 1, 1994, at 24 C120 million MS-DOS customers (including 55 million Windows users)''). See also OS Overview, Computer Reseller News, Aug. 22, 1994, at 223 (International Data Corporation table) (DOS and Windows installed base of 110.1 million).

[11] Amy Cortese, No Slack for Microsoft Rivals, Business Week, Dec. 19, 1994, at 35 (Ex. 5).

[12] Attorney General Janet Reno, Department of Justice Press Conference Transcript Microsoft Settlement (July 16, 1994) at 2 (Ex. 12).

[13] Amy Cortese, Business Week, Dec. 19, 1994, supra, at 35 (Ex. 5) (''Computer makers have been startled to learn that they will be asked to swallow a huge price hike for their use of Windows 95—to as much as $70 per PC, vs. roughly $35 today.'').

systems market, a key competitor in that market, the maker of DR DOS, has subsequently withdrawn from the market. The competitor observed in withdrawing from the market that ''the battle for the desktop is over and MS DOS and Windows have won.'' [14] The withdrawal of DR DOS from the market is of particular note since it was DR DOS that the authors of Hard Drive pointed to as providing the most likely source of meaningful competition to Microsoft in the operating systems market. See Hard Drive, supra, at 398.[15]

Having failed to explain how its proposal will remedy Microsoft's illegal acquisition of its massive installed base in the operating systems market, the Department's submission does not even touch on Microsoft's use of that illegally acquired installed base to leverage into—and acquire market power in—other software markets. In analyzing the strength of the Department's case against Microsoft, Hard Drive identified Microsoft's weakness in application programs as the principal reason (apart from the competition provided by products such as DR DOS) why Microsoft's dominant position arguably would not hurt consumers. With respect to application programs, the authors in 1992 argued that Microsoft does not come close to dominating the Big Three of applications—word processing, databases and spreadsheets. WordPerfect is far ahead of Microsoft Word, Lotus 1–2–3 is still ahead of Excel, and Microsoft has nothing to compete against Ashton-Tate's dBASE.

Larry Campbell, Novell to Introduce SuperNOS Strategy, South China Morning Post, Sept. 20, 1994, at 1 (Ex. 37) (quoting Robert Frankenburg speech to Networld + InterOp ''94 conference). See also Bob Lewis, Ten Troublesome Trends in Computing That Are Sure to Spook You, InfoWorld, Oct. 31, 1994, at 82 (''Let's all admit that NextStep and QNX should have all of the market if there was any justice,'' but Microsoft's ''Windows and DOS have more than 80 percent market share, so the wax is over! ''). Nor has the irony of this withdrawal been lost on the computer industry. As one observer noted: ''July [of 1994] saw Microsoft in full agreement with the Justice Department. Microsoft agreed to withdraw the ''per processor'' option that most PC suppliers found the cheapest way to buy DOS [in order to] encourage firms to offer alternatives to Microsoft's operating systems. Shortly afterward, Novell announced that it was stopping development of DR-DOS.'' Jack Schofield, Computing 94: Processor Wars and Rumors of Delays, Guardian, Dec. 29, 1994, at T14.

What a difference three years can make—at least when, like Microsoft, a company can leverage its installed base in operating systems, and finance early losses in applications with monopoly profits from operating systems. Under the headline ''MICROSOFT'S DOMINATION,'' Dataquest Inc. has reported the 1994 market revenue and share figures for the applications market:

''Lotus 1–2–3, WordPerfect, dBASE, Paradox and Harvard Graphics once dominated their respective categories,'' said Dataquest analyst Karl Wong. ''Today, Microsoft products have replaced each of these one-time product category leaders.'' Microsoft's Domination, San Jose Mercury News, December 21, 1994, at 1F (Ex. 35).

Microsoft did not achieve its dominant position in operating systems and applications through free and open competition on a level playing field. Rather, it used the illegal tactics challenged in the Government's complaint to create a huge installed base in operating systems. Then, it took unfair advantage of its installed base to give its own applications group a head start and its programs a performance advantage over applications competitors—precisely the concern voiced in Hard Drive [17] and echoed by this Court.[18]

Indeed, in 1990 Microsoft began to bundle its application products together into so-called ''suites.'' These mites are the fastest growing segment of the applications market, and Microsoft commands more than 85% of the suite market. See Personal Computing Software Worldwide, Dataquest, June 27, 1994, at 20 (selected pages at Ex. 11) (unit shipments of suites grew more than 350% in 1993); id. at 27 (Microsoft's 1993 market share for suites is 85.4%); Doug VanKirk, Integrated Office Suites, InfoWorld, Feb. 7, 1994, at 51 (''Microsoft owns a 90 percent share of the suite market .... '').

''Microsoft has never had a hit among its MS-DOS applications programs.'' [19] Yet, in the past few years, Microsoft has come from nowhere to provide the lion's share of business application programs.[20]

As explained in this brief, Microsoft achieved that result by the illegal tactics charged by the Government, and by illegal tying techniques, monopoly leveraging, and otherwise predatorially exploiting its monopoly position in one market to achieve market power in other markets. Because of the type of economic forces that prevail in these markets, rigorous economic analysis predicts that, unless restrained by Government action, Microsoft will succeed in using its dominance in operating systems to monopolize all other aspects of transaction software, from desktop applications to online systems. Microsoft's goal is to identify and control every ''strategic component,'' ''choke point'' or ''leverage point'' in the information economy.[21] And Microsoft is already close to achieving a complete lock-in in desktop applications.

This Memorandum of Amici argues that the Proposed Final Judgment is not in the public interest and should not be entered by this Court. Indee??conomically impossible to achieve the stated goals of greater choices and lower prices for operating systems without (1) addressing the increase in installed base that Microsoft has procured through illegal practices and (2) restraining Microsoft's use of that installed base to dominate the markets for applications and other software products.

This Memorandum of Amici is divided into seven sections. This first section provides a summary and overview of the brief. The second section addresses the scope of investigation and power of this Court under the Tunney Act. In particular, the second section argues that, under 15 U.S.C. 16(e), the Court not only can but should consider the effect of the proposed decree beyond the operating systems market. The section further argues that the Department's submission falls far short of providing the Court with an adequate record upon which to act, and provides no factual predicate for concluding that the decree's remedy is even arguably within the ''public interest'' under Section 16(e). The remainder of the brief explains that the Government cannot effectively restore and maintain competition—even in the operating systems market—without addressing both the consequences of the ''installed base'' that Microsoft increased through illegal means, and the use of Microsoft's resulting market power more broadly. Section III describes the markets and technologies in which Microsoft operates and lays a foundation for an understanding of Microsoft's conduct and strategic direction. The section begins by describing the interrelationships among complicated software technologies and demonstrates that the various markets in which Microsoft competes are parts of a large network that can be entered by a competitor's product through a few key gateways, the principal gateway being the desktop operating system. Using economic analysis, the section then argues that the economic characteristics of the technologies and markets at issue differ markedly from other, more conventional industries, in that these products (software products) and markets (networks) exhibit ''increasing returns,'' also sometimes called ''network effects.'' The section discusses the underlying characteristics of the technology that gave rise to these conditions and the likely consequences that these circumstances will produce.

Section IV of the brief explains Microsoft's strategy and evaluates Microsoft's prospects for complete domination of all of the interconnected software markets. The section begins by explaining that Microsoft increased its ''installed base'' in operating systems through the illegal practices charged in the Government's complaint. The section then explains and documents the fact that Microsoft pursues a strategy of leverage from ''gateway'' markets, like the desktop operating system in which it is dominant, to strategic markets in which its competitive position is weak (as was the case in applications). Microsoft targets such strategic markets, establishes marketing and technological links to those markets from established monopolies in gateway markets, and leverages its power to monopolize the target markets. In other words, it transfers the installed base of a gateway market it dominates to create an installed base in the strategic target market. The section focuses primarily on the desktop market, describing in some detail the method by which Microsoft (according to the Government's Tunney Act filing) used illegal activities to increase its installed base in operating systems and then leveraged its monopoly

[17] Hard Drive, supra, at 398–99.

[18] Tr. of Status Call, Sept. 29, 1994, at 25–28.

[19] Ron White, Microsoft Gives the New Word, PC Week, Oct. 20, 1987, at 95.

[20] See. Eg., Brent Schlender, Bill. Gates: What Doesn't He Want, Fortune, Jan. 16, 1995, at 36.

[21] Id. at 47.

over the operating system to dominate applications. In particular, the section describes Microsoft's tactics of bundling and unbundling functions into and out of its operating system to disadvantage its competitors in the applications market.

Section V of the Memorandum of Amici applies ''increasing returns'' economics to suggest that Microsoft likely will achieve a monopoly position for its products throughout the entire personal computer network unless restrained by Government action. The section rejects various arguments that could be put forward to justify such monopolization, including the arguments (1) that alternative networks created by alliances of competitors will provide competition, and (2) that the benefits derived from integration of a single product line are worth the cost in loss of free competition throughout the network. The section concludes by suggesting that absent meaningful governmental intervention, the American software industry will be monopolized by Microsoft, with the only competition coming from protected markets and competition abroad.

Section VI evaluates the possibilities and prospects for governmental intervention from the legal ''perspective. The section begins with an evaluation of the proposed Final Judgment, observing that the Government's Tunney Act filing concedes that Microsoft. through the use of illegal practices, has acquired an enormous installed base that constitutes an overwhelming barrier to entry. The only sanction proposed by the Government, requiring Microsoft to cease the behavior that permitted it to acquire this entrenched installed base, will have no effect in diminishing the installed base, easing barriers to entry, or otherwise precluding Microsoft from using the illegally acquired installed base to monopolize the operating system market or other markets. The section considers specific strategies for relief adopted by previous Administrations in comparable situations and analyzes legal precedents supporting such strategies. Finally, Section VII of the brief proposes procedures this Court may wish to adopt in order to exercise its appropriate role in Tunney Act proceedings. The section urges the Court to order the production of key Microsoft documents and to require the Government to produce detailed and predictive economic models of the type previously employed to support consent decrees adopted through Tunney Act procedures.

The Permissible Scope of This Court's Review

In 1974 Congress enacted the Antitrust Procedures and Penalties Act (''APPA''), also known as the ''Tunney Act.'' 15 U.S.C. §§ 16(b)-(h) (1994), out of concern with ''prior practice, which gave the [Justice] Department almost total control of the consent decree process, with only minimal judicial oversight.'' United States v. American Tel. & Tel., 552 F.Supp. 131. 148 (D.DC 1982) (''AT&T''), aff'd sub nom. Maryland v. United States, 460 U.S. I001 (1983). To remedy this practice, Congress sought to eliminate ''judicial rubber stamping'' of such consent decrees,[22] providing that ''[b]efore entering any consent judgment ... the court shall determine that the entry of such judgment is in the public interest.'' 15 U.S.C. 16(e). Circuit Judge Aldrich, sitting by designation in United States v. Gillette Co., 406 F.Supp. 713 (D. Mass. 1975) (cited by both the Department and Microsoft), observed upon reviewing the legislative history of the Act:

The legislative history shows clearly that Congress did not intend the court's action to be merely pro forma, or to be limited to what appears on the surface. Nor can one overlook the circumstances under which the act was passed, indicating Congress'' desire to impose a check not only on the government's expertise—or at the least, its exercise of it—but even on its good faith.——Id. at 715.[23]

Despite this clear statutory intent, the oral and written submissions in the present case have suggested that the Court's review should be circumscribed in ways not supported either by the statute or by existing case law. First, the submissions may be taken as suggesting that the Court should look only to the impact of the proposed decree on the operating system market in determining whether the decree is in the public interest. See, e.g., 59 Fed. Reg., at 59,429. The law, however, plainly is otherwise. For example, in United States v. BNS Inc., 858 F.2d 456 (9th Cir. 1988),—a case relied upon by the Department—the Court observed that ''the statute suggests that a court may, and perhaps should, look beyond the strict relationship between complaint and remedy in evaluating the public interest.'' 858 F.2d at 462 (quoting United States v. Bechtel Corp., 648 F.2d 660, 666 (9th Cir.), cert. denied, 454 U.S. 1083 (1981)). While the court's public interest determination may not be based on a different market from the one identified in the complaint, the Ninth Circuit emphasized that this did not mean that only effects on that market can or should be considered:

[T]he statute clearly indicates that the court may consider the impact of the consent judgment on the public interest, even though that effect may be on an unrelated sphere of economic activity. For example, the government's complaint might allege a substantial lessening of competition in the marketing of grain in a specified area. It would be permissible for the court to consider the resulting increase in the price of bread in related areas.—Id. at 463 (emphasis added).

Under the Department's own authority, therefore, the Court's inquiry is not limited to the effect of the proposed judgment on the operating system market. To the contrary, the Court can (and, it is submitted, should) determine the effect of the proposed judgment on other areas impacted by Microsoft's monopolistic conduct. As will be discussed in more detail in Section IV, infra, for example, Microsoft has used its illegally acquired market position to leverage into and acquire a monopoly in other related markets. The failure of the decree to ''break up or render impotent [this] monopoly power found to be in violation of the Act.'' AT&T, 552 F. Supp. at 150—indeed, its tacit decision to leave Microsoft free to profit from its unlawful market power by leveraging into other software markets—is something that the Court should consider in evaluating the public interest served (or disserved) by the proposed decree.

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A second limitation implied in the submissions to the Court also is without authority in the case law. namely, that the Court is limited to considering those matters that the Department has identified in its complaint. That is not the law. See, e.g., BNS, 858 F.2d at 462 (''a court may consider matters not discussed in the complaint''); Gillette, 406 F.Supp. at 715 (''Congress did not intend the court's action to be... limited to what appears on the surface''). Indeed, simply accepting at face value the Department's analysis—and even its good faith—amounts to precisely the kind of ''rubber stamping'' that the APPA expressly rejects. The Court is required, in evaluating the Department's proposed decree, to determine whether it ''meets the requirements for an antitrust remedy—that is, if it effectively opens the relevant markets to competition and prevents the recurrence of anticompetitive activity.'' AT&T, 552 F. Supp. at 153. If the Department has determined not to address a practice—for example, Microsoft's ''bundling'' of operating and applications programs, discussed in more detail in Section IV, infra—which forecloses any meaningful chance of competition in the operating systems market, that fact must be considered by the Court in assessing the adequacy of the decree as a remedy for the charged violations. That is so regardless of whether the Department has chosen to turn a blind eye to the consequences of such bundling on the effectiveness of its proposed decree.

Finally, prior submissions to the Court have emphasized that in assessing whether the decree is in the ''public interest'' under Section 16(e), the Court should not ''determine whether the resulting array of rights and liabilities is the one that will best serve society, but only to confirm that the resulting settlement is within the reaches of the public interest.'' United States v. Western Electric Co., 900 F.2d 283, 309 (DC Cir. 1990), cert. denied, 498 U.S. 911 (1990) (citations and quotations omitted; emphasis in original). This standard clearly is correct. but the parties'' further assertion—that the submissions already made by the Department are sufficient to satisfy this standard—equally clearly is not.

A comparison of the information provided in those cases relied upon by the Department,

[22] As the sponsor of the Act, Senator Tunney, declared: ''Specifically, our legislation will . . make our courts an independent force rather than a rubber stamp in reviewing consent decrees, and it will assure that the courtroom rather than the backroom becomes the final arbiter in antitrust enforcement.'' The Antitrust Procedures and Penalties Act: Hearings on S. 782 and S. 1088 before the Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary, 93rd Cong., 1st Sess. (1973).

[23] Accord AT&T, 552 F. Supp. at 148 (Congress had ''found that consent decrees often failed to provide appropriate relief, either because of miscalculations by the Justice Department or because of the ''great influence and economic power'' wielded by antitrust violators'').

with that provided here, highlights just how far short the Department has fallen in providing this Court with an adequate record upon which to act. For example, the Department relies heavily upon the Court of Appeals'' decision affirming a modification of the consent decree in United States v. Western Electric Co., Inc., 993 F.2d at 1572. See 59 Fed. Reg. at 59,429.[24] However, in finding that there was a sufficient ''factual foundation for the judgment call made by the Department of Justice and to make its conclusion reasonable,'' 993 F. 2d at 1582, the Court of Appeals in that case expressly pointed to the ''array of prominent economists (including two Nobel laureates, Stigler and Arrow),'' who had submitted affidavits in the record that supported the Department's position. These affidavits provided detailed support for the factual predicates underlying the Department's proposal, including the view that the Bell operating companies would not be able to discriminate or engage in cross-subsidization: that government oversight would be effective in regulating their behavior; and that the proposal would enhance competition in the relevant markets. See id. at 1578–82.

This Court, by contrast, has not been provided with the affidavit of any economist, or for that matter of anyone else, that would provide a factual predicate for any of the matters that it must decide in reviewing the adequacy of the proposed decree. The Department has provided no factual basis (other than its say-so) for believing that the remedies proposed in the decree would be sufficient to ''pry open to competition'' the operating systems market, AT&T, 552 F. Supp. at 150; that Microsoft's other anticompetitive practices (undocumented calls, predatory preannouncements, anticompetitive bundling and unbundling, early disclosure to Microsoft applications programmers) will not undermine the effectiveness of the decree; and so forth. Although this case involves an industry of unquestioned significance to the future of the American economy—one of comparable importance to AT&T itself — the Department has in fact given this Court nothing to go on other than the purest ipse dixit. Indeed, it is hard to imagine how the Department could claim that its request for approval of the decree amounts to anything but a request for a ''rubber stamp'' when it has so notably failed to say anything other than ''trust us.''

Nor does the Department's submission compare favorably with the information available to other courts in cases cited by the Department. In Gillette, for example, which first formulated the ''reaches of the public interest'' standard, see 406 F. Supp. at 716, Judge Aldrich concluded that he was able to make an independent determination regarding the adequacy of the proposed decree because ''the record [in the case] is both open and extensive.'' Id. at 715. Here, the record is neither. Indeed, the transcripts of the hearings on September 29, 1994 and November 2, 1994 are replete with inquiries by the Court regarding matters inextricably tied to the adequacy of the proposed remedy—inquiries that repeatedly failed to yield any information at all, or (even worse) information that is at odds with the record.

The example of preannouncements already has been discussed above: despite Microsoft's unequivocal denial, and the Department's silence, the documentary record shows that such predatory preannouncements in fact are used by Microsoft. Nor is this the only example highlighted by the transcript. Equally striking is the Court's effort to ascertain whether the Department had concluded that a ''Chinese Wall'' exists between Microsoft's operating system and applications divisions. Noting the discussion of this point in Hard Drive, the Court may have been left with the impression during the hearing that such a ''Chinese Wall'' in fact exists. See Tr. of Status Call, Sept. 29, 1994, at 27:11–28:1. Certainly that is the impression that Microsoft previously has sought to convey, dating all the way back to 1983.[25] Indeed, throughout the spring and summer of 1991, after the FTC announced its investigation of Microsoft in March 1991, Microsoft persisted in its claim that the company's applications and systems development groups were separated.[26]

Now, however, at the end of a long footnote in its written submission, Microsoft disavows that any such ''Chinese Wall'' exists—and, indeed, derides the idea as ''irrational.'' See Microsoft Mem. at 7 n. 12. The Department, again, has been silent. Was its determination that ''no further action [is] warranted'' on this issue, 59 Fed. Reg. at 59,427, based on Microsoft's earlier representation that a ''Chinese Wall'' in fact exists? Was it based on the conclusion that there is no ''Chinese.Wall,'' but it does not matter? If not, why not'.)

The answers to these and other questions may remain unanswered because no satisfactory answer is available. As shown in Sections III through VI, infra, the Government cannot effectively restore competition in the operating systems market without addressing the consequences of Microsoft's illegally-acquired ''installed base,'' and its broader use of its acquired market power. The Government's proposed consent decree, however, fails to do either.

The Economic Characteristics of the Software Industry

Section III is divided into two parts. Subsection A provides background by describing the structure of the software industry and how it has changed over time in response to Microsoft's prior conduct in the market. Subsection B describes the economic characteristics of the technologies and markets at issue here.

A. Market And Technology Background

The relevance of much of the material in this section, particularly the schematic diagrams, is fleshed out and explained to a great extent in the subsequent sections. If the Court is unfamiliar with these markets, the Court may find it useful at this point to read The Economist [27] article, and the Harvard Business Review [28] article, both found in the Appendix.

At the outset, two characteristics of these markets and technologies should be emphasized. First, the products at issue are software products, composed almost entirely of intellectual property content. Because of the nature of software, there can be greater flexibility in the formation of vertical relationships than often is present with respect to more conventional products. Unlike a pipeline, for example, many competitors can vertically link their software, through software compatibility, to products in the markets above and below them. So, for example, a number of different companies can make word processing application programs that work equally well with Microsoft's operating system so long as they all have the same technical information on a timely basis. It is not necessary for Microsoft to bundle—or literally tie together—its operating system and word processing program in order to ensure that the two programs work well together. With software, the efficiency benefits of vertical integration can be achieved without foreclosing access to competitors.

Second, the Stipulated Complaint and Final Judgment in this case focus on the Personal computer operating system and the applications that run on top of it. Together, the personal computer operating system and the applications that run on it are sometimes known as the ''business desktop.'' But the desktop is really only an interrelated component of a network that contains desktops (or ''clients'') and ''servers.'' These software networks bear many of the characteristics that economists have associated with networks in other industries, including ''increasing returns'' or ''network

[24] An initial difference between that case and the present one, of course, is that the initial decree in that case was entered after the District Court had already heard approximately 11 months of trial testimony from roughly 350 witnesses. See AT&T, 552 F. Supp. at 140.

[25] See, e.g., A Fierce Battle Brews Over the Simplest Software Yet, Business Week, November 21, 1983, at 114 (Ex. 2) (quoting Microsoft executive Steve Ballmer) (''There is a very clean separation between our operating system business and our applications business... It's like the separation of church and state'').

[26] See, e.g., Paul Andrews, Can Microsoft Just Do It?, Seattle Times, March 18, 1991, at B1 (Microsoft ''repeatedly'' asserted ''that a ''Chinese Wall'' exists between its applications and systems divisions''); Microsoft and IBM Under Investigation by FTC, Technical Computing, Apr. 1, 1991 (''Microsoft maintains that it does not take unfair advantage of advance knowledge of operating systems in designing its consumer products. It says there is a ''Chinese Wall'' between systems and applications''); Michael Stroud, ITC Widens Probe of Microsoft Dominence, Investor's Daily, Apr. 15, 1991, at 1 (''Microsoft maintains that it keeps a ''Chinese Wall'' between its operating system and applications divisions to prevent such an unfair advantage from occurring''); Sean Silverthorne, AMD Files $2 Billion Antitrust Suit Against Intel, Investor's Daily, August 30, 1991, at I (Microsoft responds to charges that its application developers receive ''inside knowledge'' about the company's operating systems by claiming that Microsoft ''has erected a ''Chinese Wall'' between the two operations. '').

[27] The Computer Industry Survey: Reboot System and Start Again, The Economist, Feb. 27-Mar. 5, 1993, at 3 (Ex. 14). 28 Charles R. Morris and Charles H. Ferguson, How Architecture Wins Technology Wars.

[28] Harv. Bus. Rev., Mar. 1993, at 86 (Ex. 16).

effects,'' as described in Subsection B. Indeed, software networks manifest increasing returns, or demand-side economies of scale, more strongly than networks in more conventional industries.

The network at issue here has four components, two on the ''business'' side and two on the ''home'' side. On both the home and business sides, there is a desktop, or ''client,'' component, and a ''server'' component that links the desktop into a broader network. The network as a whole can be diagramed as follows:

BOX 1
HOME CLIENT
Applications
Multiple Layers
Connected to Server
by Windows 95
Home-to-Business
(''On Line Services'')
Home-to-Business
Server
8 Layers
Connected to Home
Client and
Intrabusiness Server
by Windows NT
HOME-TO-BUSINESS
BOX 2
BOX 4
INTRABUSINESS CLIENT
Applications
5 Layers
Connected to Server by
Windows 95''
Intrabusiness
(Enterprise Server)
Intrabusiness Server
8 Layers
Connected to
Intrabusiness Client
and Home-to-
Business Server by
Windows NT
ENTERPRISE SERVER
BOX 3
Figure I

The following description attempts to provide some explanation for each of these boxes: the intrabusiness client, which runs on the ''desktop''; the enterprise ''server, '' meaning the hardware and software applications that run on a more centralized computer and that link the clients together; the home ''client;'' and the home-to-business server, that similarly links home personal computers (''PCs'') into a. larger network. This brief then discusses two particular technologies that play a critical role in understanding Microsoft's strategy: OLE and Windows.

1. The Business Desktop

The personal computer or ''PC'' was initially devised as a stand-alone device, but today it is usually used as part of a network. This is certainly the case in business, and will increasingly be the case in the home.[29] The PC, both stand-alone and as part of a network, is often referred to as ''the desktop.'' The FTC Investigation and the DOJ investigation of Microsoft have focussed on the desktop.

Prior to Microsoft Windows, the intrabusiness ''client side'' or desktop could have been thought of as having four layers.

Level	Name	Examples
4	Applications	Lotus 1–2–3, dBASE, WordPerfect. Harvard Graphics
3	Development Tools	Basic, Pascal, C
2	OS	Apple, CPM, MS DOS, DR DOS
1	Hardware	IBM, Apple, Kaypro

Today, the market looks more like Figure 3 below. It reflects two principal changes, each of which will be explained in Section IV, infra. First, Microsoft succeeded in forcing the market to migrate to a new operating system or ''OS'' (Windows), thereby inserting a new layer, the ''graphical user interface'' (GUI) layer (layer 3), between the operating system and the applications. Second, using its leverage in layers 2 and 3, it has become dominant as well in development tools (layer 4) and business applications (layer 5).[30]

Level	Name	Examples
5	Applications	(a) Desktop applications (e.g., Lotus 1–2–3, dBASE, MS Word, MS Excel, WordPerfect) The Microsoft Office is a bundle of these applications made exclusively by Microsoft. (b) Client applications as part of a network (e.g., Oracle Financials, SAP, Peoplesoft, D&B Software. etc.)
4	Development	Basic, Pascal, C, Borland C + +, Tools Powersoft
3	GUI and/or	MS Windows OS Services
2	Operating System	DOS, Apple, OS2/WARP, UNIX
1	Hardware	IBM, Apple, Compaq, Dell

Figure 3

The Justice Department investigation of Microsoft has focussed primarily on operating systems (Levels 2 and 3 in Figure 3),—but the Government's Tunney Act submission also considers the applications layers (Levels 4 and 5) insofar as they impact competition in operating systems. In order to evaluate the proposed Final Judgment, a slightly more detailed understanding of the operating system layer is necessary.

The Government's complaint defines the market as operating systems that run on the Intel chip set (known as ''X86'' chips). 59 Fed. Reg. at 42.847 (Complaint ''[13). There were formerly three principal operating system vendors for this market—Microsoft (MS DOS and Windows), Novell (DR DOS) and IBM (PC-DOS and OS/2). Novell, as indicated above, has withdrawn from this market, and Microsoft is unquestionably a monopolist, currently enjoying a greater than 90% market share.[31] Software written for the current version of Windows (v. 3.1) and prior versions will also run on the IBM OS/2 operating system. However, software written expressly for Microsoft's next release of Windows (Windows 95), due out in August of 1995, will not run on the IBM OS/2 operating system. Don Clark and Laurie Hays, Microsoft's New Marketing Tactics Draw Complaints, Wall St. J., Dec. 12, 1994, at B6 (Ex. 41).

There are a few other competing desktop operating systems that run on different chip sets. For example, Apple's Macintosh operating system runs on a Motorola chip set. And the UNIX operating system generally runs on a specially designed chip, such as the ''RISC'' (reduced instruction set) chip designed by Sun Microsystems. See also

[29] See, e.g., All Things Considered (NPR broadcast, Nov. 17, 1994) (''if there's a sub-theme to this whole [Comdex] conference, it's networking, and Microsoft is the company that wants to connect all those different boxes that are going to be in your house. ''); Elizabeth Corcoran, —Microsoft Heads Home: Software Giant Targets Huge Consumer Market With a Host of High-Tech Innovations, Washington Post, Nov. 13, 1994, at H1 (Ex. 44).

[30] 30 Layer 5 has been broken out into two parts to reflect the development of what are known in the industry as ''client-server'' applications: applications that run partially on the desktop, and partially on server hardware connected to the desktop by a computer network.

[31] PC Week, Feb. 21, 1994, at 39 (Paine Webber, Inc. Table) (excluding sales of Macintosh—which does not use X86 chips—Microsoft's 1994 market share was 92.4%).

Computerworld, Dec. 6, 1993, at 99 (International Data Corp. Table) (Microsoft 1992 market share is 92.5%).

Even including these other operating systems in the same market as those that run on the Intel chip, Microsoft has an overwhelming market share, with well over 85 %. As the Government's Complaint correctly points out, applications software written for an Intel chip operating system will not run on the Apple Macintosh or Sun RISC workstation without significant modification—known as ''porting.'' Frequently, porting application software to a new chip set and operating system entails a significant re-engineering of the software. Hence. the Government does not include operating systems for the different chip sets within the same antitrust market.

However, the Government fails to point out that the only companies in the market for developing business application software for the operating systems sold by Apple and Sun, for example, are also the business application vendors on the Windows platform—e.g., Novell/WordPerfect, Lotus, Borland, etc., and Microsoft, itself, of course. The significance of this fact is discussed in greater detail infra. The point here, however, is that if Microsoft were able to monopolize the market for business applications software, it would severely inhibit competition from vendors of operating systems that run on other chips but nevertheless compete with the Microsoft operating system (e.g., Apple and Sun).[32] Figure 4 shows what the intrabusiness client side probably will look like once Microsoft's strategy of vertical integration of markets within the client is completely executed.

It shows the completion of Microsoft's leverage from layers 2 and 3 to further its domination of all aspects of layers 4 and 5.

Level	Name	Examples
5	Applications	Desk-top Applications, e.g., Microsoft Word, Microsoft Excel, Microsoft Access, and Client Server Applications
4	Development Tools	MS Basic, MS C, MS C + +, Microsoft Visual Basic, Microsoft Visual C + +, OLE
3	Graphical User Interface	MS Windows
2	Operating System	MS DOS
1	Hardware	X86 PC Hardware and Other Hardware in Figure 3

Figure 4

2. The Intrabusiness Server

The ''server'' is the direct lineal descendant of the mainframe computer. Prior to the advent of the personal computer, companies operated using a mainframe, to which ''dumb'' terminals were connected. Personal computer technologies now allow many computing functions to be performed on the desktop by an individual worker, but workers within a business still need to share information with each other and access a body of data simultaneously. The ''server,'' a dedicated hardware platform with its own server operating system, allows this to happen. Indeed, increasingly, workers within a business will want simultaneous access to several bodies of data and several different application programs, so that, for example, textual documents containing spreadsheets can be prepared by a number of employees working at the same time.

There are two basic components of the server markets. The intrabusiness server is the backbone of business. Microsoft has projected that there will be 300 million servers in the business community, running everything from phone systems, to copying systems, to cash registers. J. William Semich, The Long View From Microsoft: Component DBMSs. Datamation, Aug. 1. 1994, at 40 (Ex. 10). If a Single company controls all business server markets and applications, that company has far greater market power in various sections of the economy than, say, mere control of the desktop would bestow. The second server component. home-to-business, will be described in a subsequent section.

Today, the ''server'' side of the intrabusiness environment has approximately eight layers. It would unnecessarily complicate this brief of amici to describe the intrabusiness server markets in great detail. There are, however, three important points about the intrabusiness server markets that are relevant for this Court's consideration. First, the most important layer in the server market is the operating system level. The two leading competitors in this market at present are Novell's ''Netware'' product and Microsoft's NT product.'' The operating system is important because the other products in the server market run on top of the server operating system in much the same way as desktop applications run on top of Windows. The operating system level is also important because it is the level through which the server is connected to the business desktop and (through on-line services) to the home client.

Second, as was the case on the desktop four years ago, competition is vigorous at all levels of the server market. At each of the eight levels, there are a number of competitors, each striving to make better products at cheaper prices. This condition represents a significant (and welcome) departure from the state of the computer industry prior to the advent of personal computer and server technology. In an earlier period, there were only a few vertically integrated companies in the computer industry, such as IBM, DEC and Wang. These companies attempted to supply all aspects of computer technology—from the underlying chips and operating systems, to applications, to distribution, and even including service and support of previously sold computers. Generally speaking, consumers have benefitted enormously by the fragmentation of the industry into horizontal layers characterized by vigorous competition. Consumers have been able to choose the technologically superior and most cost effective product at each level and combine those products into a system that addresses the consumers'' needs. The pro-competitive benefits of the industries'' current horizontal alignment is discussed in some detail in the Economist article (Ex. 14).[33]

Finally, Microsoft is pursuing a vertical integration strategy on the intrabusiness server side similar to that pursued on the business desktop side. This strategy is only briefly discussed elsewhere in this paper. The Court can get further information concerning Microsoft's strategy, goals and prospects for success from the following articles found in the Appendix: Stuart J. Johnston and Ed Scannell, Server Suite Could Squeeze Market, Computerworld, Oct. 10, 1994, at 4 (Ex. 7); How Microsoft's Server Strategy Will Change The Industry—Parts I & II, Report by Summit Strategies Inc.; J. William Semich, Datamation, Aug. 1, 1994, supra, at 40 (Ex. 10). Obviously, after complete execution of this strategy, Microsoft products would be dominant or exclusive on each of the server layers.

3. The Home-to-Business Server

The second aspect of server technology is the home-to-business server market, sometimes known as ''online services.'' Today, most online services run off mainframe computers the way LEXIS and NEXIS do. Businesses will increasingly need to sell directly into the home through online services in order to remain competitive. Control by a single company of the home-to-business server market would have significant economic ramifications.

[32] The situation with respect w UNIX is slightly more complex, but in the final analysis, the situation is the same. UNIX has a strong following among technical engineering (as opposed to business) users of computers. There are companies that have written technical engineering application programs (such as ''computer aided design'' programs) to run on UNIX. But, as with Apple, the business applications vendors for the UNIX platform are the same companies that write applications for Windows. Hence, by controlling business desktop application programs, Microsoft can keep UNIX from penetrating the business desktop market.

[33] 33 Laura DiDio, NetWare, NT Server to Divide Lion's Share, Dec. 26, 1994, at 77 (''The network operating system arena looks like a two-horse race in 1995, with Novell, Inc.'s NetWare 4.1 and Microsoft Corp. ''s Windows NT Server 3.5 locked in a battle for first place. '').

Although there is a vigorous online services market in place, the home-to-business server does not yet exist, except in Microsoft's plans. It can be readily assumed that the home-to-business server would look much like the intrabusiness server, with only Microsoft products being vertically integrated.

Level	Name	Examples
8	Vertical Applications	Home banking, home shopping, news, product support, portfolio management, plus other ''Marvel''
7	Horizontal Applications	(the Microsoft online service) applications
6	Development Tools	Same as Intrabusiness Server, plus Blackbird (OLE-based development tools; see InfoWorld 10/24/94)
5	Server Applications	Microsoft EMS E-mail; Microsoft Tiger Video Distribution
4	Database Services	Microsoft SQL Server (bundled with Marvel)
3	OS Services	Windows NT (bundling MS Services)
2	OS Networking	Windows NT (with Marvel Server Code)
1	Hardware	Intel or Alpha (DEC) chip

Figure 5

4. Home Computer Market

The home computer market is in its incipiency. The most important applications programs on the home client are ''home banking'' (also sometimes known as ''personal finance'') and tax preparation.[34] The most successful company in this market, Intuit, Inc., makes the largest selling home banking (''Quicken'') and tax preparation (''TurboTax'') programs. The only substantial competition to Intuit's products comes from Microsoft. Yet, despite a very. substantial commitment in marketing staff and resources, Microsoft has gained only a 10% share. Microsoft has therefore elected to take over the home finance market by purchasing the leading software developer, Intuit, rather than by making better products to compete against it. The Microsoft acquisition of Intuit was announced on October 13, 1994 and is still under review by the Department of Justice. It is the largest acquisition in the history of the industry with Microsoft paying twice as much for Intuit as that company was worth in the stock market.[35]

The Microsoft acquisition of Intuit is highly strategic. It is a key element in Microsoft's plans to dominate all of information processing and will be discussed in a subsequent section. If the Microsoft-Intuit deal is consummated, it is not difficult to project what the home client will look like given Microsoft's recent announcement concerning ''Marvel'' (described in a subsequent section).

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Level	Name	Examples
5	Applications	Microsoft Works, Quicken (Intuit), TurboTax, Encarta. etc.
4	Development Tools	For example, language features of Microsoft Excel
2–3	GUI/OS/Networking	Windows 95 with Marvel Client Code
1	Hardware	PC Hardware

Figure 6

In summary, in each of the four components of the software industry, Microsoft's overall business approach and strategy is based on the creation of technological linkages between layers within the same market (e.g., DOS to Windows on the desktop) and between layers in one market and corresponding layers in another market (e.g., Windows NT to the Microsoft Network to Windows 95 on the home client). To fully understand Microsoft's strategy and its economic implications, however, it is necessary to understand two additional strategic Microsoft technologies: OLE and Windows. This Memorandum of Amici will address each in turn.

5. OLE

OLE (object linking and embedding) is a strategic technology for Microsoft on both the client and server side. It is the Microsoft-imposed standard for sharing information both among applications, and between applications and the operating system. During the Justice Department investigation, desktop application companies complained that Microsoft seeded OLE to its own application developers before giving it to ISV's (independent software vendors), thereby giving its own applications a lengthy head start over the competition.[36] As set forth in a subsequent section, these charges are supported by ample evidence and constitute the clearest examples of Microsoft's use of operating system information and specifications to achieve an unfair head start in the application markets. This is precisely the issue raised by this Court.[37]

Even more striking is the fact that Microsoft continues to exercise the very same strategy on the server side. See, e.g., J. William Semich, Datamation, Aug. 1. 1994, supra, at 40, 41–44 (Ex. 10) (''If you think OLE is everywhere in the future, the answer is yes''). Microsoft has made it clear that OLE will be strategic technology for the home-to-business server market, but Microsoft has not provided sufficient specifications to independent database server providers to enable them to release equally well-behaved products on the same time schedule as Microsoft's own products.[38]

6. Windows

The business desktop connects to the server through the Windows operating system (''OS'') and the home-to-business server (''online services'') also connect to the home computer through the Windows operating system. Microsoft has several different Windows products that provide OS, GUI and networking capabilities. A brief (and superficial) description of these products is included at this point to avoid confusion.[39]

a. Desktop

Microsoft's first Windows products were targeted for the desktop and were built on top of Microsoft's dominant desktop operating system MS-DOS. Because of their DOS legacy, these products are unable to take full advantage of the capabilities of the 32-bit microprocessors they run on. Microsoft's

[34] See, e.g., Michelle Flores, Probe of Microsoft is Extended—Justice Dept. Asks For More Information, Seattle Times, Nov. 22, 1994, at B11 (electronic banking is the ''killer app. of the ''90s'').

[35] Prior to rumors of the acquisition, Intuit's stock traded at 40 3/4. John Eckhouse, Giant Microsoft Buys Intuit for $1.5 Billion, San Francisco Chronicle, Oct. 14, 1994, at A1, A19. Each Intuit share is to receive 1.336 Microsoft shares at the closing. Id. Based on Microsoft's January 3, 1995 closing price of 60 3/16, each Intuit share receives over $80.

[36] See Brian Livingston, Undocumented Windows Calls, InfoWorld, Nov. 16, 199≥2, at 98 (Ex. 19); Doug Barney and Ilan Greenberg, ISVs Dampen Microsoft Furor for OLE, InfoWorld, July 18, 1994, at 1.

[37] 37 Tr. of Status Call, Sept. 29, 1994, at 25–28.

[38] Microsoft has made numerous presentations around the country that specifically make this point and written documentation from these presentations has been provided to the Justice Department.

[39] For a more thorough discussion, see Miles B. Keyhoe, The Winds of Change, HP Professional, Aug. 1994, at 40 (Ex. 17). See also Microsoft Corporation, Microsoft Windows NT and Client-Server Computing, May 1993.

current product in this area is Windows 3.1, which. due in part to the illegal per-processor licensing challenged by the Government, is pre-installed on most desktop systems presently sold.

Microsoft plans to proliferate Windows 95 (also known in the press as ''Chicago'' or ''Windows 4.0'') widely next year as the successor to Windows 3.1. Windows 95 is a true 32-bit operating system, but it is being targeted to the mainstream personal computer market. It also includes advanced networking features.

Windows NT was Microsoft's first true operating system for 32-bit microprocessors. NT's principal use is in the server market (discussed below) but Microsoft has also targeted its NT marketing to power users running high-end personal computers or workstations.

b. Server

Windows NT can also be used as an operating system for a network server. Microsoft markets a version of NT with advanced server capabilities, called Windows NT Advanced Server, as an enterprise-wide computing solution. Microsoft offers a suite of applications for Advanced Server called ''BackOffice'' that includes database services, electronic mail, systems management, and connectivity to mainframe and minicomputers. Microsoft's vision for enterprise computing is being marketed through its plans for a replacement for Windows NT currently code-named ''Cairo.'' Cairo brings object-oriented technology into the file server and operating system. Microsoft already controls object standards through it OLE specification, discussed in the next subsection. See J. William Semich, Datamation, Aug. 1, 1994, supra., at 41–44 (Ex. 10).

B. Free Market Forces in lncreasing Return Industries

In some industries, companies generally compete on a ''level playing field.'' In such industries, diminishing returns to scale ensure that the forces of the free market will naturally gravitate toward an equilibrium point which maximizes the production of goods and services and results in the most efficient allocation of resources. Under such conditions, antitrust enforcers as well as business executives can count on the fact that superior products will necessarily prevail in free and open competition.[40]

Free market forces in other industries—including those at issue here—do not exhibit such qualities. Rather, they exhibit ''increasing returns.'' In such industries, there is more than one equilibrium point and there is no reason to expect the free market to reach equilibrium at a point that most efficiently allocates resources.[41] The markets in such industries can easily be manipulated by a company with a large ''installed base,''[42] with the result that superior products of competitors are not likely to prevail in the free market.[43] Indeed, in ''increasing returns'' industries, there is every reason to believe that consumers will get ''locked into'' the first product that appears on a new platform, even if the product is technologically inferior.[44] Similarly, a company with a large installed base in one market can give its inferior product in a second market an insurmountable advantage over competitors in the second market by integrating the products from the two markets together technologically.[45]

Some of the early economic research in the area focused on perceived anomalies — particular standards that became locked in, notwithstanding their obvious inferiority. Stanford economist Paul David identified several such examples, the most famous of which is the layout of the common typewriter keyboard, known as the ''QWERTY'' configuration because of the order of the keys in the second row of the keyboard.[46] Primitive typewriters were unreliable mechanical devices and the QWERTY keyboard, at least according to the folklore, was therefore deliberately designed to be dysfunctional so that typists would not strike the keys so rapidly that the device would jam. Obviously. modem software and computers can process keystrokes far more quickly, yet consumers are locked into the QWERTY standard. There are even allegations ''that the combination of constant repetitive motion and inefficient finger movements that QWERTY requires is the ticket to the most well-known [repetitive stress injury.] RSI. carpel tunnel syndrome.'' yet we go right on teaching it in elementary schools.[47] Superior keyboard layouts were developed years ago but were unsuccessful in dislodging the clearly inferior design that established itself as an early standard.[48]

By the late 1980's, economic analysis was finally able to explain such situations more clearly. Economists at Stanford and the University of California at Berkeley published '' leading articles demonstrating that market characteristics long viewed as anomalous were, in fact, widespread in high technology industries.[49] By the mid-1990's, increasing returns economics has become widely accepted as mainstream economic analysis.[50] There is now extensive theoretical literature with direct empirical application to many leading industries, including telecommunications, broadcasting, computers, and ATMs.[51]

Increasing returns are present in industries throughout the economy, but two high technology market situations, in particular, give rise to increasing returns. First, users of high technology products are frequently electronically connected in a network. Networks exhibit and produce certain important economic results. Because the purpose of a network is to enable communication with others, the value of the network increases with the total number of users who join the network.[52] Consequently, once a network such as a telephone network is in place. a competing network would have to enter the market with at least as large a number of nodes in order to displace (or even compete meaningfully with) the first network.[53]

A second factor that gives rise to increasing returns is referred to as ''compatibility'' in the economic literature. Unlike more conventional industries, the value of the technology to end users in increasing returns industries increases with the number of users who use compatible technology. While the ''network'' feature draws its force from physical interconnection, the ''compatibility''

[40] W. Brian Arthur, Positive Feedback in the Economy, Scientific American, Feb. 1990, at 92, 93 (Ex. 36).

[41] Id. at 92 (Ex. 36).

[42] ''Installed base'' in the economic literature ''means the number of owners of a good who may be dependent on the manufacturer of the good for the provision of complementary goods.'' Joseph Katten, Market Power in the Presence of an Installed Base, 62 Antitrust L.J. 1, 4 (1993).

[43] Joseph Farrell and Garth Saloner, Installed Base and Compatibility: Innovation, Product Pre-Announcements, and Predation, Amer. Econ. Rev., Dec. 1986, at 940; Janusz A. Ordover and Garth Saloner, Predation, Monopolization, and Antitrust, in Handbook of Industrial Organization 537, 565 (R. C. Schmalensee and R. Willis eds., 1989).

[44] W. Brian Arthur, Scientific American, Feb. 1990, supra, at 92–93 (Ex. 36).

[45] See, e.g., Garth Saloner, Economic Issues in Computer Interface Standardization, Econ. Innov. New Tech., 1990, at 140–142.

[46] See, e.g., Paul A. David, Clio and the Economics of QWERTY, Amer. Econ. Rev., May 1985, at 332; David A. Harvey, Ergonomic Issues Have Taken a Backseat to Performance, Resulting in a Growing Tide of Computer-Related Injuries. Change is Needed—Now!, Byte, Oct. 1, 1991, at 119.

[47] See David A. Harvey, Byte, Oct. 1, 1991, supra, at 120.

[48] Joseph Farrell & Garth Saloner, Amer. Econ. Rev., Dec. 1986, supra, at 942; Jean Tirole, The Theory of Industrial Organization at 405, n.40 (1988).

[49] W. Brian Arthur, Scientific American, Feb. 1990, supra, at 93.

[50] See W. Brian Arthur, Increasing Returns & Path Dependence in the Economy, 1994, at ix (forward Kenneth J. Arrow).

[51] For the theoretical literature see, for example, the recent Symposium on Network Externalities in the Journal of Economic Perspectives, Spring 1994, the Symposium on Compatibility, edited by Richard Gilbert in the Journal of Industrial Economics, March 1992, and the survey by Paul David and Shane Greenstein in the Economics of Innovation and New Technology, 1990. For an application to telecommunications, see Stanley Besen and Garth Saloner, The Economics of Telecommunications Standards, in Changing the Rules: Technological Change, International Competition, and Regulation in-Communications 177 (1989); for applications to broadcasting, see Stanley Besen and Leland Johnson, Compatibility Standards, Competition, and Innovation in the Broadcasting Industry (1986); for applications to ATMs, see Garth Saloner and Andrea Shepard, forthcoming in the Rand Journal of Economics, and Steven Salop, Deregulating Self-Regulated Shared ATM Networks, Econ. of Innov. and New Tech., 1990; and for computers, see Garth Saloner, Econ. Innov. New Tech., 1990, supra.

[52] This ''network effect'' has been described by numerous authors. In a recent Symposium in the Journal of Economic Perspectives, Michael Katz and Carl Shapiro write, ''Consequently, as has long been recognized, the demand for a network good is a function of both its price, and the expected size of the network.'' See also Jeffrey Rohlfs, A Theory of Interdependent Demand for a Communications Service, Bell J. of Econ., Spring 1974, for an early reference, as well as Michael Katz and Carl Shapiro, Network Externalities, Competition, and Compatibility, Amer. Econ. Rev., June 1985; Joseph Farrell and Garth Saloner, Amer. Econ. Rev., Dec. 1986, supra: and other papers cited in Michael If, am and Carl Shapiro, Systems Competition and Network Effects, J. of Econ. Perspectives, Spring 1994.

[53] See Julio J. Rotemberg and Garth Saloner, lnterfirm Competition and Collaboration, Strategic Options, 1991, for an example of the power of network size.

factor arises from a dependency of mutual use by consumers without regard to actual physical interconnection.[54] For example, although manual typewriters were not connected in a physical network, new users adopted the QWERTY keyboard because it was in wide use by others.[55]

Economic analysis demonstrates that superior products do not necessarily prevail in markets and technologies that exhibit increasing returns. Rather, these markets are easily susceptible to ''tipping''—once moved off of equilibrium by an event, the market tends quickly toward a single standard that dominates the market:

[N]etwork markets are ''tippy': the coexistence of incompatible products may be unstable, with a single winning standard dominating the market. The dominance of the VHS videocassette recorder technology and the virtual elimination of its Betamax rival is a classic case.

Creating a large installed base is the key to dominating such an increasing returns market.

Because of the compatibility and network benefits, all else equal, a new user prefers a vendor with a larger total installed base of users. Thus installed bases have a tendency to be self-perpetuating: they provide the incentive for the provision of products (software and hardware) that is compatible with the installed base which in turn attracts new users to the installed base further swelling its ranks ....

Garth Saloner, Econ. Innov. New Tech., 1990, supra, at 140. Indeed, ''de novo entry into a market occupied by vendors with large installed bases is exceedingly difficult.'' Id. at 140.

The self-perpetuating nature of an installed base in an increasing returns industry causes particular products to become ''locked-in.'' W. Brian Arthur, Scientific American, Feb. 1990, supra, at 99 (Ex. 36). The costs to a consumer of using or switching to a different system are so high that the vendor with the installed base has a substantial advantage over competitors and can, once the base is established, charge consumers supracompetitive prices.[56]

Because increasing returns markets are particularly susceptible to ''tipping,'' a company with a monopoly in one market that faces competition in a second market can use the locked-in installed base of the first market to wipe out competition in the second market by ''tipping'' the second market. The monopolist might achieve this result by releasing a ''predatory preannouncement'' with regard to a product in the second market. In markets that feature increasing returns, users will want to be on the same standard as other users, so expectations (what users believe will happen) dominate user choice in the second market—as opposed, for example, to the inherent technological quality of competing product offerings,[57]

[A] preannouncement can sometimes secure the success of a new technology that is socially not worth adopting, and that would not have been adopted absent the preannouncement.

Similarly, a monopolist that is cash rich from monopoly profits in the first market might also ''buy off'' early adopters to create a ''band wagon effect'' in favor of its product in the second competitive market.[58] This technique of predation is known in the economic literature as ''penetration pricing.''

An installed base advantage might also be achieved by ''penetration pricing,'' the technique of offering low prices to early customers so as to build up an installed base and influence the choice of later adopters. Penetration pricing seems a natural strategy in network industries, and appears prominently in the theory.

Finally, a monopolist with a large installed base in one market might ''tip'' a second competitive market in favor of his product in that market by technologically linking the two products, or by outright bundling of the functionality of the second product into the first product, thereby eliminating the need for the competitor's product in the second market. For example, by subtly altering the tying product so that rival products in the tied market become incompatible with the monopolist's ''standard,'' the monopolist can quickly dominate the second market.[59]

The Justice Department's complaint in this case recognizes the critical importance of an ''installed base.'' The complaint alleges that the ''lack of a sizable installed base of users'' constitutes a ''substantial barrier to entry'' for Microsoft's operating system competitors. 59 Fed Reg. at 42,847 (Complaint 15). The complaint also alleges that Microsoft used ''anticompetitive contracting practices'' including ''per processor licenses'' starting as early as 1988 to ''significantly increase the already high barriers to entry.'' Id. at 42,847, 42,848 (Complaint 18, 20, 26). The complaint appears to assume that Microsoft's monopoly was lawfully acquired. Id. at 42,847 (Complaint 19). But since Microsoft's installed base of operating system users has increased six-fold since 1988, it must follow that the ''anticompetitive licensing practices'' with which Microsoft is charged had the result of increasing its own installed base at the same time it impeded the development of competitors'' installed bases. As set forth in the next section, Microsoft has used its installed base both to preclude competitive entry into the operating system market, and to stifle competition in related markets.

Microsoft's Tactics and Prospects for Success

This section of the Memorandum of Amici will examine Microsoft's overall strategy, the tactics that Microsoft has used in pursuing that strategy, and the likelihood that Microsoft will accomplish its aims. Microsoft, by the admission of its own Chief Executive Officer, intends to dominate all of data and information processing. There's no level of performance or specific application of corporate information systems that we don't intend to go after... [and] there won't be anything we won't say to people to try and convince them that our way is the way to go. That's because this new, electronic world of the information highway will generate a higher volume of transactions than anything to date, and we're proposing that Windows be at the center, servicing those transactions. Brent Schlender, Fortune, Jan. 16, 1995, supra, at 40 (emphasis in original).

To accomplish these aims, Microsoft has pursued licensing practices that the Government has denominated as ''anticompetitive,'' and has engaged in classic predatory behavior by using its monopoly in one market to achieve monopolies in other markets. This section applies increasing returns economic analyses to Microsoft's behavior and concludes that, unless restrained by Governmental intervention, it is highly likely that Microsoft will achieve its goal of dominating the entire national information infrastructure.

A. Microsoft's Strategy

Even if Microsoft's initial monopoly was lawfully obtained, its enormous market power (and particularly the power to leverage into related markets) comes from its installed base in operating systems. That installed base, according to the Complaint, was procured as a result of anticompetitive practices. Indeed, Microsoft's installed base of operating system users has increased more than six-fold (from 18 to 120 million) since 1988, when the company began its anticompetitive practices. Microsoft has used its monopoly and its installed base in a classically predatory manner. It has used its monopoly revenues in one market to drive competitors out of other markets. It has also used its operating system installed base in a predatory manner to ''tip'' adjacent competitive markets in the direction of its own product in those markets, to the detriment of competitors.

Microsoft's strategy at any particular point on the network (for example, at the home client or at the business desktop) can only be understood and evaluated in the context of Microsoft's overall strategy. Microsoft pursues a strategy of leverage from product

[54] See Stanley M. Besen and Joseph Farrell, Choosing How to Compete, J. of Econ. Perspectives, Spring 1994, at 118; see also Michael Katz and Carl Shapiro, J. of Econ. Perspectives, Spring 1994, supra, at 106. Once a market is ''tipped'' in favor of a particular competitor, it would take truly massive forces to return the market to a state of equilibrium (i.e., competition). See, e.g., W. Brian Arthur, Increasing Returns and Path Dependence in the Economy, supra, at 2, I0–11.

[55] For early examples in the economics literature, see Joseph Farrell and Garth Saloner, Standardization, Compatibility, and Innovation, Rand J. of Economics, Spring 1985 and Michael Katz and Carl Shapiro, Amer. Econ. Rev., supra; Jean Tirole, supra, at 405. 55 Jean Tirole, supra, at 404–406.

[56] Garth Saloner, Econ. Innov. New Tech., 1990, supra, at 137–138; Joseph Farrell and Carl Shapiro, Dynamic Competition with Switching Costs, Rand J. of Econ., Spring 1988, at

[57] Joseph Farrell and Garth Saloner, Amer. Econ. Rev., Dec. 1986, supra, at 942.

[58] See Stanley M. Besen and Joseph Farrell, J. of Econ. Perspectives, Spring 1994, supra, at 122; see also Janusz A. Ordover and Garth Saloner, Predation, Monopolization, and Antitrust, supra.

Stanley M. Besen and Joseph Farrell, J. of Econ. Perspectives, Spring 1994, supra, at 118; Joseph Farrell and Garth Saloner, Amer. Econ. Rev., Dec. 1986, su0ra, at 946.

Joseph Farrell and Garth Saloner, Rand J. of Econ., Spring 1985, supra; Joseph Farrell and Garth Saloner, Amer. Econ. Rev., Dec. 1986, supra.

[59] See Garth Saloner, Econ. Innov. New Tech., 1990, supra, at 141–142.

markets in which it is dominant, to markets in which its competitive position is weak. It targets particular markets, establishes marketing and, in particular, technological links to those markets from established monopolies, and then leverages its power to monopolize the target markets.

As used in this brief, ''leverage'' means that Microsoft uses the installed base in a market it dominates (for example, the operating system) to create an installed base in a new market (for example, desktop applications). It uses predatory subsidization, and both marketing and technological linkages, to accomplish leverage, as explained in greater detail in the succeeding pages. For the sake of easy example, Microsoft's horizontal tie-ins within, a single layer represent the most trivial example of its marketing strategy. Thus, Microsoft has trundled for sale a number of desktop applications (under the name, the ''Microsoft Office''), putting companies like Lotus, WordPerfect and Borland at a competitive disadvantage. Carole Patton, Bundles Are Bad News, Computerworld, Nov. 14, 1994, at 57 (Ex. 8). Microsoft is executing the same tactic on the server side by bundling its ''BackOffice'' products to foreclose meaningful competition at the ''server applications'' layer. See Stuart J. Johnston and Ed Scannell, Computerworld, Oct. 10, 1994, supra, at 4 (Ex. 7). Microsoft also pursues other tactics. In particular, Microsoft derives leverage from its control of Windows products and logo; from its use of a consistent graphical user interface; and from its tight technical integration between interconnected machines through the control of standards such as OLE. After establishing market power on one level, Microsoft will target an adjacent layer, subsidize the creation and sale of products at that layer from the monopoly it derived on the first level, establish proprietary technological linkages to the target layer, and then leverage its market power to establish market power in the next layer. Two examples of this within the desk-top side are DOS to Windows, and Windows to desktop applications. In addition, Microsoft uses its market power from one side of the network (server or client) to leverage to the other side, again by establishing linkages. Microsoft is already attempting to leverage its control of the desktop into a control of servers. It will also use its market power in the PC-based financial and text software market, through the acquisition of Intuit, to leverage into the server.[60]

Obviously, control of certain layers in the various markets of the network create greater potential for leverage than control of other layers. In particular, there are a few ''gateway'' layers into the network. Control of these layers represents the most effective platform for leverage (i.e., moving the installed base). Generally speaking, the operating system layers in each box represent the most powerful platforms for both horizontal and vertical leverage.[61] For example, Microsoft has already leveraged control of operating systems to desktop applications. It can also leverage control of the desktop operating system (Windows 95) to the server operating system (Windows NT).

Control of the ''gateway'' layers provides greater possibilities for leverage because control of the architecture at those levels effectively controls all higher vertical levels, and also provides significant power at the horizontal interface between the client operating system and the server operating system. This brief uses the term ''architecture'' in the same way as that term is used in the Morris and Ferguson Harvard Business Review article—namely, the complex of standards and rules that define how programs and commands will work and how data will move around the system. Charles R. Morris and Charles H. Ferguson, Harv. Bus. Rev., Mar. 1993. supra, at 88 (Ex. 16).

By owning the installed base at a gateway, Microsoft can control not only the architecture at that level but also at all higher vertical levels. For example, by controlling the desktop operating system architecture, Microsoft can easily obsolete or render inoperable Lotus 1–2–3, merely by making a minor change to the architecture. Microsoft can pretextually or otherwise claim the change to be an ''upgrade'' or a ''bug fix,'' but it is the effect of the power to control architecture that is more important than Microsoft's subjective intent.

If Microsoft controls the architecture at a ''gateway,'' it can loudly proclaim its system to be ''open'' while in truth its architecture remains closed. Thus, for example, Microsoft can claim that its desktop operating system will continue to work with Lotus 1–2–3 or that its server operating system will continue to work with the database products offered by Microsoft competitors (and, to that extent, its system is ''open''). Because Microsoft can easily obtain competitive advantage over (or outright displacement of) vertically related competitors by upgrades to the architecture, however, its nominally ''open'' system does not provide for effective competition on higher vertically related levels.[62]

All companies try to use leverage to some extent,[63] but Microsoft has a powerful advantage over its competitors. It has used ''anticompetitive'' licensing practices to acquire a huge installed base and it uses the power of this installed base against competitors in adjacent markets. Microsoft employs multiple linkages and leverage from the different markets (and, in particular, from the gateways) it controls into a single target market, so as to completely outflank and overrun existing competitors in that market.

In the beginning (for our purposes), IBM had a monopoly in computers and the market for computer products was, generally speaking, vertically integrated. (This necessary background is explained in The Economist, supra, at 3–18 (Ex. 14).) How IBM got this monopoly was the subject of much conjecture and years of litigation, but is irrelevant for our purposes. What is relevant is the fact that IBM, in its rush to get out a personal computer, did not leverage its own power from mainframes. Rather, it procured chips from Intel and an operating system from Microsoft (''DOS''), thereby transferring its market power to them as the market for personal computers expanded to displace mainframes and IBM's imprimatur established a standard. In short, IBM empowered Microsoft and Intel to control the architecture for the next generation of computers, and has been playing catch-up ever since. See Charles R. Morris and Charles H. Ferguson, Harv. Bus. Rev., Mar. 1993, supra, at 86, 92 (Ex. 16). See. also Elizabeth Corcoran. Washington Post, Nov. 13, 1994, supra, at H6 (Ex. 44).

Bill Gates, the founder of Microsoft, secured control of the personal computer market by riding IBM's coattails. The success of the IBM PC opened a lucrative market for compatible computers, or ''clones.'' At the time, Microsoft was the sole source for a compatible operating system. Accordingly, Microsoft was able to license the operating system (''DOS'') to compatible makers at significantly higher rates than those charged to IBM. Hence, as the Government's Complaint (¶ 19) explains, ''Microsoft quickly dominated and gained a monopoly in the market for PC operating systems.'' 59 Fed. Peg. at 42,847. More precisely,

DOS would have been worth relatively little had Gates not retained the right to license its use to IBM's rivals. This arrangement—the source of Gates'' wealth and power—became clearer as IBM set the standard for the burgeoning PC market. By the mid 1980's every rival except Apple computer felt that the only way to compete against IBM was to sell a clone of IBM's PC. Making a clone required, among other things, licensing DOS from Microsoft. Over time DOS became a kind of annuity for Microsoft: buying DOS was the price of admission for entering the PC business.

See G. Pasquel Zachary, Showstopper: Breakneck Race To Create Windows NT and the Next Generation at Microsoft, 27 (1994).

As new technologies overcame the old mainframe market, the market for computer products formed into a number of horizontal markets that are vertically related to each

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[60] For a detailed review of Microsoft's server strategy, see How Microsoft's Server Strategy Will Change The Industry, supra, (Ex. 38).

[61] There was clearly the potential for at least some leverage from the chip or hardware level, when the OS level was more fragmented. This possibility is not treated in this brief for a number of reasons, including the widely publicized alliance between Microsoft and Intel that makes separate treatment of the hardware layer irrelevant.

[62] The operating system gateways are the most effective layers for leverage. But the system can also be leveraged from other access points as to which strong network externalities attach. For example, on the home client, Intuit has leverageable power from the strong network externalities that have attached to that product at the computer-human interface. (This is described in greater detail elsewhere in this brief.)

[63] In many respects Microsoft's strategy of targeting, linking and leverage is little different from that employed by MITI and Japanese keiretsus to target and capture American markets. Microsoft's leverage comes from technical ties in markets it dominates, while Japanese companies'' leverage comes from the installed base of buyers it creates in Japan. In both cases, the leverage can be applied by forward-pricing into the target market to damage competition in that market. Cf., L. D. Tyson, Who's Bashing Whom.? Trade Conflict in High-Technology Industries, at 55–57, 99–101 (1992).

other. Charles R. Morris and Charles H. Ferguson, Harv. Bus. Rev., Mar. 1993, supra, at 8 (Ex. 16). There are many competitors at each level that aggressively compete with each other to develop more powerful products at lower prices. Generally speaking, consumers have benefitted from the formation of horizontal markets. Consumers can put a system together using the best and most cost effective products at each level, even if the products are made by different manufacturers. But by using its installed base in operating systems to ''tip'' each of these markets in favor of its own products, Microsoft undermines the competitive process. From the initial monopoly bestowed on it by IBM and the huge installed base secured by anticompetitive practices, Microsoft has leveraged and linked a series of powerful monopolies with the intent of forming a new verticality on the market. After establishing several monopolies with enormous leverage potential, the positive feedback from the verticality imposed by Microsoft will in short order eliminate competition on all horizontal layers within the server and online markets, just as it is eliminating competition in the horizontal layers on the desktop.

1. The Business Desktop

The Justice Department's Tunney Act filing alleges that Microsoft has monopolized ''the market for PC operating systems worldwide'' for ''almost a decade.'' 59 Fed. Reg. at 42,850. As noted previously, in 1988 Microsoft had an installed base of approximately 18 million operating system users? In 1988, Novell (formerly Digital Research, Inc.) entered the X86 operating system market with a competitive product, DR DOS, and it was in response that Microsoft began the ''anticompetitive licensing practices'' identified by the Government. Microsoft continued these practices through mid-1994, and, as noted previously, it was during this period that Microsoft was able to increase its installed base by more than 100 million

See supra note 9.

users.[65]65 the preceding section explains, it is the size of Microsoft's installed base, rather than merely its market share, that determines the company's true market power. Accordingly. through practices that the Government has identified as ''anticompetitive,'' Microsoft has increased its market power many fold.

Having gained this market power, Microsoft has used it both to maintain its monopoly in operating systems (described in subsection (a) immediately below) and to obtain a monopoly in desktop applications (subsection (b)). The remainder of this section (subsections (c) through (f)) describe how Microsoft has used its market power to engage in other predatory, conduct in the desktop markets.

a. Effect of the Monopoly on Operating Systems

Microsoft's strategy, which was based at the outset on an installed base created in part through anticompetitive licensing practices, succeeded in monopolizing the desktop OS and threatening desktop applications. Once Microsoft had control of the operating system, which is the key architectural technology for desktop computing, it was able to maintain its share, even with an inferior product. The introduction of DR DOS from Novell showed that Microsoft had failed to keep MS DOS abreast of leading technology.[66] Yet Novell's compatible offering in the DOS market (DR DOS) stopped selling when Microsoft made it clear that Microsoft would create versions of Windows that were incompatible with DR DOS. It is common for ''better'' products to fail if a competitor controls the architecture in which the product operates. See Charles R. Morris and Charles H. Ferguson, Harv. Bus. Rev., Mar. 1993, supra, at 89–91 (Ex. 16).

Microsoft was also able to raise prices for its operating system, as its monopoly position continued to solidify and its installed base increased. In the early 1980's, Microsoft licensed MS DOS for $2—$5 per copy. By 1988, the price was up to $25 to $28. Once Microsoft drove DR DOS out of the operating system market, it was able to double the price it charged, with recent press reports indicating that it is demanding as much as $70 per copy of the forthcoming version of its operating system.[67]

Overall, Microsoft's strategy has been enormously successful in maintaining its monopoly in operating systems while expanding its installed base. Microsoft's share of all desktop operating systems is a staggering 85 %. See supra note 32. Microsoft's share of the operating system market that runs on X86 chips is even larger—more than 90%. See id.

b. Effect of the Monopoly on Applications

Having entrenched its operating systems monopoly, Microsoft has aggressively leveraged this monopoly to gain a monopoly in business applications. In 1991, Microsoft's senior vice-president Mike Maples expressly stated the company's intention to monopolize the software applications market:

If someone thinks we're not after Lotus, and after WordPerfect and after Borland, they're confused... My job is to get a fair share of the software applications market, and to me that's 100 percent.

See Jane Morrissey, Microsoft's Application Unit Seeks Market Dominance, PC Week, Nov. 18, 1991, at 1.

Microsoft used the monopoly revenues from licensing the operating system to fund the development of applications to run on DOS, in competition with software vendors which had no operating system control (for example, Lotus, Borland. and WordPerfect). But because of the relatively open nature of DOS, competitors like Novell could make ''compatible'' operating systems—operating systems that would run applications written for Microsoft's MS DOS without modification.

Therefore, Microsoft could not exercise sufficient control to give its own applications a strong competitive advantage over the application programs of competitors. The competitors'' products were the first developed on DOS and had therefore acquired significant installed bases, as to which powerful network externalities had attached. In order to displace these competitors, Microsoft needed to create a new operating system platform so that its own applications would reach the market on the new platform before its competitors'' products.

Microsoft ''solved'' this problem by (1) developing a new operating environment (Windows) that it totally controlled, (2) targeting a function performed in the application layer that it could either embed in the operating system (for example, the ''graphical user interface'' or ''GUI'' feature) or link with the operating system, and (3) using its power over DOS to migrate users to Windows. Microsoft thereby got more control over the OS, added value to the OS it controlled, and forced independent application publishers to rewrite all of their applications twice (once for Windows and a second time for OLE, as described below). The forced migration that Microsoft effected with the GUI and Windows may be depicted as follows:

DOS
BEFORE (See Figure 2)
GUI/Applications
GUI/Applications I
GUI/Applications
AFTER (See Figure 3)
DOS/Windows GUI
Applications

Figure 7

Microsoft, in effect, added a new layer to the architecture of the desktop, moving the industry, from Figure 2 to Figure 3 above. Controlling architectures is the key to dominating competition. See Charles R. Morris and Charles H. Ferguson, Harv. Bus. Rev., Mar. 1993, supra (Ex. 16).

Microsoft leveraged its control over the operating system to control desktop applications, following a carefully crafted plan that utilized the market power of its installed base. First, Microsoft emulated the application program of the market leader in that application (e. g., Lotus, WordPerfect or Borland), breaking the network externality of the installed base by providing file and keystroke compatibility. Microsoft funded the development, marketing, and below-market pricing of its applications from the profits it reaped on the six-fold increase in the installed base of its operating system. Microsoft's stronghold in operating system software . . . financed Microsoft's push into applications software.

Victor F. Zonana, $.l. 4-Million Deal Microsoft Buys Software Competitor, L.A. Times, July 31, 1987, at 4? For years, Microsoft funded ''many versions'' of applications programs before they ''were good enough to grab substantial market share. ,,[68]But [b]ecause Windows gives Microsoft a

[65] Amy Cortese, Next Stop, Chicago, Business Week, Aug. 1, 1994, at 24 C 120 million MS-DOS customers (including 55 million Windows users)''). See also OS Overview, Computer Reseller News, at 223 (DOS installed base of 110.1 million).

[66] See Start Miastkowski, Digital Research Creates a Better DOS, Byte, Nov. 1991, supra, at 68.

[67] See Amy Cortese, Business Week, Dec. 19, 1994, supra, at 35 (Ex. ——) (''Computer makers.., have been startled to learn that they will be asked to swallow a huge price hike for their use of Windows 95—to as much as $70 per PC vs. roughly $35 today.'').

[68] See also O. Casey Corr, IBM vs. Microsoft—Software Superbowl—IBM to Kick Off New Version

Continued

''pervasive presence on any desktop that matters, Microsoft can subsidize its loss leaders [in applications] and leverage its desktop heritage''.

Barbara Darrow, Developers Brace for Shakeout, Computer Reseller News, Feb. I, 1993 at 28 (quoting Don DePalma, senior industry analyst for Forrester Research). ACCESS, Microsoft's database program, is a case in point. It cost a staggering $60 million to develop .... By contrast, the [entire 1992 development] budget at Borland was $50 million. At Lotus, it was $35 million. That's not all. Microsoft also had the money to offer an introductory price of $99 for ACCESS—less than one-third the retail price for similar packages. Result: Microsoft sold 700,000 copies in just three months. The entire market in 1992 was only 1.2 million units.

Kathy Rebello, et al., Business Week, March 1, I993, supra, at 88.[69]

c. Unfair Early Access

Moreover, because of Microsoft's installed base in operating systems, it was able to provide an unfair advantage to its applications in a variety of other ways, as well. For example, Microsoft based its own application programs on components m the operating system that it had unique or early access to. Microsoft claimed it was ''open,'' but actually used hidden features and functions to gain a competitive advantage. Brian Livingston. InfoWorld, Nov. 16. 1992, supra, at 98 (Ex. 19). That is, Microsoft provided a proprietary architecture with a supposedly ''open'' system. See Charles R. Morris and Charles H. Ferguson, Harv. Bus. Rev.. Mar. 1993. supra. The most well-known such example involves Microsoft's ''OLE'' (object linking and embedding) standard.

Microsoft created interoperability among its own applications, and between its applications and its operating system, by creating a new standard, OLE, which copied functionality from Hewlett-Packard's product New Wave. Stuart J. Johnston, Dangerous Liasons, InfoWorld, April 8, 1991, at 44. With market power on both sides of the interface (i.e., in both the applications and the operating system), Microsoft easily displaced the existing standard in favor of OLE. It embedded OLE functionality into both its operating system and applications, and it heavily marketed this new functionality using profits from its market position in operating systems.[70]

During the very same time period that the Government contends Microsoft was using ''anticompetitive licensing tactics'' to harm OS competitors, applications competitors repeatedly complained that Microsoft was using its knowledge of new operating system features to give its own applications programs a head start and performance advantage over applications competitors. As stated in Section II of this memorandum, throughout the 1980's and early 1990's Microsoft responded to this criticism by asserting that it had erected a ''Chinese Wall'' between its operating system developers and applications developers. According to Steve Ballmer, the senior vice-president for Microsoft's system divisions:

[T]here is a very clean separation between our operating system business and our applications business .... It's like the separation of church and state.

Business Week, Nov. 21, 1983, supra, at 114 (Ex. 2).

In the face of mounting criticism, Microsoft executives adhered to the party line. For example, in 1989, Steve Ballmer again disputed ''the charge that his people gave their counterparts in applications previews of their upcoming systems products.''[71] Microsoft executives repeatedly told the press that a ''Chinese Wall'' was in place. See, e.g., Laurie Flynn and Rachel Parker, Infoworld, Aug. 7, 1989, supra, at 43. Indeed,

Gates insisted that Microsoft kept the playing field level by erecting an imaginary barrier between the company's operating systems group and its applications division.

Hard Drive, supra, at 308. Even into early 1991, Microsoft executives were claiming that the company had an ''ISV-independent program'' that treated Microsoft applications ''the same as any other ISV [independent software vendor].''[72] Although the FTC began investigating Microsoft in 1990, Microsoft continued to maintain that it had a ''Chinese Wall'' well into 1991.[73]

But Microsoft's head start in using OLE in 1991 to the detriment of applications competitors put the lie to such claims. Microsoft incorporated OLE into its Windows operating system and shipped its first completed application incorporating OLE, Excel 3.0, in February. of 1991. at the very same time it was releasing a ''beta version'' of OLE—not suitable for commercial distribution—to ISV's. Indeed, the February 1, 1991, issue of Byte Magazine reports the two events in the same issue.[74] Microsoft's applications competitors suffered delays of many months as they were forced to rewrite their own applications to make them perform under Windows as well as Microsoft's Excel, which had a head start in using OLE. It was not until many months later that the first third-party implementation of OLE appeared on the market.[75]

Microsoft's unfair advantage obtained from prior knowledge of operating system functionality created a significant head start for its own applications on the new Windows platform. As the prior economic analysis demonstrates, the advantage of being first to market in an ''increasing returns industry'' is enormous—it permits a competitor to begin to generate an installed base, reap the benefits of ''positive feedback,'' and otherwise drive its own products to ''lock in'' before competitors even reach the market. Microsoft used its operating systems information to secure these unfair benefits for its applications.

Confronted with their obvious untruths, Microsoft executives did an abrupt corporate-wide about-face at the end of 1991. Microsoft senior executive Mike Maples stated in December of 1991:

There is no Chinese Wall. We don't want there to be a Chinese Wall, and I don't think we've ever claimed that there is a Chinese Wall. Microsoft is a single company .... We don't try to pretend that there is a Chinese Wall ....

Stuart J. Johnston, ''No Chinese Wall'' at Microsoft, Infoworld, Dec. 30, 1991, at 107 (Ex. 18). And since early 1992, Microsoft has freely and openly given its applications developers an advantage over ISVs. In November of 1992:

at least half a dozen cases in which Microsoft allegedly withheld information on its DOS or Windows functions from outside developers, for periods ranging from six months to several years. During these periods, Microsoft's own developers appear to have used these functions in applications or utilities that competed with those eventually developed by independent software vendors, according to programmers who have examined the code.

[I]n each case, the lack of documentation of the functions may have given Microsoft applications a time-to-market lead of six months or more before similar features could be incorporated into competing developers'' applications ....

Brian Livingston, InfoWorld, Nov. 16, 1992, supra, at 98 (Ex. 19).

d. Predatory Bundling

Since dropping all pretense of a ''level playing field,'' Microsoft has increasingly used the power of its operating system installed base to gain advantages over applications competitors. It has attempted to monopolize the market for the development tools (also known as programming languages) used to create applications by predatorially preannouncing its products (as documented in the introduction to this brief) and by bundling versions of its own programming language products into its operating systems so that users will have a powerful disincentive to purchase a competitor's programming language separately.[76]

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of OS/2, but will Microsoft Make Winning Goal, Seattle Times, March 29, 1992, at C1 (system sales are ''the cash cow that has fueled Microsoft's aggressive entry into nearly every field of personal computing''); id. (''DOS, which comes installed on computers at the factory, has provided profits to finance Microsoft's development of applications such as the Excel spreadsheet and Word, a writing program.''); Laurie Flynn & Rachel Parker. Extending its Reach, InfoWorld, August 7, 1989, at 43 (''the Microsoft strategy has been to fund expensive applications development and marketing with its profits from the recurring DOS royalties it receives. '').

[69] Kathy Rebello, et al., Is Microsoft Too Powerful, Business Week, March 1, 1993 at 88 (Ex. 4).

[70] See Cara A. Cunningham, IBM and Microsoft Wage Open Doc vs. OLE Find, InfoWorld, Aug. 15, 1994, at 25 (Microsoft has an ''army of evangelists.., that goes out and sells the [OLE] technology and swarms over developers'').

[71] Richard Brandt, Microsoft Is Like an Elephant Rolling Around, Squashing Ants, Business Week, Oct. 30, 1989, at 148 (Ex. 3).

[72] Ray Weiss, Windows Stars at SD 91, Electronic Engineering Times, Feb. 18, 1991 (Ex. 15).

[73] 73 See supra note 27.

[74] Compare Andrew Reinhardt, First Impressions: New Extras for Excel, Byte, Feb. 1, 1991, at 136 with Microbytes, Byte, Feb. 1, 1991, at 20.

[75] See, e.g., Start Levine, Lotus Embraces ''Competition As It Aims for Identity, LAN Times, June 17, 1991.

[76] Ethan Winer, BASIC, Yes; Feeble, No, PC Magazine, Oct. 30, 1989, at 187 (Because ''the BASIC [programming language] interpreter [is] bundled with DOS... at no extra cost, [it] is known

Microsoft has also conducted a lengthy ''campaign'' to bundle business software applications into the operating system so that it can ''mop up competitors that sell stand-alone applications, resulting in more limited user choice down the road.'' [77] Microsoft has steadily increased the price of its operating system to cover its own loss of revenue from the diminished sales of free-standing applications that it bundles into the operating system. Although free-standing applications generally cost more than Microsoft's increases in operating system licensing fees, the unit sales of each application are far fewer than the number of users that upgrade to each new release of the OS—because of the huge installed base that Microsoft has procured by ''anticompetitive practices.'' Hence, even a modest increase in operating system fees more than offsets Microsoft's loss of revenue from diminished applications sales.

Applications competitors, of course, do not fare as well—when Microsoft bundles the functionality of their products into the operating system, they lose their only source of revenue. After the competitors go out of business, Microsoft is free to unbundle the applications from the operating system and charge, in the absence of competition, whatever price the market will bear. Microsoft initiated this strategy with the introduction of Windows, by bundling word processing, calculations, communications and ''paint'' business applications software directly into the operating system.[78]

Microsoft has even bundled technology into its operating system that it misappropriated from its competitors. When Microsoft wanted to add data compression capabilities to DOS, for example, it approached Stac Electronics, developer of the industry's leading data compression software. Microsoft demanded a worldwide license to use Stac's software as part of DOS, but ''steadfastly refused . . . to pay Stac any royalty for [its] patented data-compression technology.'' [79] When Stac refused Microsoft's demand, Microsoft simply incorporated Stac's intellectual property directly into DOS. Id. Stac brought suit and a federal jury found Microsoft guilty of infringing Stac's data compression patents and awarded Stac $120 million in damages.[80] Microsoft thereafter settled the case by acquiring a 15 % interest in Stac, and obtained a license to Stac's vital data compression technology for a fraction of the jury's verdict.[81] Because Microsoft's conduct in the Stac case ''underscore[s] the sort of allegations that have kept the [Government's antitrust investigation] alive for years,'' some observers have suggested that the timing of Microsoft's settlement with Stac m late June 1994 was calculated to ''remove [Stac president Gary] Clow as a hostile witness in the Justice investigation.''[82]

e. Predatory Unbundling

Microsoft has also unbundled technology from its operating system in order to render other companies'' products uncompetitive. For example, the DOS operating system contained, in version after version, a portion of code known as the ''debug kernel.'' Both Microsoft and competitors like Borland created development tools that used the functionality of the debug kernel in order to run.

With the introduction of Windows 3.1 in April, 1992, Microsoft removed the debug kernel from the operating system and bundled it with its own language application program. If a user wanted to run the competitive Borland program, it had to buy the debug kernel separately from Microsoft, at a price Microsoft set to make the Borland product less competitive. Microsoft even conspicuously advertised the fact that its own product was cheaper than the Borland product because the user had to buy the debug kernel separately from Microsoft. Byte, May 1992, at 159 (Ex. 6). Whatever pro-competitive benefits Microsoft might advance to justify its bundling of new functionality into the operating system, it is difficult to imagine any justification for unbundling operating system technology, other than harming competition.

f. Other Uses of Leverage

Microsoft further exploited its leverage, both vertically and horizontally. Horizontally, within the desktop applications layer, Microsoft introduced additional applications, touting and exploiting the benefits and advantages of its vertical linkage (to the operating system): for example, word processing (''Word''), database (''Fox Pro'' and ''Access''), and presentations (''Power Point''). Microsoft also employed horizontal leverage in the applications layer through its marketing practice of bundling a group of applications into a ''suite,'' which is sold at low price points. And, all the while, Microsoft used its profits from its monopoly position in OS for (1) massive marketing to promote the linkage features of the OS. and (2) sustaining a protracted battle with independent applications vendors in a new market that. without the profits from the leveraged market, could not be sustained.[83]

As noted in the introduction to this brief, Microsoft has been spectacularly successful in leveraging its installed base in the operating system market to dominate the business applications market. In four years, Microsoft ''went from an also ran in the business applications market to the industry leader.'' Inside Telecom, Sept. 26, 1994. Although Microsoft has not yet fulfilled Mike Maples'' goal of ''I00 percent'' market share, it is by far the leading supplier in each individual applications product category. Microsoft Domination, San Jose Mercury News, Dec. 21, 1994, supra, at 1F (Ex. 35). Moreover, suites are the fastest growing category of business applications software and Microsoft accounts for an astounding 85% of all suites sold. See supra note 16. Microsoft's success in monopolizing business applications is, absent effective Government intervention, only a taste of things to come. Having succeeded in dominating the desktop operating system and applications markets, Microsoft has begun to leverage its installed base to monopolize both the intrabusiness server and on-line systems, as set forth m subsequent sections.

2. The Intrabusiness Server

Microsoft intends to displace all of the competition on the enterprise server, just as it did on the desktop, by employing multiple linkages and leverage. Its leverage will come from the large installed base of the PC operating system monopoly. Using this base, Microsoft will employ three strategies: (a) vertical linkages similar to those that worked in the desktop markets, (b) horizontal linkages from desktop to intrabusiness server, and (c) horizontal linkages from home-to-business server to intrabusiness server.

Microsoft began the implementation of its strategy by creating a new server OS (''Windows NT'') that horizontally leverages from the monopoly position of DOS/Windows in the client market. Microsoft has increasingly placed server functionality into Windows and Windows applications (for example, with the Microsoft products, Access, Fox Pro, and Excel). With NT, Gates seeks to extend his software dominion from desktop software, which he monopolizes, to the network. In the 1980's, Microsoft's DOS and Windows systems software defined the way most people worked with computers. In the 1990's, the company aims to define the software that electronically ties together workers and businesses, customers and homes. Zachary, Showstopper, supra, at 3.

In addition, Microsoft is nakedly leveraging its market power in the desktop operating system market to the enterprise server by requiring software developers who want to use the logo for ''Windows 95,'' the forthcoming version of Microsoft's desktop operating system, to make their desktop application products also run on ''Windows NT'' (Microsoft's server operating system).

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and used by more people than any other programming language for personal computers.'').

[77] Michael Csenger & Adam Griffin, Microsoft Free At Last?, Ruling Still Lets Firm Incorporate Apps Into Its OS'es, Network World, July 25, 1994, at 4 (Ex. 23); see also John Markoff, Microsoft'', Future Barely Limited, N.Y. Times, July 18, 1994, at D1 (Ex. 24) (describing Microsoft's 14 year ''campaign[] to expand the definition of what computing functions belong inside the computer operating system.'').

[78] Paul Andrews, Windows Is No JFK, But Its Visual Appeal Is Outstanding, Seattle Times, May 22, 1990, at C2 (''Windows 3.0 comes with a suite of mini-applications including Write, Paintbrush, Clock, Recorder (a macro utility), and Terminal (telecommunications). '').

[79] O. Casey Corr, A Look Behind Stac Deal, Seattle Times, June 26, I994, at FI (quoting Stac's complaint).

[80] Id.; Charles McCoy, Microsoft to Pay Stac Judgment of $120 Million, Wall St. J., Feb. 24, 1994, at A4.

[81] Stuart J. Johnston, Microsoft Settles for Piece of Stac, Computerworld, June 27, 1994, at 30 (Microsoft paid $39.9 million for 155'o of Stac, and an additional $43 million over 43 months for a license to Stac's data compression technology); Doug Barney, Micros. oft, Stac Resolve Dispute; Microsoft Finally pays Up, InfoWorld, June 27, 1994, at 14.

[82] O. Casey Corr, A Look Behind Stac Deal, supra, at Fl.

[83] As explained in Section V.C., infra, the superficially irrational behavior of undermining the application vendors that produce programs that run on Microsoft's operating system is logical specifically because Microsoft has an independent economic incentive to monopolize the market for business application programs.

See William Brandel, Developing for Next Generation of Windows May Mean Running on NT, Computerworld, November 18, 1994, at 4. There is no technical reason to require an application to run on both Microsoft's desktop and server: indeed, a user would not even expect (nor perhaps even want) a ''Windows 95'' application program to run on the server. Microsoft's requirement is simply another way of leveraging:

The NT requirement seems like nothing more than an attempt to leverage Microsoft's control over the upcoming Windows 95 market to assist its lackluster Windows NT product.

Brian Livingston, Will ''Windows'' Compatible Really Mean What It Says?, InfoWorld, November 14, 1994, at 40 (Ex. 20) (quoting Andrew Schulman, Unauthorized Windows 95). Microsoft is using its operating system power to force independent application vendors to establish the linkage between the desktop and the server that Microsoft has been trying to establish through its own products. In affect, Microsoft is using independent software vendors to establish Microsoft's power in servers.

Microsoft also enhances its power in the server applications layer by horizontally bundling these products into a suite (the ''BackOffice'') in the same way Microsoft bundled desktop applications into a suite. Just as with the desktop applications, there is also vertical leverage to enforce the horizontal bundle by making all server applications OLE-enabled. See Stuart J. Johnston and Ed Scannell, Computerworld, supra, Oct. 10, 1994, at 4 (Ex. 7); J. William Semich, Datamation, Aug. 1, 1994, supra, at 4144 (Ex. 10).

3. The Home-to-Business Market (Server and Client) Increasingly, business will need to communicate with personal computers in homes in order to sell products or services and in order to provide information, for work or other purposes. Obviously, businesses that exploit this channel will have a strong advantage over competitors that do not, with the result that all businesses will seek entry. This market is currently known as ''online services.'' There are three principal competitors in this market— America Online, CompuServe and Prodigy.

Control of the home-to-business market by a single company would produce an enormous windfall. First, of course, the monopoly would be able to extract a toll for a large percentage of consumer financial and product transactions. More strategically, a company that controlled the home-to-business market could leverage that control back to the intrabusiness, or enterprise, server market. Control of both sides of the server market, intrabusiness (enterprise) and home-to-business, would place enormous power (financial services, information, education, etc.) in the hands of a single company. Microsoft has this power within its grasp. Microsoft is pursuing its policy of targeting, linking and leverage from the operating system installed base to seize control of the architecture of the home-to-business market, just as Microsoft gained domination of the desktop.

On November 14, 1994, Microsoft announced its own online service known as ''Marvel'' or the ''Microsoft Network.'' Microsoft will use Windows NT as the home-to-business server for the Network. Adam Gaffin & Peggy Watt, Microsoft, Lotus Baffle Shifting to On- Line Services, Network World, Nov. 21, 1994, at 1. More importantly, Microsoft will use the market power from its'' installed base in operating systems in a number of ways to displace existing on-line competitors and dominate the home-to-business market.

a. Predatory Bundling

First, Microsoft intends to leverage its installed base in operating systems to give its own on-line service an unfair advantage over existing competitors. Microsoft has already announced that the next upgrade of its PC operating system, Windows 95 (due out later this year), will have a connection to the Microsoft Network already bundled in. According to Bill Gates, ''We'll give you access to [the Microsoft Network] with Windows 95... If (the software notices you have a modem, it will ask you if you want to register.''[84]

This tactic will instantly displace existing on-line competition. Windows 95 will be pre-installed on virtually every PC sold in the United States in the coming year85 and approximately 20 million copies will be in use within a year of its release. Amy Bernstein. Microsoft Goes Online, U.S. News & World Report, Nov. 21, 1994, at 84. This ''potent plan for spreading Marvel'' will dwarf the competition. Id. America On-Line, by comparison, has an installed base of 1.25 million subscribers. Elizabeth Corcoran, Washington Post, Nov. 12, 1994, supra, at H6.

Industry analysts and commentators have repeatedly raised concerns that Microsoft's bundling of its own on-line service ''tilts the playing field in its direction,'' likening Microsoft's bundling practice to the utility company selling appliances or the local phone company automatically connecting the user up with AT&T's long distances[86]

In essence, OEMs will be forced to distribute MSN [The Microsoft Network] if they want to access Windows 95—even if that distribution is to the OEM's detriment.

s, Elizabeth Corcoran, Washington Post, Nov. 12, 1994, supra, at H6. Amy Cortese, Business Week, Dec. 19, 1994, supra, at 35 (HP, Compaq and other big U.S. PC makers plan to bundle Windows 95 into their machines).

Jesse Bent, Microsoft's On-Line Rivals Could End Up In 'Cyberia', PC Week, Dec. 12, 1994, at 120 (Ex. 30). Microsoft's conduct is a textbook example of an attempt to use market power in one market (operating systems) to ''tip'' a competitive adjacent market (online systems).

b. Unfair Use of Information

Microsoft is also using its power over the operating system installed base to dominate the content of the home market—CD ROMs—the same way it used leverage from the operating system installed base to dominate business applications. For example, as a condition to obtaining information about how to run on the multimedia portions of Microsoft's operating system, independent CD ROM developers were required to fill out a form, designated ''Microsoft Confidential.'' In other words, in order to obtain necessary operating system information, the form required Microsoft's CD ROM competitors to disclose to Microsoft confidential business information necessary to make successful CD ROM products. This form is a remarkably glaring example of the open exercise of market power. It required, inter alia, the following disclosures:

Please describe your company's important business relationships (distribution, venture capitalists, etc.) Provide proposed product areas.

Current key software products (in order of market share and importance to your company).

Who is the target audience for your products?

What is the price of your products?

What is your supply date for retail distribution?

What competition do you perceive for this product?

How will you differentiate this product from its competition?

How is this project funded? (The ''Microsoft Confidential'' form is found in the Appendix as Ex. 22.) Armed with all of this confidential information about its competitors plans and products, Microsoft has successfully entered the CD ROM business itself, and is ''churning out about one new CD ROM title per week.'' Washington Post, Nov. 13, 1994, supra, at H6 (Ex. 44).

c. Unfair Head Start

Microsoft will also ensure domination of the content of on-line services by using OLE-based tools as the standard for business developers and users to create object-oriented documents that can be transmitted over the Microsoft Network. Mary Jo Foley, Microsoft Lays Foundation For On-Line Network, PC week, Nov. 14, 1994, at 1; Doug Barney, Microsoft to Announce New On-Line Service at Comdex, InfoWorld, Oct. 24, 1994, at I, 140. According to a PC Week article, the Microsoft network employs OLE technology and uses the ''standard Microsoft Exchange E-mail client included with Windows 95....[87] ''In short, ''Microsoft Network's on-line services are well-integrated into the Windows 95 user interface.'' Eamonn Sullivan & Matt Kramer, Microsoft Marvel Beta Leverages WIN 95 Desktop, PC Week, Nov. 7, 1994, at 169 (Ex. 28).

And, as if Microsoft's use of leverage to dominate the home and on-line markets is not sufficient, Microsoft announced on October 13, 199487 its intention to buy Intuit. Inc., paying a 100% premium to market. See supra note 36. Intuit publishes the personal finance and tax planning software programs that dominate their respective markets. Intuit's product controls 80–85% of the personal finance markets.[88]

[86] See Lawrence J. Magid, Microsoft: Not So Marvelous, Bay Area Computer Currents, Dec. 1, 1994, at 98, 101 (Ex. 1); Carole Patton, Computerworld, Nov. 14, 1994, supra, at 57 (Ex. 8).

[87] Lee Gomes, Microsoft to Acquire Intuit, San Jose Mercury News, Oct. 14, 1994, at 1D.

[88] Don Clark, Microsoft to Buy Intuit In Stock Pact, Wall St. J., Oct. 14, 1994, at A3 (86% of retail store sales); Karen Epper, Software Deal Shakes Up

Personal financial software is generally regarded as the ''killer app[lication] of the 90's'' for the home computing market,[89] Personal financial software has broad consumer appeal in that everyone has a bank account. It requires the integration of several sources of data including bank accounts, brokerage accounts, and credit information. Because of Intuit's commercial success, there is a strong network externality (''lock in'') attached to a user's viewing his personal financial information through the Intuit user interface. Accordingly, Intuit provides tremendous leverage into the home banking market.

The Intuit acquisition is currently under Justice Department scrutiny. If the deal is consummated, Microsoft can be expected to leverage Intuit's installed base to further lock in its own products. For example, Microsoft will bundle Intuit's products with its next release of the operating system to increase the number of users who will upgrade to Windows 95.[90] Microsoft can also provide an enormous market edge to its own on-line service by making Intuit available exclusively (as among on-line services) on the Microsoft Network, See Michael J. Miller, The World According to Microsoft, PC Magazine, Jan. 24, 1995, at 80 (Ex. 25).

Domination of home banking and personal finance provides the optimum platform from which to dominate other on-line services, including, for example, shop-at-home. Businesses that want to provide financial information to Intuit users, or who want to provide other on-line services, will want to choose server software for interacting with the Microsoft Network. Microsoft will be able to use all of its vertical integration skills developed in the desktop and enterprise server marketplace to ensure that businesses choose Microsoft home-to- business server software.

Based on the leverage potential from its operating system installed base, Microsoft has been able to consummate deals that will ensure that Microsoft Network dominates the market. For example, on November 8, 1994, Microsoft and VISA (the credit card company) announced the provision of a standard and secure method ''for executing electronic bankcard transactions across global public and private networks.'' Visa News Release, Nov. 8, 1994 (Ex. 39). In the question and answer session following the press release, the VISA spokesperson said that the driving force in VISA's decision to do the deal with Microsoft was the fact that Microsoft had an installed base of 60 million copies of Windows. The significance of Visa's agreement with Microsoft is not lost on industry observers. See, e.g., Elizabeth Corcoran, Washington Post, Nov. 12, 1994, supra, at H6. Nor is it likely to be the last such agreement: the Post reported, for example, that ''four telecommunications companies are expected to announce on Monday [November 14, 1994] that they are working with Microsoft to make dialing into Marvel a local call for many subscribers.'' Id. And, on December 21, 1994, Microsoft announced that Tele-Communications, Inc. purchased a 20% stake in the Microsoft Network for $125 million. The deal implies a value of $625 million for an on-line service that doesn't exist yet .... ''Jim Carlton & G. Pascal Zachary, Microsoft Sells A 20% Interest In Planned Unit, Wall St. J., Dec. 22, 1994. Once again, Microsoft is controlling the architecture and using a nominally open standard.

If Microsoft is successful in establishing the standard for the home-to-business market, it will be able to leverage into the enterprise server market both from the desktop, which it already controls, and the home market. Once a business decides that it should use the Microsoft server to communicate with customers, there is no point in having a different. probably incompatible, server for intrabusiness needs. After all, the operating system for the server side of Microsoft's home-to-business server is Windows NT. Why have a different business server operating system? This connection between the home server and the business server is clearly in Microsoft's contemplation because Microsoft has already announced that Marvel (the Microsoft network) will connect directly to a company's server. Doug Barney, Microsoft to Announce New On-Line Service at Comdex, InfoWorld, Oct. 24, 1994, supra, at I.

The inevitable result of Microsoft's monopoly leverage will be to transform Microsoft into a ''middleman'' or rent collector for every transaction processed in an all- encompassing information economy. Whether writing a letter, placing an order, or paying a bill, every consumer and business connected to the information highway will pay Microsoft's toll. As noted in Fortune, ''[t]his isn't just a gleam in Bill Gates'' eye—[by purchasing Intuit, entering a joint venture with Visa, and bundling the Microsoft Network]—its already starting to come together, and in Microsoft's typically orchestrated fashion.[91]

MICROSOFT'S NETWORK-WIDE MONOPOLY

It is readily apparent that Microsoft's strategy of targeting, linking and leveraging from the desktop operating system has been successful in seizing control of the business desktop. It is also apparent that Microsoft is leveraging from the business desktop to the business server and is vertically integrating within the business server so as to seize control of the critical server operating system gateway. The Intuit acquisition is intended to control the gateway on the home computer and leverage toward the home-to-business market.

Application of ''increasing returns'' economic analysis would reasonably predict that, given the present situation, Microsoft will succeed in monopolizing the entire information infrastructure (just as it has monopolized the desktop) and that the monopoly will remain in place for a very long period of time.[92] Indeed, the monopoly on the enterprise and home-to-business server markets is likely to be so vast that Microsoft will be able to extract monopoly rents on not only financial transactions, but also the transmission of information and data.

Some fear that as the digital future of the information superhighway emerges, an unchallenged Microsoft and Intel will wind up in total, undisputed control of the technology upon which the country's citizens and economy will depend . . . ''Increasingly, I'm believing it's all over, and we're going to be locked into Microsoft and Intel forever,'' said Dataquest analyst Kimball Brown.

Rory J. O'Connor, Microsoft, Intel Set to Define Technology, San Jose Mercury News, Nov. 13, 1994, at 1-A. (Ex. 34).

Notwithstanding the Government's conclusion that Microsoft has increased its installed base in operating systems six-fold using ''anticompetitive practices,'' and ample evidence that Microsoft has leveraged that installed base to attempt to monopolize business applications (as well as other markets), the Government's Tunney Act filing does not require divestiture of any part of its operating system installed base, nor does it prevent Microsoft from using that installed base to monopolize other markets, including business applications. The Government has articulated no economic rationale to justify its failure to act in the face of such clear evidence of anti-competitive intent and effect. These Amici can identify four possible economic justifications for the Government's inaction, but none of the four is persuasive.

A. Leverage of the Installed Base by Competitors

Although the Government has not articulated an economic rationale for its position, the Justice Department may have concluded that a monopoly of the X86 operating system market by Microsoft is inevitable—either because MS DOS is already locked-in or because an ''increasing returns'' market will cohere around a standard in any case. Following this approach, the Government may have concluded that the best hope for competition in the operating system market is through an operating system program compatible with MS DOS, but made by a Microsoft competitor. Arguably, a vendor of such a program could tap into Microsoft's huge

Home Banking, Amer. Banker, Oct. 17, 1994, at 1, 25 (80–85%).

[89] Michelle Flores, Probe of Microsoft is Extended—Justice Dept. Asks For More Information, Seattle Times, Nov. 22, 1994, at B11; Michael Schrage, Microsoft Can Make Lots of Money; Can It Shape the Management of It?, Washington Post, Oct. 21, 1994, at B3; Brent Schlender, Fortune, Jan. 16, 1995, supra, at 36.

[90] Gina Smith, Merger Misgivings: Will Intuit Go ''Soft?, S.F. Chronicle, Dec. 4, 1994, at B5, B14.

[91] Brent Schendler, Fortune, Jan. 16, 1995, supra, at 4748; see also, Michael I. Miller, PC Magazine, Jan. 24, 1995, supra, at 80 (Ex. 25) (''Microsoft could require just a small service charge on each transaction. Or it could make money on the float—the interest in the few seconds it takes to move money from one place to another. Or both.'').

[92] For example, leading industry analyst Rick Sherlund of Goldman Sachs predicted that with the settlement, Microsoft ''should dominate the market for desktop software for the next 10 years.'' And another leading analyst, Richard Shaffer concluded that ''It]he operating system wars are over—Microsoft is the winner .... Microsoft is the Standard Oil of its day.'' Andrew Schulman, Microsoft's Grip On Software Tightened By Antitrust Deal, Dr. Dobb's Journal of Software Tools, Oct. 1994, at 143 (Ex. 13).

installed base and attempt to displace Microsoft by ''migrating'' users to subsequent versions of the competitor's operating system. If such was ever in the Government's contemplation, events since the announcement of the settlement between the Justice Department and Microsoft have shown that such a scenario is unrealistic. Novell has withdrawn its MS DOS compatible operating system from the market entirely. See, supra note 14. And Microsoft's market is so strong that IBM selected Microsoft's MS DOS program for pre-installation on a new line of IBM personal computers, instead of IBM's own PC-DOS (compatible) program—notwithstanding the fact that IBM's product is technologically superior to MS DOS and is less expensive.[93]

IBM's [93]technologically advanced OS/2 is faring no better. OS/2 is capable of executing both DOS and Windows 3.1 applications, and according to Microsoft executive Steve Ballmer, IBM is ''offering computer makers OS/2 for free and may be even paying some to take it.''[94] However, Microsoft's market power has resulted in IBM getting few if any takers, even on these terms. As one potential customer, a computer manufacturer, stated:

Microsoft can kill us ..... I worry more about my dealings with

Microsoft than I do about my competitors.[95]

B. Alliances

Alternatively, the Government may have concluded that other operating system competitors might combine with application developers in alliance-type combinations to prevent Microsoft from extracting monopoly rents from the business desktop. But alliances among companies rarely work in the best of circumstances—i.e., in more conventional markets. Here, the alliances would have to produce or blend complex software technologies in order to make a competitive offering equally useful and reliable to that marketed by a single vertically integrated competitor, which is better able to guarantee seamless integration.[96] Similarly, from the economic perspective, the possibilities of real competition from an alliance-based product line are highly remote, at best. Microsoft's installed base and share of the applications market is so large that its products are ''locked-in'' and true competition can be restored only through truly massive forces or structural relief. See, e.g., W. Brian Arthur, Increasing Returns and Path Dependence in the Economy 2, 10–11 (1994).

Most importantly, although there are companies that make operating systems that run on different chips, no Microsoft competitor or group of competitors controls the operating system gateway to the network in the way that Microsoft does. Control of the ''human interface'' gateway on the home computer through the acquisition of Intuit will only heighten Microsoft's control throughout the market. In short, the prospects of an alliance to compete effectively with Microsoft, in the current market where the gateways are controlled by Microsoft, are extremely remote. Competitors would have to produce a competing information infrastructure through a different paradigm (e.g., cable television), something that is years, if not decades, away. Microsoft is, moreover, already committing substantial resources—reportedly 500 employees by next June—in anticipation of this paradigm shift. See Elizabeth Corcoran, Washington Post, Nov. 13, 1994, supra, at H6 (Ex. 44). It therefore is clearly preparing now to be in a position to control this new paradigm as well.

C. ''Tiered'' Monopoly

Third, the Justice Department might have concluded that, although Microsoft has achieved a monopoly in the operating system market, there is no need for governmental intervention because Microsoft would prefer competition in business and home applications software. In other words, the Government might argue that Microsoft has no economic incentive to monopolize the applications market intentionally and has acquired its dominant position in the market only because of superior products. According to this approach, although Microsoft has a monopoly on X86 operating systems, it would actually prefer that the applications (and development tools) market be fully competitive in order to maximize monopoly profits from the operating system market. A schematic representative of the ''desktop,'' Figure 3, is reproduced below for reference:

Level	Name	Examples
5	Applications	(a) Desktop applications (e.g., Lotus 1–2–3, dBASE, MS Word, MS Excel, WordPerfect) The Microsoft Office is a bundle of these applications. (b) Client applications as part of a network (e.g., Oracle Financials, SAP, Peoplesoft, D&B Software, etc.)
4	Development Tools.	Basic, Pascal, C, Borland C + +, Powersoft
3	Gill and/or ...	MS Windows
.....	OS Services	
2	OS	Apple, DOS
1	Hardware	IBM, Apple, Compaq, Dell

Figure 8

This type of economic thinking would suggest that if Microsoft truly had a monopoly at the second level (operating systems), it would prefer competition at all higher levels so as to maximize its ability to extract monopoly profits through the operating system level. And, according to this economic argument, there would be no point in Microsoft expending the resources to monopolize applications (level 5), since it would derive the same benefit by monopolizing the operating system (level 2).

Indeed, according to this approach, because of the presence of demand side economies of scale, there would be a need for Microsoft to control the X86 operating system (level 2). There is a network externality that must be solved by a single firm with control of both level 2 and all of the levels above it (3–5). All other factors being equal, according to this argument, consumers would be better off with the greatest possible variety of level 5 competition and the greatest possible adoption of one operating system standard.[97] Hence, if Microsoft controls the operating system, it would have an incentive to price it low because it could extract the profits through the applications (level 5). (Or, alternatively, Microsoft might price the applications low and take the profits out through the operating system.) Indeed, Microsoft might be willing to price below cost.

On the other hand, according to this economic approach, if a Microsoft competitor gained control of applications, Microsoft and the competitor would fight over the division of profits. This would be wasteful, would lead to higher total costs for the system because of ''double marginalization'' and would not lead to as great adoption of the overall system. Given that Microsoft controls the X86 operating system, so the argument would go, its profits would be maximized if the market for applications were made as large as possible. Hence, it would follow that Microsoft would want to control applications to make this market as large as possible and would do this by pricing applications at a low level, and by making the interconnection between its applications and operating system as efficient as possible.

This economic approach is unpersuasive for three reasons. First, although Microsoft monopolizes the market for operating systems that run on the X86 chip, there are competitive operating systems that run on other chips—Apple and UNIX, for example. These competitive operating systems, like the Microsoft operating system, run business applications. Hence, so long as these competitive operating systems exist, Microsoft can extract ''monopoly rents'' by monopolizing a layer above operating systems—business applications.

Second, as the Government's complaint in this case points out, there must be ''a variety

[93] ???

[93] See John M. Goodman, The DOS Heavyweights Go Another Round, InfoWorld, Aug. 29, 1994, at 87 (rating PC-DOS version 6.3 above MS-DOS version 6.22) and Earle Robinson, DOS-version Madness? Integration Coping with DOS, Windows Sources, Oct. 1994, at 163 (''my choice would be the IBM . . . it's cheaper'') and Yael Li-Ron, PC DOS 6.3: DOS and DOS: Separated At Birth, PC-Computing, July 1994, at 94 (IBM's Ambra computers ship with MS-DOS).

[94] Don Clark & Laurie Hays, Microsoft's New Marketing Tactics Draw Complaints, Wall St. J., Dec. 12, 1994, at B6 (Ex. 41).

[95] Id.

[96] All of these problems are discussed in Rory O'Connor, San Jose Mercury News, Nov. 13, 1994, supra, at 1A, 28A (Ex. 34).

[97] See Michael Katz and Carl Shapiro, Systems Competition, supra.

of high quality applications'' that run on an operating system if that operating system is to be successful. 59 Fed. Peg. at 42,847 (Complaint 16–18). Accordingly, control of applications enables Microsoft to maintain and increase barriers to entry in the operating system market, thereby solidifying and maintaining Microsoft's operating system monopoly.

Finally, control of the application layer enables Microsoft to price discriminate more effectively, thereby maximizing its monopoly returns. For example, because Microsoft also monopolizes business applications, it has the ability to selectively bundle some word processing functionality into operating systems, while at the same time offering a higher priced, more fully functional word processing program to users who need greater functionality. This enables Microsoft to extract greater revenues than would be possible merely by uniform operating system prices—i.e., if Microsoft only monopolized operating systems, but not applications.

In short, Microsoft has ample economic incentive to monopolize business applications. To the extent Microsoft is concerned at all about actual or potential competition for operating systems, gaining control of applications will ensure overall control of the desktop. regardless of what might transpire in the future with respect to operating systems.

A complete comparison of consumer welfare in a world with uniform dominant-firm pricing in operating systems and competition in applications on the one hand, with monopoly price discrimination on the desktop (operating system and application together), on the other hand, is beyond the scope, of this Memorandum. However, economic theory would strongly suggest that with respect to pricing, competition in applications, coupled with imperfect competition in operating systems—or at least the presence of potential competition in operating systems—is preferable to monopoly of the entire desktop. Moreover, in terms of technology, it is considerably more likely that the best technology will emerge in applications if there is open competition for the technology, rather than if it is dominated by the firm that monopolizes operating systems. That is especially true if the reason that Microsoft is able to monopolize applications is because it can leverage its operating systems monopoly and not because of any superiority of its technology.

D. Efficiencies of Integration

Finally, the Government might justify its failure to act on the belief that the benefits Microsoft is providing by vertical and horizontal integration outweigh any anti-competitive effects. Microsoft will point out that it seamlessly integrates new technologies into new markets, and it will argue that unless it is permitted to link and leverage, these markets will not be opened in a way meaningful for consumers. It will further argue that if markets are opened by less efficient alliances, the services are bound to cost more because Microsoft competitors will not enjoy the efficiency benefits of integration. Indeed, according to this argument, allowing Microsoft to leverage Windows from one market to the other amortizes the research and development costs over a broader base of potential customers, with the result that Microsoft can charge less for the product in the first instance.

Furthermore, Microsoft presumably will argue that because these markets and technologies exhibit increasing returns, they will gravitate toward a standard (i.e., a monopoly) anyway. According to this argument, it would be economically wasteful to require two networks that do the same thing. And, if there is only going to be one standard, that standard should be chosen by the market, as opposed to by Government intervention.

There are two important responses to this argument. First, software is not similar to many conventional products in an important way. With software it is possible to achieve virtually all of the benefits of integration without excluding competitors. There is no reason why an application developed by an ISV cannot work just as well with the operating system as a Microsoft application, provided Microsoft provides necessary information to application competitors on a timely and complete basis.

Second, while there are benefits to vertical and horizontal integration that Microsoft will point out, there are also very substantial costs. The enterprise server market, for example, is currently organized into a number of horizontal layers, each of which is characterized by strong competition. Generally speaking, consumers prefer this horizontal competition. See, e.g., The Economist, Feb. 27-Mar, 5, 1993, supra, at 11 (Ex. 14). Microsoft is attempting to impose a verticality on the enterprise market so that it can extract monopoly rents. e''

Benefits of vertical integration, as opposed to horizontal competition at each layer. both on the desktop and the server, should be evaluated on the basis of product quality and incentive to innovate, as well as product cost. It is clear that vertical integration will allow Microsoft to displace even superior technologies. As PC Magazine recently observed:

Since Microsoft is in a position where its operating system is dominant . . . [i]n order to be successful, Microsoft Network doesn't even have to be the best on-line service; it just needs to be good enough and the most convenient.

Michael J. Miller, PC Magazine, Jan. 24, 1995, supra, at 79–80 (Ex. 25). Similarly, if Microsoft controls the operating system gateway layer, its vertical integration will permit the displacement of superior products at the applications (and development tools) layer merely because of the vertical integration. The displacement of superior products is clearly a cost that should be evaluated, offsetting Microsoft's claim that its products would be lower-priced to the consumer.[98]

Moreover, once Microsoft achieves dominance in a market, it has little incentive to innovate[99] So the negative effects of vertical integration include both the displacement of superior products, as well as the diminution of the incentive to advance technology that has become a standard. The latter cost should be evaluated as well. Nor is it altogether clear that vertical integration will necessarily produce efficiencies (that translate into lower prices) over, say, horizontal competition at each layer.

There is not yet empirical research on point, but there is certainly theoretical research suggesting that there are benefits to horizontal competition in the vertical layers.[100] Hence, while there is theoretical literature that documents the efficiency of the horizontal competition model, the real challenge is maintaining the horizontal model in the world. Increasing return economics indicates that there is no reason to believe that the market, as currently structured, will choose the ''best'' product at a particular level. Rather. there is every reason to believe that Microsoft. through leverage from control of the operating system, will be able to impose verticality, with its associated costs—notwithstanding the fact that users appear to desire the benefits of horizontal competition. See, e.g., The Economist, Feb. 27-Mar. 5, 1993, supra (Ex. 14). In short, Government intervention is necessary merely to provide a sufficiently level playing field for the horizontal model to have a reasonable chance of succeeding.

VI ANTITRUST ENFORCEMENT

This section of the brief identifies the deficiencies of the proposed Final Judgment and compares the relief sought by the Government in this case to the relief sought by the Government in comparable situations involving pharmaceutical, computer and telecommunications monopolies. Finally, the section analyzes the relevant case law that would support similar relief in this case, particularly a preclusion on the use of leverage from an installed base that was procured by ''anticompetitive practices.''

A. Deficiencies of the Proposed Judgment

Manifestly, the proposed judgment has failed to achieve its stated purposes. Instead of saving consumers money and providing them with greater operating system choices as the Attorney General promised, the settlement has permitted Microsoft to run yet another competitor out of the operating systems market (Novell) and raise its own prices to resellers. From an economic perspective, this was to be expected. The relief proposed by the Government will neither maintain nor restore competition in the operating systems market. More ominously. the settlement clears the way for Microsoft to use its unfairly acquired

[98] Joseph Farrell and Garth Saloner, Installed Base, supra; Paul David, Amer. Econ. Rev., May 1985, supra.

[99] Indeed, Microsoft's operating system ''lock-in'' has permitted it to bring demonstrably inferior products to market (products that did not enjoy any appreciable consumer acceptance) without negative consequences to the company. See Michael Morris, Microsoft Deal: Too Little, Too Late, S.F. Examiner, July 24, 1994, at C-5. (Ex. 33)

[100] Joseph Farrell, Hunter K. Monroe and Garth Saloner, The Vertical Organization Of Industry and Systems Competition Versus Component Competition, October 1994 (working paper).

installed base to run competitors out of other software and networking markets, as well.

According to the Government's complaint, Microsoft used anticompetitive licensing practices from at least 1988 to 1994. As noted earlier, during that period, Microsoft maintained its greater than 90 % share of the X86 operating system market.[101] thereby increasing its installed base six-fold.[102] Contrary to the assertions of the Assistant Attorney General, the relief proposed by the Government, a cessation of further anticompetitive practices, will not restore competition to the X86 operating system market because of the ''network effects'' present in the market.

Because Microsoft now has a huge installed base and an overwhelming market share of X86 chip operating systems, thousands of applications have been written for the Microsoft operating system. Microsoft products, in economic jargon, are ''locked in.'' New purchasers of computers with X86 chips have every incentive to demand Microsoft operating systems—and no incentive to demand the operating systems of its competitors. Given the huge installed base, OEM's will therefore preinstall the Microsoft operating system in order to meet consumer demand—whether Microsoft continues to pursue ''per processor'' licenses or not.

This conclusion is demonstrable from the economic literature cited in earlier sections. It is also obvious to the journalists, analysts and commentators who follow the computer industry. For example, following announcement of the settlement, PC Week wrote:

According to computer manufacturers, industry analysts and end users, the outlook is grim for Novell's DOS and IBM's PC-DOS and OS/2. They say there is not much motivation for PC manufacturers to pre-install a competing product, since Windows has millions of users and thousands of software applications.

See Jeff Bertolucci, Microsoft Settles: Business As Usual, PC World, Oct. 1994, at 72 (Ex. 31).[103] Furthermore, Microsoft has adopted new marketing incentives that violate the spirit if not the letter of the consent decree by rewarding OEMs for activities designed to prevent them from doing business with competing operating system vendors. Don Clark & Laurie Hays, Wall St. J., Dec. 12, 1994, supra, at B6. In short, Microsoft's new practices achieve substantially the same effect as those banned by the Judgment.

More importantly, Microsoft remains free to leverage its installed base— apparently with the Government's blessing—to put competition out of business in scores of new markets: business applications, entertainment software, personal finance software, on-line systems, server technologies, etc. This key issue is simply not mentioned in the Government's Tunney Act filings, but, as with ''lock-in,'' the significance of the issue is not lost on the industry:

The settlement did not specifically address what many competing companies consider the antitrust issue. Microsoft, they say, has used its control of DOS and Windows to extend its hold on the software sector.

See David Einstein, Microsoft Unscathed by Settlement, S.F. Chronicle, July 18, 1994, at A1 (Ex. 32).[104] As explained in Section V.C., supra, Microsoft's use of leverage against equipment manufacturer] pricing, but they don't need it anymore.'')

Indeed, even Microsoft's supporters concede that, ''[a] year from now, [the proposed decree] will be'' no more than ''a blip on the radar screen of computing history.'' William Casey, Let's Stop Beating On Microsoft, Washington Post, July 25, 1994, at F15. ''Issued five years ago, the ruling would have had an effect.., users were open to alternative environments, even if it meant migrating from [Microsoft's products].'' Id. ldquo;Those choices, and the years in which they could have been made freely, are ancient history .... It's a fact that [today] the operating environment of choice on Intel-based processors is DOS and Windows.'' Id. application competitors damages competition in the operating systems market, the very market the Government purports to address.

The pernicious use of leverage is well known to the Justice Department. Decrees sought by the Antitrust Division in comparable circumstances over the past forty years have prohibited leveraging of monopoly power to dominate related markets.

B. Comparable Consent Decrees

It is hardly aberrational for the Department of Justice to settle monopolization cases in high technology industries by securing consent judgments that prohibit the use of leverage from a monopolized market to a market in which competition is present. Some of the largest monopolization cases in history were settled on such a basis.

1. Parke, Davis Decree (Pharmaceuticals)

The decree entered in United States v. Parke, Davis and Co. and Eli Lilly and Co., 1951 Trade Cas. (CCH) <20> 62,914 (E.D. Mich. 1951), prevented Parke, Davis and Eli Lilly from using their market power in the primary market for pharmaceuticals to exert leverage into the secondary market for gelatin capsules (used to contain individual doses of particular drugs). The decree did not foreclose the defendants from competing in the capsule market, but it imposed severe restrictions designed to ensure competition:

No Acquisitions of Stock in Companies in the Secondary— Market:

Defendants were prohibited for ten years from acquiring any interest in any business engaging in the manufacture or sale of capsules, capsule manufacturing equipment, or capsule filling equipment unless they applied to the court and made an affirmative showing that such acquisition would not substantially reduce competition. (An equivalent Microsoft decree would prohibit Microsoft from acquiring any interest in any company making or selling application programs (e.g., Intuit).) Mandatory Licensing of Patents Pertaining to Secondary Market: Defendants were required to grant to ''any applicant'' (except the other defendant) royalty-free, unrestricted licenses under all Defendants'' existing capsule-related patents. Defendants also were required to grant licenses to all of their future capsule-related patents in return for a ''reasonable and non-discriminatory royalty.'' (An equivalent Microsoft decree would require, at minimum, that Microsoft grant royalty-free licenses on all its existing application and server software patents.)

Publication of Documentation to Enable Competition in Secondary Market: Defendants were required for five years to provide to all applicants ''a written manual.., describing the methods, processes, materials and equipment used by [Defendants]'' in the commercial manufacture of capsules. (A provision that would have the same effect in the Microsoft decree would require, at minimum, that Microsoft immediately provide all competitors or potential competitors all operating systems documentation and specifications necessary to create a well-behaved application program. Going forward, Microsoft would have to provide the information necessary to place each of its competitors in the applications program market on an equal footing with Microsoft itself.) This decree remained in

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[101] See, e.g., supra, note 32. (Microsoft presently holds greater than 90% of the X86 operating system market share); Christopher O'Malley, Personal Computing, October 1986, supra, at 181, 183 (''Microsoft's operating system'' has ''better than 95 percent'' share of the X86 systems.)

[102] Department of Justice Press Conference (July 16, 1994), at 3–11 (by Asst. Attorney General Anne Bingaman).

[103] See also Stuart J. Johnston, Decree: Deal or Dodge?, Computerworld, July 25, 1994 (''Interviews with PC hardware vendors last week indicated few are likely to switch to a competing system any time soon. ''Customers have already voted with their dollars in a very strong way for DOS and Windows. I don't see that changing,'' said Howard Elias, a vice president at AST Research, [a leading OEM].'') Jane Morrissey, DOJ Accord Fosters ''Too Little, Too Late'' Perception, PC Week, July 25, 1994, at 1 (''[O]bservers doubt the consent decree agreed on will have much effect on the company or its competitors,'' because it is ''too little, too late. ''); Jesse Berst, Behind The Smoke: Microsoft Wins Again, PC Week, July 25, 1994, at 106 (''Does the agreement really change anything? No .... If the decree had come five years ago, when there were viable MS-DOS clones, it might have had some immediate impact. Now, in a world where MS-DOS is on the way out and Windows has no real clones, it will have no short-term impact'') (Ex. 27); Andrew Schulman, Dr. Dobb's Journal of Software Tools, Oct. 1994, supra, at 143 (''the change from per-processor to per-copy licensing probably comes about four years too late''); Claudia Maclachlan, Software Makers Mull Over Microsoft Legal Challenge, National Law Journal, Aug. 1, 1994, at B1 (''They can't do [original

[104] See also John Markoff, N.Y. Times, July 18, 1994, supra, at D1 (Ex. 24) (''The agreement leaves untouched what many computer industry executives say is Microsoft's principal advantage—that it develops both the basic operating system software that makes personal computers run.., and applications software.., that performs specific tasks.''); id. (''The other important issue not specifically addressed in the consent decree is whether Microsoft has been able to leverage its virtual monopoly in operating systems into domination of applications software—a far bigger and more lucrative market''); Claudia Maclachlan, National Law Journal, Aug. 1, 1994, supra, at B1 (''As long as [Microsoft has] a dominant position in operating systems ... it allows them to leverage that into applications. This agreement does nothing to the sums quo.'') (internal quotation omitted).

effect until 1987. See United States v. Parke, Davis and Co. and Eli Lilly and Co., 1987–2 Trade Cas. (CCH) §thnsp;67,834 (E.D. Mich. 1987).

2. International Business Machines Corp. (Computers)

In 1956, the Justice Department settled its monopolization case against IBM with the entry of a comprehensive decree, United States v. International Business Machines Corp., 1956 Trade Cas. (CCH) §thnsp;68,245 (S.D.N.Y. 1956). That decree still remains in effect.

The IBM decree prevents IBM from utilizing its power in a primary market (the market for ''tabulating systems'' and ''electronic data processing systems'') to create a monopoly in secondary markets (the markets for service on IBM machines). Unlike the Microsoft settlement, however, the IBM decree makes a comprehensive effort to prevent leveraging of the primary market monopoly. Rather than prohibiting a small number of specific practices (e.g., per-processor licensing), the IBM decree fundamentally restructured IBM's method of operation in the primary market to eliminate leverage opportunities.

A similar decree against Microsoft would have included (at minimum) provisions requiring that Microsoft: (1) train its customers and competitors in the use and structure of Windows, (2) disclose to all developers, customers and competitors the same details about Windows that it discloses to its own employees and at the same time, (3) make public Microsoft technical documentation and tools used in Windows development, and (4) create a separate corporation for developing application programs, with a true ''Chinese Wall'' between the applications and operating system development personnel.

3. American Telephone and Telegraph (Telecommunications)

In January of 1982, the Department of Justice filed a Final Judgment breaking up the AT&T monopoly. In its response to comments on the proposed final judgment, the Government explained that it sought broad relief to prevent the type of leverage that Microsoft is currently employing:

The theory of both the Western Electric and AT&T cases was that, as a rate base/rate of return regulated monopolist, AT&T has had both the incentive and the ability, through cross-subsidization and discriminatory actions, to leverage the power it enjoys in its regulated monopoly markets to foreclose or impede competition in related, potentially competitive markets.

47 Fed. Reg. 23,320, 23,335 (1982). Microsoft is not a regulated monopolist, but its monopoly in operating systems is no less thorough and its use of leverage to dominate related markets no less pervasive. Yet according to newspaper interviews given by the Assistant Attorney General following announcement of the settlement with Microsoft, the Justice Department ''never considered'' breaking up Microsoft. Viveca Novak, Antitrust's Bingaman Talks Tough in Microsoft Case, Wall St. J., July 19, 1994, at B5.

C. Case Law

Had the Justice Department sought to prevent Microsoft from leveraging its installed base of ''locked-in'' operating system users, its position would have found support in the case law. Cases in which leveraging claims have been denied involve factual situations in which the plaintiff conceded that monopolization of the target market was impossible, even with the leveraging. See, e.g., Alaska Airlines, Inc. v. United Airlines, Inc., 94.8 F.2d 536, 54.6 (9th Cir. 1991), cert. denied, 112 S. Ct. 1603 (1992).

This is not such a case. Here, both Microsoft and the Government concede that Microsoft has a monopoly in the operating system market and that Microsoft used ''anticompetitive practices'' to increase its installed base in operating systems six-fold. Microsoft then clearly expressed its intention to monopolize the business application market and thereafter succeeded by leveraging. Now, Microsoft's executives have clearly expressed their intention to monopolize every ''specific application of corporate information systems.'' Brent Schendler, Fortune, Jan. 16, 1995, supra, at 40. Microsoft's tactics, coupled with the economics of the markets at issue, would lead inexorably to the conclusion that Microsoft will succeed.

A number of courts, including the Supreme Court, have evaluated conduct in one market based upon conditions in an adjacent, related market. Relevant decisions have reflected increasing returns-type analyses. For example, in Eastman Kodak Co. v. Image Technical Services, Inc., 112 S. Ct. 2072 (1992), the Supreme Court held that factual issues regarding consumer ''lock-in'' in the after-market for replacement parts constituted a proper basis on which to deny motions for summary judgment in a tie-in case. Similarly, a plaintiff's use of leverage in lock-in situations has frequently been cited in the lower courts as a principal basis for the denial of summary judgment motions in both tie-in and monopolization situations.[105]

One good example of such thinking is Grappone, Inc. v. Subaru of New England. Inc.. 858 F.2d 792 (1st Cir. 1988). There the First Circuit (Breyer, C. J.) provided what it referred to as a more ''refined analysis'' for tie-in situations. This analysis begins to consider the anti-competitive consequences of actions that require competitors to enter the market on two levels (rather than a single level) of business. Id. at 795–96.

VII PROPOSED PROCEDURES UNDER SECTION 16(f)

Reflecting its emphasis on the importance of court review of decrees agreed to by the Justice Department, Congress in 15 U.S.C. § 16(f) has expressly authorized a wide variety of procedures that the Court may use in making its determination regarding the public interest. These procedures include, inter alia, taking the testimony of Government officials or experts, or other expert witnesses (§ 16(f)(1)); appointing a special master or court expert (§ 16(f)(2)); examining documentary materials (§ 16(f)(3)); or ''taking such other action in the public interest as the court may deem appropriate'' (§ 16(f)(5)).

In this action, some information is relatively well-documented in the public record, and hence is less pressing significance to the Court's ability to engage in a meaningful public interest analysis. By way of comparison, in United States v. Yoder, 1989–2 Trade Cas. (CCH) § 68.723, at 61,797 (N.D. Ohio 1986), the Department provided the court with an affidavit identifying the number of competitors, distributors and customers in the industry, whom it had contacted about a proposed modification to a consent decree, and described the responses and concerns of those contacted. See id. at 61,797 n. 10. Here, the Department has simply asserted orally that ''by and large I think we got positive feedback'' from competitors and customers, then adding (in response to a comment by the Court) ''there were clearly some people who wished that we had done more.'' Tr. of Status Call, Sept. 29, 1994., at 13:16–22. These observations certainly do not give the Court the full flavor of industry concerns, but critical reports in the media amply document the true reaction in the industry to the proposed decree.[106] It is, therefore unnecessary to further burden the Court with affidavits or the testimony from those in the industry, regarding these concerns.

Similarly, the nature of the allegations regarding Microsoft's conduct are well-established. Media reports, publications such

[105] See, e.g., Digidyne Corp. v. Data General Corp., 734 F.2d 1336, 1340–43 (9th Cir. 1984), cert. denied, 473 U.S. 908 (1985); (software); Ortho Diagnostic Systems, Inc. v. Abbott Laboratories, Inc., 822 F. Supp. 145, 155–56 (S.D.N.Y. 1993) (blood screening technology); Viacom International, Inc. v. Time Inc.,, 785 F. Supp. 371,377 (S.D.N.Y 1992). See also Lee v. Life Ins. Co., 829 F. Supp. 529, 537–39 (D.R.I. 1993), aff'd, 23 F.3d 14 (1st Cir.), cert. denied, 1994 U.S. LEXIS 7596 (1994).

[106] See, e.g., David Einstein, S.F. Chronicle, July 18, 1994, supra, at A1 (Ex. 32) (Ernie Simpson, president of a software company which develops programs for use with Windows, called the decree ''a waste of time''); Quote of the Week, InformationWeek, Aug. 1, 1994, at 10 (Reacting to the proposed decree, Gordon Eubanks, CEO of software firm Symantec Corp., said simply, ''That's it?''); John Markoff, N.Y. Times, July 18, 1994, supra, at D1 (Ex. 24) (quoting Martin Goetz, cofounder of Applied Data Research, the nation's first software company, as saying of the decree, ''The Justice Department hasn't listened to the cries of the software companies''); Jane Morrissey, PC Week, July 25, 1994, supra, at 1 (Ex. 26) (quoting Mitchell Kertzman, chairman of Powersoft Corp., as saying the proposed decree will have ''close to zero impact,'' and that ''to the extent that Microsoft's behavior prevented other operating systems from succeeding, the war is over ... DOS is it and Windows is it''); Andrew Schulman, Dr. Dobb's Journal of Software Tools, Oct. 1994, supra, at 143 (Ex. 13) (quoting spokesman for Compaq as saying ''Windows is the standard—not much will change''). See also David Einstein, S.F. Chronicle, July 18, 1994, supra, at A1 (Ex, 32) (quoting a leading industry analyst as concluding that ''[t]he operating system wars are over—Microsoft is the winner ... Microsoft is the Standard Oil of its day''); Claudia Maclachlan, National Law Journal, Aug. 1, 1994, supra, at B1 (''As long as [Microsoft has] a dominant position in operating systems ... it allows them to leverage that into applications. This agreement does nothing to the status quo'') (internal quotations omitted).

as Hard Drive, this brief, and the Government's own submissions all document what the alleged illegal conduct is claimed to be: undocumented calls; early disclosure of operating systems information to Microsoft's own applications engineers; predatory preannouncements; predatory bundling and unbundling of operations and applications functionality; restrictive licensing practices; and the use of subsidized pricing to leverage into the applications market using monopoly profits from operating systems. See supra text at notes 69–70. It would therefore appear unnecessary to hold hearings in which various independent software vendors, OEM manufacturers, and other industry participants recount particular instances of such alleged conduct.

Instead, these amici submit that what is missing from the record before the Court are two categories of information, neither of which should require unduly protracted hearings. but which together should provide the Court with a sufficient record to make a determination under Section 16(e). First, in the course of its investigation, the Government has reviewed large quantities of documents from Microsoft, and these amici believe that a very. small group of these documents have been identified by the Government as ''key'' documents. These documents largely should answer questions regarding Microsoft's intent and use of various illegal practices. They should be turned over to the Court for its review.

Second, the Government should be required to submit affidavits from its economic experts that set forth in detail what those experts anticipate the operating systems and applications software markets will look like in five years, assuming that the present proposed decree were implemented. Such a submission should indicate whether, under the present decree, the Government's experts anticipate that competition will have been restored in the operating systems market by that time. If the Government's experts believe that competition is not likely to have returned to the market by that time, they should be required to indicate what effect different alternative proposals might have on restoring competition to the market. And, if they believe under ''increasing returns'' theory that it is simply too late to restore competition—that the operating systems market ''runs to scale,'' and having been permitted to establish dominance through its illegal practices, that Microsoft cannot now practically be unseated—the Government should be required to indicate what alternatives it has considered to minimize adverse consumer consequences resulting from this monopoly.

These amici submit that the affidavits from the Government's economists also should address the extent to which they anticipate that Microsoft will have been able to leverage

its operating systems monopoly into secondary software markets. Because Microsoft's installed base monopoly (and the resulting monopoly profits) were illegally acquired, the Government's economists should explain why it is unnecessary from an economic point of view to implement provisions such as those present in the IBM and Eli Lilly consent decrees. This analysis would include, for example, the effect of alternatives such as prohibiting Microsoft from acquiring stock in companies that make or sell application programs (Eli Lilly): spinning off its applications division into a separate subsidiary, and enjoining it from giving any benefit to the subsidiary, that is not also provided to third-party applications providers (IBM); and making public Windows technical documentation and tools used in Windows development (IBM). In the event that such alternatives were not viewed as sufficient to ensure a ''level playing field'' in the applications markets, given Microsoft's now-dominant installed base, the economists should address whether divestiture (such as in AT&T) is the appropriate remedy.

Based upon the information made available to the Court as a result of this analysis, these amici believe that the Court would be in a position to accept or reject the Government's current proposed decree, or to identify those modifications that would be necessary to bring the decree within the public interest standard. Cf. AT&T, 552 F. Supp. at 153 & n.95, 212–13. At a minimum, such submissions would provide a factual record which the Court's own economist expert could review in considering the economic issues raised by the proposed decree, or to which economists could respond on behalf of other interested parties.

Given the extreme importance of these proceedings to the future of the American software industry, and hence to the economy as a whole, the Government should be permitted to do no less. As documented in previous Sections, economic theory predicts that, even without resort to its ongoing (and unchecked) illegal practices, Microsoft would very likely be able to

leverage its unlawfully acquired installed base in operating systems to monopolize the entire business and home software network in the United States. The Government's decision to do nothing to restrain Microsoft's ability to engage in such monopoly leveraging, or even to curtail Microsoft's use of blatantly predatory and unlawful practices in furtherance of that end, requires explanation. Absent such explanation, these amici submit that the Court has no choice but to reject the proposed consent decree as plainly outside the bounds of the public interest.

Dated: January 10, 1995

Respectfully submitted,

WILSON, SONSINI, GOODRICH & ROSATI

By———————————————

Gary L. Reback

PROOF OF SERVICE BY OVERNIGHT COURIER

I. Sharon S. Kelly, declare:

I am employed in the City of Palo Alto, County of Santa Clara, State of California. I am over the age of 18 years and not a party to the within entitled cause. I am readily familiar with Wilson, Sonsini, Goodrich & Rosati's practice for collection and processing of correspondence for overnight delivery by courier. In the ordinary course of business, correspondence would be consigned to a messenger service on this date.

On January 9, 1995, I served the attached NOTICE OF MOTION, MOTION, AND MEMORANDUM IN SUPPORT OF MOTION TO FILE MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT and MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT as well as the APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT on the parties listed below by placing the documents described above in an envelope addressed as indicated below, which I sealed. I consigned the envelopes to an overnight courier service by placing it/them for collection and processing this day following ordinary business practices at Wilson, Sonsini, Goodrich & Rosati, 650 Page Mill Road, Palo Alto, California 94304–1050, to be personally served on the following:

Honorable Stanley Sporkin
United States Courthouse
Third Street & Constitution Ave., NW
Washington, DC 20001
Anne K. Bingaman
U.S. Department of Justice
Civil Division
Tenth Street & Constitution Ave., NW
Room 3101
Washington, DC 20530
Donald J. Russell
U.S. Department of Justice
Antitrust Division
555 Fourth Street, NW
Room 8249
Washington, DC 20001

GARY L. REBACK (Bar No. 218594)
SUSAN A. CREIGHTON
DAVID A. KILLAM
NEIL M. NATHANSON
IRWIN R. GROSS
WILSON, SONSINI, GOODRICH & ROSATI
Professional Corporation
650 Page Mill Road
Palo Alto, California 94304—1050
Telephone: (415) 493–9300

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA,
Plaintiff, vs. Civil Action No. 94–1564 (SS)
MICROSOFF CORPORATION, FILED
Defendant. FFB 14 1995
FILED
FEB 14 1995
Clerk, U.S. District Court
District of Columbia

APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT

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TAB1

TO

APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT IN CIVIL ACTION NO. 94–1564 (SS) SIGNED BY GARY REBACK

PAGE 98 BAY AREA COMPUTER CURRENT5 DECEMBER 1— DECEMBER 12, 1994 USER OUTLOOK

Microsoft:

Not So Marvelous

BY LAWRENCE J. MAGID

Microsoft Chairman Bill Gates didn't get to be the richest person in America by being modest or by playing patsy with his competitors. So it came as no surprise to hear Gates belittle his competition and exaggerate the value of his offerings at the recent Comdex trade show.

Gates was introducing the Microsoft Network. Preliminary reports on this online service, code-named ''Marvel,'' have been circulating for months.

Like everything Gates announces, The Microsoft Network is purported to be the greatest thing since individually wrapped cheese slices. In introducing the service, Gates made some not-so- subtle digs at current online providers. ''There is an opportunity to bring innovation into this market,'' said Gates, adding that existing services ''take print material and move it over.'' GOOD, NOT REVOLUTIONARY

Due that's not entirely true, While the three big online services (CompuServe, Prodigy, and America Online) each offer online magazines, newspapers, and other print material, they also offer interactive forums, live chat rooms, shareware libraries, online technical support, and other information and interactive services that you can't get from your local newspaper. All three services are also experimenting with sound and graphics, and all plan to introduce animation and full motion video when communications technology (i.e., ISDN) lets them get around the limits of today's phone system. Bill Gates and his team of developers may be smart, but they have an exaggerated opinion of themselves when compared to the rest of the world.

Besides, what did Gates show when he demonstrated the service! An icon pointing to an online edition of USA Today. This is creative? To be fair, Gates also demonstrated some interesting new technology, including an online prototype of Microsoft Bookshelf, the company's multimedia reference guide. Most commercial online services offer online encyclopedias and other reference works, but none currently include graphics as a routine part of the deal.

Gates also showed how the Microsoft Network will be integrated with Windows 95, Users will be able to drag icons directly from the service to their Windows desktop. In theory at least, information that's online will be as easy to locate as information on your computer's hard disk. Of course, your modem will have to dial into the network to ??rieve the information, at least until we're all hard wired into cyberspace.

I was also impressed by the way the Microsoft Network will display complex graphics like color photos. When you enter an area that uses images, graphics will quickly reveal themselves in low-resolution form, then become sharper and more vivid as data streams over the modem. This gradual display of graphics is necessa because the Microsoft Network will initially suffer the same phone-line and modem limitations that other online services do.

As interesting as Microsoft's service may be, it's hardly revolutionary. Prodigy, CompuServe, America Online, and Interchange (Ziff-Davi??'s forthcoming service) are all capable of offering similar features. The Microsoft Network won't be available to the public for at least eight months; its See USER OUTLOOK, page 101

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Clerk, U.S. District Court

District of Columbia

USER OUTLOOK

USER OUTLOOK, from page 98

competitors will have plenty of time to catch up, if not move beyond Microsoft's plans.

Three basic issues affect the popularity of online services— interface, price, and content. Prodigy, CompuServe, and America Online can compete quite successfully on all three fronts. All three have plenty of time to tweak their interfaces, all can adjust their prices, and they all have a head start when it comes to content. Prodigy will announce a major interface overhaul in early 1995, and has had several years to build up its online content. CompuServe is reportedly working on easier-to-use software and, after nearly 15 years, is a leader in online databases, shareware, and more. America Online,

though lacking the content of its two major competitors, leads the way with online editorial offerings and is generally regarded as being easy and pleasant to use.

Ziff-Davis's Interchange is every bit as up-to-date as Microsoft's Network. The only advantage Microsoft has is its ability to build its online software into Windows 95. And therein lies my biggest concern.

A RIGGED PLAYING FIELD

By making its network part of the operating system, Microsoft tilts the playing field in its direction. Microsoft clearly has the right to enter the online business, but ?? question whether it's fair to the other players if the Microsoft Network—and only the Microsoft Network—is part of Windows 95.

Imagine that utility companies said appliances. You've just moved into an empty house and after turning on the power, the power person says she has a great refrigerator in the truck that she'd be happy to install for you. ''It's as cheap as any you'll get in town and you don't have to make any payments until after you've used it for a while. Besides, our refrigerator is optimized to work best with our electricity.'' That utility company would sell a lot of refrigerators—and every other appliance vendor would rightly cry foul. This would never happen in real life, because utilities are regulated monopolies. Microsoft, despite the Justice Department's recently rulings, is a virtual monopoly, controlling nearly 80 percent of the personal computer operating system business.

Gates claims that his bundling the Network with Windows 95 is no different than IBM's bundling Prodigy software with some of its machines. And IBM does own half of Prodigy. But IBM also offers America Online on some of its machines. More germane, IBM controls only a fraction of the personal computing market. Nobody, except Microsoft, has a grip on more than about 10 percent of the market.

Microsoft's bundling scheme has caused America Online president Steve Case to cry foul, accusing Microsoft of creating an ''unlevel playing field.'' Others in the online industry agree. Robert D. Mainor, vice president of Product Marketing for CompuServe, didn't go as far as Case in criticizing the Microsoft announcement, but he did say that ''Microsoft enjoys a distribution model that no one else has access to.'' He added that his service, in business for about 15 years, is in a good position to compete with Microsoft. If CompuServe's claim of 2.4 million members is accurate, it is currently the largest online service.

Prodigy's president, Ross Glatzer, said that Microsoft's entry will help expand the total online market.

However, he agrees that Microsoft has its thumb on the scale. Glatzer would welcome the opportunity to include Prodigy and other online service software with Windows 95 so that users would have free choice of services.

I think Microsoft is a great company. It produces some excellent programs and it improves America's trade imbalance. But it doesn't have the right to run roughshod over the entire computer industry. Microsoft's practices affect its competitors and, ultimately, its customers. The computer industry needs competition and a balance of power. Right now, that power is tilting toward Redmond, WA. It's time for the folks in the other Washington—the one between Maryland and Virginia—to wake up and start taking a hard look at Microsoft's anti-competitive behavior. * ?? 1994 Lawrence J. Magid. All rights reserve.

Larry Magid is the author of Cruising Online: Larry Magid's Guide to the New Digital Highways (Random Housc. 1994) and The Little PC Book: A Gentle Introduction to Personal Computers (Peachpit Press. 199J). He is also an internationally syndicated columnist for the L.A. Times. You can reach Larry on the Internet at magid@la??imes.com, via CompuServe at 75.100,2105. via Prodigy at KPVN58A, via America Online as LarryMagid, or care of Computer Currents.

TAB 2

TO

APPENDIX TO MEMORANDUM OF AMICI CURIAE

IN OPPOSITION TO PROPOSED FINAL JUDGMENT

IN CIVIL ACTION NO. 94–1564 (SS)

SIGNED BY GARY REBACK

1ST STORY of Level I printed in FULL format.

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Business Week

November 21, 1983

94—1564

FILED

FEB 14 1995

Clerk, U.S. District Court

District of Columbia

SECTION: INFORMATION PROCESSING; Software; Pg. 114

LENGTH: 1565 words

HRADLING: A FIERCE BATTLE BREWS OVER THE SIMPLEST SOFTWARE YET BODY:

The all-out fight for supremacy among the hardware makers—Apple, Digital Equipment, IBM, and 150 others—has been getting the headlines recently in the mushrooming personal computer market. But while it may never attract as much attention, an equally important battle is about to explode among the leading companies that write software for the small machines. Prompting this latest free-for-all is the emergence of an entirely new class of product called ''environment'' software Environment software has no specific application such as word processing or financial analysis. It is designed to make such jobs easier for users who are not technically trained—a group that is rapidly becoming the majority of personal computer users. The new generation of software, which was pioneered with such machines as Xerox Corp.'s Star and Apple Computer Inc.'s Lisa, splits the computer screen into sections, or ''windows.'' Users can run different applications software simultaneously in each window. Normally, a computer displays only one program at a time.

The new software more or less replicates tne desktop on the computer screen. In effect, a business executive or professional can put the equivalent of a letter, financial spreadsheet, or Rolodex file in the different windows on the computer display, or electronic desk.

The software battle pits three leading developers—Microsoft, Digital Research, and VisiCorp—against one another. Each wants its product to become the industry standard. The competition is especially fierce, because windowing programs are expected to be standard on every personal computer—a market potential of as many as 5 million units in 1984 alone. ''Environments used to feature, but now they have become a fundamental part of the [personal comter] system,'' says Esther Dyson, president of Rosen Research Inc.

In the fight to get their new software running on the largest variety of computer brands, the competitors are wooing the hardware makers for endorsements. The outcome will shape not only the future of the current $1.5 billion annual market for personal computer programs but also sales of the equipment itself, since the machines tnat run the most popular software will be among the best sellers. As a result, leading hardware makers—most notably Apple and International Business Machines Corp.—are being drawn into the fray.

The battle lines are forming rapidly. On Nov. 10, Microsoft Corp. was expected to announce that 23 computer makers—including Apple, Digital Equipment Honeywell, Tandy, and Texas Instruments—have signed up to muse its LEXIS??-NEXIS??LEXIS??-NEXIS??LEXIS-NEXIS??

Services of Mead Data Central, Inc.

1983 McGraw-Hill, Inc., Business Week, November 21, 1983 version of the new software, which it says will be ready by April. Meanwhile, VisiCorp, the first software company to offer this next-generation product to the industry, is racing to get its VisiOn program out the door (page 115). Not to be left out, Digital Research Inc., which has not yet demonstrated its product, is leaking word that it will begin delivering its version of environment software to as many as 10 computer makers before the end of the year. ''It's a real battle of the software developers,'' says Steven A. Ballmer, a vice-president at Microsoft.

Competition will be fierce because there is not enough room in the personal computer marketplace to support several versions of environment software. Applications programs for specific tasks such as word processing and financial analysis will have to be rewritten to work with each environment package.

''The battle is to establish whose [environment software] is going to win, because software developers don't want to write programs for 18 different systems,'' says Rosen Research's Dyson. Adds Moize Adney, manager of internal software development at Texas Instruments Inc.: ''The pressure to standardize will be there.''

INDUSTRY STANDARD. Companies racing to market environment software are placed in something of a catch-22 situation. They must convince computer makers that many writers of applications software will develop useful programs to operate with their environment packages. But they must convince the software writers at the same time that their environment programs will be used on the largest number of machines.

Microsoft hopes to parlay the popularity of its MS/DOS operating system— the

housekeeping software that controls the basic functions of a computer— into a marketing edge. Its new environment program, Microsoft-Windows, is actually just an extension of its operating system. An impressive 40% of personal computers sold—including the best-selling IBM PC—are controlled by the Bellevue (Wash.) company's operating system software. This penetration, Microsoft maintains, provides a ready market for Windows. If every computer that runs Microsoft's operating system adds Windows, Microsoft is well on its way toward becoming an industry standard, says the company's Ballmer.

''CHURCH AND STATE.'' On the other hand VisiCorp is stressing its success in appli cations programs. The San Jose (Califcompany, which was made famous by the VisiCalc financial modeling and spreadsheet program, has developed a set of applications for its VisiOn environment package. ''What will make a windowing system successful is the quality of the applications under it,'' says Danie Fylstra, VisiCorp chairman.

While archrival Digital Research has not formally announced its environment package, the company is working hard to line up applications software companies to write programs for use with its new windowing software. Digital Re search says its environment package is the safest choice, because the company does not write applications software. ''We're not in the applications business like VisiCorp or Microsoft,'' says Digital Research President John R. Rowley. ''We do not present a threat.''

Rowley contends that competitors can use their own environment software to bring out applications packages before anyone else can. Microsoft, for one, denies that offering an environment program gives its own applications programs an advantage. ''We have shown in the past that there i8 a very clean separation LEXIS??-NEXIS??LEXIS??-NEXIS??LEXIS-NEXIS??

Services of Mead Data Central, Inc.

between our operating system business and our applications software,'' says Ballmer. ''It's like the separation between church and state. Axed if you don't play it straight, you can't expect to get the business.'' Microsoft is expected to hit sales of $70 million this year, double its figure for 1982.

Some applications software writers are concerned, however, that Rowley may be right. ''VisiCorp is a competitor,'' says Fred M. Gibbons, president of Software Publishing Corp., which sells personal computer applications software. ''Why should I trust them?'' To cover their bets, some powerful independents could decide to go with more than one environment package. ''There are many valid reasons to support more than one environment and let the marketplace decide,'' says Mitchell D. Kapor, president of Lotus Development Corp., which for now has gone with Microsoft for 1–2–3, its popular integrated spreadsheet and graphics package.

One variation on the environment theme is Quarterdeck Office Systems, a small Santa Monica (Calif.) startup. By the end of the year, Quarterdeck will begin shipping a $399 environment package called DESQ. But instead of persuading software writers to modify their programs, the company has designed DESQ for use with several existing applications programs. ''With DESQ you just buy it and run it totally without having anything modified,'' says Therese E. Myers, president and founder.

PREEMINENT POSITION. As the battle begins to heat up, no company has produced the supporter that could carry the day: IBM. ''IBM has established such a preeminent position in the marketplace that the supplier that has its environment on IBM will have the greatest success,'' says John R. Keifer, senior analyst at InfoCorp. Since the IBM PC was introduced in 1981, the computer giant has won more than 26% of the market. As many as 75% of personal computers, industry observers agree, are expected to follow the IBM PC design by 1985 (BW—Oct. 3).

Few are willing to predict IBM's strategies in this key software market. ''I don't expect IBM to endorse one environment in the near term,'' says Rosen Research's Dyson. ''It will probably make them all available.'' But some observers say IBM will bring out its own environment software, and it is not clear where such a move would leave the independent software companies. IBM already has shown some of its own windowing software on an enhanced version of the PC, and there are reports of another IBM environment program, called Glass, that is being considered as a product. ''With IBM's announcement of its own windowing capability, it looks to us that the big guy is starting his own standard,'' says Dennis V. Vohs, executive vice-president of Management Science America Inc., which owns Peachtree Software Inc., a personal computer software company.

The victors in the battle over environment software may not be obvious for a year or more. Despite an impressive array of endorsements, Microsoft will not begin shipping Windows until April. At that time, VisiCorp and Digital Research will have had their products on the market for only a few months. ''There will be a lot of bandstanding and claiming victory,'' says Digital research's Row- ley. ''But you won't really know what will happen for at least 6 to 12 months.''

GRAPHIC: Picture, MICROSOFT'S BALLMER AND A DISPLAY DIVIDED INTO ''WINDOWS''

LANGUAGE: ENGLISH

LEXIS?? LEXIS?? LEXIS?? NEXIS?? LEXIS?? NEXIS??

services of Mead Data Central, Inc.

TAB 3

TO

APPENDIX TO MEMORANDUM OF AMICI CURIAE

IN OPPOSITION TO PROPOSED FINAL JUDGMENT

IN CIVIL ACTION NO. 94–1564 (SS)

SIGNED BY GARY REBACK

Information Processing

SOFTWARE

''MICROSOFT IS LIKE AN ELEPHANT ROLLING AROUND, SQUASHING ANTS''

As the company's dominance grows, so have the complaints of other suppliers of software. There's no doubt about it. Microsoft Corp. wants to dominate the world—the personal computer software world, that is. And it isn't very far from doing so: It already supplies the core software for just about all of the world's 25 million-plus IBM PCs and their clones. It has done well, too, in many sectors of the huge market for PC applications programs—spreadsheets, word processors, and the like. All in all, it's the leader in total PC software sales—Wall Street expects revenues of $1.1 billion for the year ending next June, up 40% from the year before.

Now, Microsoft is beginning to suffer the slings and arrows that often come with such fortune. Other suppliers of PC software are downright angry over its dominance. The company, they say, is just too powerful and its products too pervasive. Its virtual monopoly-in PC operating systems—the software life-support systems that all other programs call upon for access to the PCs memory, disk drives, and display screen—means that Microsoft's even'' technical change, strategy shift, or mistake can adversely affect, producers of applications soft ware. They argue, moreover, that Micro soft is abusing its systems software edge to put them at a disadvantage— and win greater control of the market. INTIMATE TIES. This, critics say, will make it harder for Microsoft's small competitors to prosper. And that hints at less innovation in software, the one part of the world computer market in which U.S. companies still hold an unassailable edge. Says Fred M. Gibbons, president of $100 millionplus Software Publishing Corp.: ''Microsoft is like an elephant roll ing around, squashing ants.''

William H. Gates III, Microsoft's CEO, argues that such fears are misplaced. He contends that his company is so in fluential simply because it knows more than any other about how the pieces of a PC fit together, from chips to other com ?? to software. Microsoft's inti ??s with leading companies such as IBM, Compaq, and Intel bode well for the U.S. computer industry, he argues. By virtue of those relationships, Micro soft can establish coherent technical standards—in graphics, communications, or computer languages, for instance— that if followed by everyone would speed up the process of writing new pro grams. Those would help sell machines, fulfilling Gates's vision of a PC on every desk and in every home.

What worries other software makers is where they fit into this vision. While tightening its grip on the $1.4 billion sys tems software market, where its MS-DOS and OS/2 operating systems are king, Microsoft has pushed harder than ever into the $4.4 billion market for applica tions packages. Its Microsoft Word text processing program, Excel spreadsheet, and other such products now account for 47% of total revenues—almost equal to its systems business. And competitors say they're getting squeezed.

Recently, for example, Microsoft stopped providing them with lists of cus tomers that use Windows, its graphical extension to MS-DOS. Instead, it offered to place ads for their Windows-compatible software in a booklet shipped with each copy of Windrows. Competitors suspected that Microsoft's own applications group was still getting the lists. So they complained—and got the lists back.

VOCAL CRITIC. More unsettling are suspi cions that Microsoft doesn't keep its systerns and applications groups as sepa rate as it promises—that church and state tend to ming??. Competitors figure that if Microsoft's applications people'' get peeks at unanmounced systems software, they should, too. Otherwise, they're at a disadvantage. Microsoft'' fuels suspicions by sometimes-shifting workers between its groups. And it Agenda 90, a recent trade conference 148 BUSINESS WEEK/OCTOBER 30, 1989 INFORMATION PROCESSING

outsiders were angered to see an Excel specialist demonstrating new operating system features that they hadn't been briefed on. Apple Computer Inc. solved such conflicts in 1987 by spinning off its applications group into an independent company, called Claris Corp. Gates says that's not necessary at Microsoft.

Micrografx, a tiny graphics software company, might disagree. Recently, it approached Microsoft with a program it thought the larger company might want to use. But it showed it only to Microsoft's applications developers—not to its systems people, who it ??eared would copy its proprietary ideas. Micro ?? President J. Paul

Grayson says that one person who saw his program was soon transferred to Microsoft's systems division. Eventually, Gates placated Grayson with a crossli ??ensing deal, which Microsoft concedes was unusually generous. Still, Grayson says he was ''manipulated by Micro soft,'' which insists it did nothing wrong. ??NFUL P.S. Whatever the case, Microsoft's tactics have strained relations even with partners. This fall, John War ??ock, chief executive of Adobe Systems Inc., had an emotional, public falling out with Gates. Adobe's top product called Postscript, is a key program for desktop publishing. Earlier this year, Apple, Ado he's best customer, said it would replace Postscript in Apple computers. Microsoft continued to do business with Adobe.

Then, in September, Apple and Microsoft surprised Warnock by an nouncing at an industry conference that they would collaborate in competing with Adobe. Says Warnock: ''We used to be a strong ally of Micro soft.'' Now, ''it's easier to help their competitors.''

The biggest gripes have been with Micro soft's moves in operating systems. Like Microsoft, its competitors use those basic programs as ''platforms'' upon which to construct applications software. But if the platform is shaky, late to market, or just not selling well, writing software for it can be risky—as the tale of Win dows shows.

Starting in early 1983, Microsoft tried to supplement MS-DOS with Windows, a program that makes PCs act much like Apple's Macintosh. But outside develop- era were wary of writing programs for Windows, which was 16 months late to market, because of its many early technical problems. They say Microsoft also gave them mixed signals: It positioned Windows as a program mainly for low- end PCS, while it worked on a more ad vanced—but incompatible—operating system called OS/2 for more powerful computers. And IBM threw its weight be hind OS/2.

Much to the industry's surprise, how ever, OS/2 has caught on slowly. And Windows has taken off. Microsoft has shipped 2 million copies of it, compared with only 150,000 of OS/2. And next year, it will bring out a major revision of Windows that will be easier to program and more functional than the original— enough so, in fact, to do many of the same jobs that OS/2 was supposed to handle. Windows, says David G. Bayer, an analyst at Montgomery Securities, ''has become the platform of choice.'' DUPLICITOUS? Guess which company is poised to exploit that platform? While most competitors concentrated on writ ing for OS/2, Microsoft has been ready ing a slew of applications for Windows as well. They include a fancy new word processor, a project management program, and a long-rumored dam-base program called Omega. That's leading companies such as Lotus Development and Software Publishing to call Microsoft duplicitous. They charge that Microsoft enhanced Windows just to help its own applications group. And, they claim, the more powerful Windows will further hurt OS/2 ''It's irresponsible of Micro soft to do that,'' says Software Publish ing's Gibbons.

Even discounting the effect of a revived Windows, Microsoft has disappointed those counting on OS/2. Introduced in 1987, that program still can't do all it promised, such as use all the power of Intel Corp.'s popular 80386 chip Worse, perhaps, is that Microsoft still offers no aids for modifying Windows programs to work with OS/2. A recent poll shows that software executives don't expect OS/2 to really catch on until 1993—two years later than what they predicted last year. Gates's answer: Microsoft is devoting the maximum feasible engineering talent to OS/2 and Windows, favoring neither.

''SLIDEWAR'' On top of all this are wilder accusations—for instance, that Microsoft peddles nonexistent products to scare off competition. Michael J. Maples, the company's vice-president of applications software, shows slides at trade shows that list the software markets Microsoft intends to enter—programs for desktop presentations, for instance. One competitor calls that ''slideware. They have slides saying they're going to be involved in every conceivable area of innovation five years from now,'' he says. ''It slows the pace of innovation'' by intimidating smaller competitors.

Gates laughs off the idea of software companies quaking in their boots. ''So what are they doing instead, starting fast-food restaurants?'' he quips. ''I've never heard anyone say, ''we're chicken, we can't compete with you.'' WordPerfect Corp., for example, is beating Microsoft in word processing, with a 40% share of the market, up from 16% three years ago. And companies such as Micrografx and Atlanta-based Samna Corp. have drawn technical praise for their applications programs for Windows.

In fact, many of Microsoft's critics helped create their own problems when they ignored its pleas to develop applications for Windows. ''Even when Gates makes a mistake, people turn it into a Machiavellian plot,'' says Gordon E. Eubanks Jr., president of software house Symantec Corp. And Steven A. Ballmer, senior vice-president for Microsoft's systems division, disputes the charge that his people give their counterparts in applications previews of their upcoming systems products.

Since Microsoft earns more from systems than from applications programs, Ballmer says, he would be foolish to jeopardize his market just to boost applications sales. Indeed, he recounts an occasion when Microsoft's developers of Excel accosted him in the company cafeteria for revealing their work to Lotus, which confers often with Microsoft on FORMATION PROCESSING BUSINESS WEEK/OCTOBER 30, 1989 149

Information Processing changes in its operating systems. ''Telling me is as good as telling Lotus,'' he says, as if to prove his independence.

So, qthe tension mounts. But what can Microsoft's rivals do? Their dependence on its PC operating systems puts them at a disadvantage. But no company—not even ISM—has been able to avoid that. They might try to subvert Microsoft's efforts to win control over every critical software standard in the PC market. ''If people are feeling mishandled, they're going to look for other [partners],'' warns Lotus CEO Jim P. Manzi. A likely one would be the group of suppliers backing American Telephone & Tele graph Co.'s Unix operating system, which rivals OS/2 in scope and function.

But Unix'' base of existing customers is minuscule compared with MS-DOS's. And Microsoft already has the best-sell ing version of Unix for personal comput ers, called Xenix. Perhaps, for competi tots, there's just one choice: Learn to dance with the elephant.

By Richard Brandt in San Francisco WHAT NOT DOING WINDOWS COSTS LOTUS

It's enough to drive Lotus Development Corp. to whining. Lotus spent three frustrating years and millions of dollars to bring out two versions of its 1–2–3 spreadsheet program that Can work with Microsoft Corp.'s OS/2 Presentation Manager, the basic software, or operating system, that was supposed to turn every PC into a Macintosh. But OS/2 isn't selling well. And Microsoft, unexpectedly, is selling loads of an alternative called Windows, an earlier program that has lots of Presentation Manager's easy-to-use graphics.

Microsoft wins no matter which program takes off. Its own spreadsheet, called Excel, works with both. But Lotus isn't so lucky. Its advanced new 1–2–3, called Release 3.0, won't work with Windows. As Excel makes inroads, ''Lotus has found that there's this large installed base of Windows users that it decided to ignore,'' says analyst David Readerman at Shearson Lehman Hutton Inc. LATEST WOE. That has led to some public griping. For software companies, ''choosing an operating system'' to write programs for ''should not be equivalent to betting on a horse race,'' Lotus CEO Jim P. Manzi told some of his peers in a recent speech. ''Windows is like a horse that was about to be put to pasture but was then revitalized.''

Indeed, corporate buyers such as Eastman Kodak Co. and BankAmerica Corp., which want to upgrade pro ?? like 1–2–3 and use Windows us we??used. Less powerful ver sions of 1–2–3 work with Windows, but they

can't take advantage of many of its graphical features. Lotus probably will solve that problem: ''We're not naive,'' says Frank A. Ingari, vice-president of its PC spreadsheet division. But analysts say the revised program could take a year to produce.

The Windows flap is just the latest woe for seven-year-old Lotus. True, customers are buying more of 1–2–3 than competing products, giving Lotus 65% of the $600 million world market for PC spreadsheets. But so far, Re lease 3.0 may not be doing as well as its other new version, called Release 2.2, which runs on less powerful PCs. Some customers even are sticking with Release 2.01, now more than three years old. At Soft sel Inc., a software distributor, Release 2.2 is outselling 3.0 by 3 to 2. Corporate Software Inc. says its ratio is more than 2 to 1. Lotus disputes such numbers, claiming that 2.2 and 3.0 are selling about the same.

The split means a lot to Lotus, which gets two-thirds of its profits from spreadsheets. Next year, it will lift 3.0's list price to $595, some $100 higher than other versions. That might add $20 million or more to Lotus'' overall revenues in 1990. But it might not: ''The question is, does Lotus see a fall-off after this initial upgrade bubble?'' says Richard G. Sherlund, an analyst at Goldman Sachs & Co.

Profits dipped while Lotus struggled to get 3.0 out the door. But it now expects to finish this year with strong earnings. Its spreadsheet sales have returned to historical levels of about 110,000 units a month. And sales of 2.2 and 3.0 will boost revenues by $30 million this year. Now, all Lotus needs is one more product—so it can bet on two Microsoft horses at once.

By Keith H. Hammonds in Boston
COMPUTERS A HEAVYWEIGHT LIGHTWEIGHT

Compaq's new laptop may win big Rod Canion keeps his word—eventually. For years, the president Compaq Computer Corp. promised that his company would build a laptop computer as soon as it could do so without compromises such as eliminating floppy disks. Lately, with Zenith Data Systems Corp. and Japanese rivals selling laptops with all the customary PC features, Canion's pledge began sounding hollow. Even Compaq's first battery-powered PC, although a runaway success, had drawbacks: At a time when the Japanese were pushing down the size weight, and price of laptops, the Compaq machine came in at a hulking 14 pounds—and with a $5,400 base price.

Now, Canion has kept his promise with a pair of laptops that weigh only 6 pounds, fit in a briefcase, and don't cost a lot more than competing PCs. These are the first ''notebook'' models (8 1/2 by 11 by 1 7/8 inches) to incorporate a full size floppy disk. An optional hard disk, storing 20 million or 40 million characters of data, boosts the weight to only 6.7 pounds. Starting at $2,400, the basic LTE is aimed at NEC Corp.'s Ultralite and Zenith's Minisport, the leading notebook PCs. The competing models don't have a standard floppy disk drive and can't accommodate a built-in hard disk. A second Compaq LTE model, based on the faster Intel 80286 microprocessor, starts at $3,899. ''These are breakthrough systems,'' says Peter J. Tiege, an analyst at market researcher InfoCorp. ??. Some breakthroughs came from Japan s Citizen Watch Co., which will build LTEs for the European market. Citizen also worked on manufacturing problems. ''We benefited from their miniaturization experience,'' says Canion.

On Wall Street, the laptops were an instant hit. Rumors of their debut sent Compaq's stock to a record 107 on Oct. 10. The Oct. 16 announcement pushed the stock back to 103 3/4 on Oct. 17, up from 98 after the market dove on Friday the 13th. Predicting that Compaq can sell 190,000 LTES by the end of next year, Prudential-Bache Securities Inc. analyst Kimball H. Brown has boosted 1990 earnings estimates by 20??, to $9.80 per share. That should make Compaq's lightweight laptops worth the wait.

By Geoff Lewis in New York 152
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TO
APPENDIX TO MEMORANDUM OF AMICI CURIAE
IN OPPOSITION TO PROPOSED FINAL JUDGMENT
IN CIVIL ACTION NO. 94–1564 (SS)
SIGNED BY GARY REBACK
Special Report
IS MICROSOFT ??

It's a chilly November night in Las Vegas, but 10,000 technoids are in full fever pitch. They're in town for 1992's Fall Comdex, the computer world's biggest convention cure celebration. Tonight is the annual Chili Cook Off, a charity event for the National Center for Missing & Exploited Children. Each year, the crowd pours in for kegs of beer, vats of chili, and live music. For one night, archrivals in the industry are expected to put aside their bitter feuds and just goof off.

But not this year. The Grayson brothers, Paul and George, founders of software house Micrografx Inc. and organizers of the event, are thanking companies that ponied up money. Each gets a round of applause. That is, until one of the hosts offers ''a special thanks to Bill Gates and Microsoft,'' donors of $30,000. The crowd's reaction: scattered cheers, drowned out by a round of boos. BIG GREEN. The fear and loathing on display in Las Vegas—as well as envy and a grudging respect—are the natural responses to Microsoft Corp. these days. Long a power in personal computer software, Microsoft has now emerged as clearly the most important single force in the entire computer industry. Where Microsoft leads, computer makers and customers follow. Where it stakes a claim, rivals steer clear. And as it springboards from its dominance in operating systems into a commanding position in applications programs, Microsoft leaves less and less territory for its software rivals. Many venture capitalists these days troy they won't consider funding a software startup that looks like it might wind up competing on Microsoft's expanding turf.

Such a concentration of clout and power has not been seen in the computer industry, since the glory days of IBM. Even Intel Corp., whose microprocessors are as pervasive as Microsoft's software. does not have the leverage of Microsoft, in part because Intel now must respond to chip clones (page 86). Some software executives refer to Microsoft, headquartered amid the evergreen trees of Redmond, Wash., as ''Big Green.'' Says Ala?? K. McAdams, the chief economist in the Justice Dept.'s fruitless antitrust suit against IBM in the 1970s: It sure sounds familiar. Microsoft: is using its power in ways that are just like IBM's.''

But does that mean Micros?? powerful: Does its dominance ?? WHY ALL THE FUSS? THE POINTS OF CONTENTI?? EARLY PRODUCT ANNOUNCEMENTS CHARGE To preempt competing products, rivals say, Microsoft sometimes announces products years before they actually exist. Even if a rival's product already has the features'' that Microsoft promises, many customers are reluctant to buy it, preferring instead to wait for the ''safe choice''—Microsoft RESPONSE Microsoft says it is important to let outside software developers know Microsoft's directions in system software so they can develop application programs. In fact, software developers demand it. And. Microsoft says. it is important to let customers know where it's headed so they can plan accordingly

INSIDE KNOWLEDGE ??RGE Makers of applications programs allege that Microsoft's applications programmers have advance details of its operating system software, and the company is slow to share vital information. They say Microsoft uses this edge to bring out better applications sooner. This, rivals complain, is a big reason Microsoft has more than 60% of the market for programs that work with Windows RESPONSE Microsoft says it freely shares its knowledge with the industry and enjoys no substantial advantage in developing applications that work with its operating systems. The company says its software sells well because it's good

THE DOS TAX

CHANGE Rivals say that the way?? crosoft licenses MS-DOS and W?? dows to major PC manufacture?? makes it nearly impossible for ?? to compete. Under some Micros?? censing contracts, PC makers pa?? fee to Microsoft for every PC th?? ship, even if they don't install th?? crosoft software on each mach?? Because of this. PC makers are ?? likely to substitute a competing ?? ating system RESPONSE Microsoft says PC ?? can. and do. choose several diff?? ways to license MS-DOS. The co?? versial ''per processor'' licensing rangement offers a lower price ?? higher volume

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POWERFUL? HOW THE INDUSTRY'S LEADER IS WIELDING ITS CLOUT

hibit competition in the software market, and does it hamper advancement of the computer industry, itself?. And, perhaps most worrisome, will it ultimately lead to fewer competitors and less innovation in an industry founded on the latest, the greatest, and never-before-thought-of? Those questions are critical because computer software has be come one of the driving forces in the economy. Not only is the software industry, a key area for job creation, but it also pro

duces the tools other industries need to boost productivity. Is such a vital industry best served by having a single dominant company?

FTC PRO??E. Microsoft's competitors answer no. Software rivals insist that Microsoft's hyperaggressiveness—its use of every trick at its disposal to gain an edge, enter a new segment, or eke out one more iota of market share—has started to edge out innovation itself as the force that determines the shape of the industry. Microsoft Chairman William H. Gates III says such charges are ridiculous. ''Our success is based on only one thing: good products. It's not very BETWEEN MICROSOFT AND COMPETITORS PRICING

CHARGE Microsoft can offer low-ball prices in two ways: by including extra programs with its operating systems and by using profits from operating system sales to support low pricing of applications programs. For instance, because it has not made much headway so far. against Novel?? in sales of networking software, Microsoft is now building networking into Win dows and MS–DOS

RESPONSE Microsoft says it is an in dustrywide trend that. as operating system software is improved, more features, such as networking, communications and graphics, are included to make computing more seamless for customers

THE F.U.D. FACTOR

CHARGE As the dominant force in PC software, Microsoft uses its unique position to spread ''fear. uncertainty, and doubt'' about its rivals to stop customers from buying rival products. Microsoft, competitors say, warns buyers that if they buy IBM's OS/2 or Novell's DR-DOS— both of which claim advantages over Microsoft's operating systems—-they will be throwing away their money be cause those products may wind up in compatible with Windows or may not be around in a few years

RESPONSE Microsoft says customers ask for advice on many products, and, when it comments it is just respond ing to questions

BRAIN-PICKING

CHARGE Several companies charge that Microsoft has, in effect, stolen their ideas in the course of exploring collaborative agreements. Go Corp., for example, says that Microsoft expressed interest in writing applications for Go's operating system for pen-based computers. After Microsoft programmers examined Go's technology, however, Microsoft said it was no longer interested, Go says. Then, Microsoft announced plans for a competing system, developed, in part. by those who visited Go RESPONSE Microsoft says it is upsetting that companies accuse it or imply it stole from them. Microsoft says it always honors nondisclosure pacts ?? BUSINESS WEEK/ MARCH 1, 1993 83

Complicated.'' he says. ''We're not pow erful enough to cause products that are not excellent to sell well.'' Still. com plaints from other software makers helped spur a 2 and 1/2-year investigation by the Federal Trade Commission into Microsoft's tactics. FTC sources say the nonpublic probe was completed at the close of 1992 and focused on allegedly unfair tactics used to squelch competi tion (table). According to a confidential outline obtained by BUSINESS WEEK, the FTC investigated practices ranging from the way Microsoft prices software to the way it allegedly uses tying arrange ments to force customers who want one Microsoft product to also buy others. Sources close to the investigation say that FTC staffers recommended a number of actions, including a preliminary. court injunction, ordering Microsoft to cease the offending practices immediate ly, pending the outcome of the case.

NECESSARY EVIL? That they would even contemplate such an injunction—rather than wait for the outcome of a commis sion proceeding—is an indication of how serious the situation appears to the FTC staff, says Terry Calvani, a former FTC commissioner. ''The reason the staff went into this uncharted area was the concern that there are companies in business today that may no longer be'' by the time the FTC could finish trying a case against Microsoft, he says. But an injunction was only one staff recommen dation among many and, so far. the FTC commissioners have not acted. On Feb. 5, they considered the recommendations and split 2–2 on what action, if any, to take. They are expected to meet again in a few weeks, but Calvani says the tie does not bode well for competitors who were hoping to see dramatic action.

Even if the FTC does nothing, the dom inance of Microsoft will remain a maelstrom of controversy. Interviews with more than 60 industry executives and customers and a review of still secret FTC documents point'' to one overriding concern: Microsoft's methods and its growing control over the computer in dustry could choke the life out of any company that stands in its way. Steven P. Jobs, chairman of NeXT Computer Inc. and an outspoken critic of Microsoft. has publicly called for the breakup of Microsoft into two companies: one for operating systems and one for applications pro grams. That move—considered, then rejected by the FTC staff—would keep

Microsoft from using its operating-sys tems business to give its applications business an extra edge, as now alleged.

For the most part, customers can't see what all the fuss is about: Most seem happy with what they're getting and with what they're paying for it. And even if computer makers grouse about how much influence Microsoft now exerts over their business plans, they concede that the standards Microsoft sets are helping to keep their industry vi brant. Says an executive with a top-tier PC maker: ''Microsoft is not just a neces sary evil at this point. It's necessary for the industry to proceed.''

For many customers. Big Green has already taken on the role that had been Big Blue's. The saying among computer managers used to be: ''Nobody ever got fired for buying IBM.'' Now. says the information-technology manager of a major French manufacturer. ''If you put all your marbles in the Microsoft hat, you're safe—like the old IBM.''

Even Gates, who pooh-poohs comparisons with the mighty IBM of the 1970s, agrees that his company has partially taken on the leadership role Big Blue has lost. ''Who's there to fill that vacuum? Microsoft, more than anyone else,'' he says. Adds Roger McName??, a partner in technology investors Integral Capital Partners: ''Microsoft has been anointed the industry tsar. When that happens, people make it very, very rich.'' WINDOWS AND ORPHANS. Rich indeed. Microsoft's MS-DOS operating system is used by 81% of the 22 million IBM-compatible PCs built every year, according to Sanford C. Bernstein & Co. Microsoft Windows, which gives MS-DOS a graphical ''look and feel,'' is selling an the rate of 1 million copies a month. Anal because it has been first to market with top-notch applications packages for Windows, Microsoft is now the king of that white-hot growth segment. Lot??s Development Corp., the king of spreadsheets in the MS-DOS world, has just 20% of the $756 million Windows spreadsheet market, while Microsoft's Excel now claims 73%, says market researcher Dataquest Inc. In word processing, the MS-DOS leader, Wordperfect, has 31% of the Win

BIG BLUE MEETS

BIG GREEN

As IBM ruled the 1970s with its mainframe hardware, Microsoft dominates today with its operating system software Microsoft used IBM's own tactic against it: By ''preannouncing'' Windows NT, it stalled sales of Big Blue's OS/2, Version 2 84 BUSINESS WEEK/MARCH 1, 1993 S??CIAL REPORT

Special Report ly, he adds: ''I hope they don't kill us.'' Novell can afford to joke. For now, it still holds 70% of its market. But the rest of the industry, isn't laughing. Rival software companies give Microsoft credit for building good products and marketing them cleverly. But many software executives also are fuming about what they say are Microsoft's unnecessarily tough, sometimes downright mean-spirited tactics. Says the CEO of a rival software company: ''If you were in my shoes, you would probably want to go and shoot them. It's not a level playing field. IBM was the most opportunistic and ruthless in the 1970s. And that's exactly what Microsoft is today.'' VAPOR TIGERS. Indeed, industry veterans say there's a striking parallel between how Big Blue behaved back then and how Microsoft acts now. Computer executives say that just like the IBM of yore, Big Green bullies partners, withholds vital information, disparages competitors, and stalls the market by announcing products long before they're ready. Microsoft denies such charges. While such tactics are in the playbooks of many competitors, in the hands of the richest and most powerful player, they can be lethal.

Take IBM's classic move of announcing a product long before it was ready to ship—a tactic known as ''preannouncing.'' In software, such products are called ''vaporware'' and no one pays much attention—unless the company promoting vapor holds a dominant position. In that case, tire market freezes. Facing upstart Control Data Corp. in the 1960s, IBM paralyzed the market for scientific mainframes by announcing it was working on machines that would be far faster than CDC's.

These paper tigers, as they came to be known in a subsequent antitrust trial, prevented CDC from winning a single order in 18 months.

Microsoft preannouncements now have a similar effect. Take the case of Adobe Systems Inc.. maker of software that controls how computer printers produce typefaces. In September, 1989, Microsoft and Apple Computer Inc. said they would jointly develop a rival product. Adobe's stock fell 20% in one day, and for the next nine months the company spent 90% of its time answering customer's questions and ''fighting vaporware,'' says Chairman John E. Warnock. As it turned out. Apple backed off and Microsoft did not ship its competing product, TrueImage, for two years.

Microsoft has turned this Big Blue weapon on IBM itself. Just as IBM was getting OS/2 Version 2.0 off the ground in mid-1991. Microsoft announced plans for Windows NT. Like the IBM product, NT would be a 32-bit operating system, meaning that it would tap all the powers of Intel's fastest chips. Customers could buy the 32-bit system from IBM then or wait at least 18 months for NT. POWER PITCH. Guess what? Most of the market is waiting for the leader. An executive at a top PC company tells of one customer that felt the squeeze after committing to buy 36,000 copies of OS/2. The way the exec tells it, Microsoft came and pitched NT, and the buyer put the OS/2 order on hold. ''It used to be IBM could put orders on hold,'' says the executive. ''Now it happens with Microsoft.''

And NT? It's the toast of the tech world even though it's still not ready.

After a six-month delay, it's now scheduled for shipment by June—two years after it was announced. It could be a big FOR INTEL, ONE GOOD FRIEND ISN'T ENOUGH Microsoft isn't the only standard-bearer in the computer business. Software alone does not a computer make, and when it comes to standard PC hardware, the world looks to Intel Corp. Its microprocessors are at the heart of most IBM-Compatible personal computers.

But Intel's power isn't rock-solid. For starters, unlike Microsoft, it has lost share in its core business. Clonemakers Advanced Micro Devices Inc. and Cyrix Corp. have already snagged 62% of the market for Intel's aging 386 chips and are getting ready to sell clones of the 486 as well. Their presence has forced Intel to adjust its marketing plans in the past two years, accelerating the shift from 386 to 486 chips. ''SIMPLICITY.'' Intel could be in for more adjustments as Microsoft, its partner since the dawn of the ISM PC in 1981, spreads out. Windows NT, scheduled to appear this June, will be the first Microsoft operating system to run on chips other than those that are Intel-compati-Microsoft's Gates and Intel's Grove: Intel needs Microsoft, but the reverse is becoming less and less true ble. For starters, NT will also run on the Alpha AXP chip from Digital Equipment Corp. and the R4000 line from MIPS Computer Systems Inc., now owned by Silicon Graphics Inc. These are RISC (for reduced instruction-set computing) chips, the type of speedy design that since 1985 has been challenging Intel's dominance.

Microsoft says the RISC deals are to satisfy, customer requests and don't indicate a change in the relationship with Intel. ''Our cooperation with Intel is far more advanced than it is elsewhere,'' 86 BUSINESS WEEK/ MARCH 1 1993 SPECIAL PEPORT MTC–00030631—0385 dows market, compared with 539 for Microsoft Word.

In short. Microsoft is cleaning up big time—at the expense of its smaller rivals. While other software makers were announcing shrinking market share, losses, or lay-offs in 1992. Microsoft tacked on $975 million in calendar-year revenues—more than 90% of all the revenue growth in the PC software industry, according to preliminary Data-quest figures. Microsoft's share of the world desktop PC software industry reached 44% last year. Dataquest figures. And if. as analysts project, Microsoft sales rise 36%, to $3.75 billion, in the fiscal year ending June 30, Micro-soft will have more revenues than its seven closest publicly held rivals combined. And at nearly $1 billion, it will have more than twice their net income (chart).

All that money, rivals fear, will soon translate into even greater power for Microsoft. Without healthy profits, other software makers may find it impossible to fund new development or finance up-grades of complex programs such as data bases, which comprise millions of lines of code. Borland International Inc. Chairman Philippe Kahn blamed pressure from Microsoft's foray into Borland's data-base turf when he laid off 150 of his 2,200 workers in December. Borland then reported a $61.3 million loss for the quarter and put on the back burner a word processing project that had been two years in development. Gates says Borland suffered mainly because its products were late to market. Lotus, once No. 1 in PC applications programs, had its first-ever layoffs in 1992. Now, it's concentrating its resources where Microsoft isn't—yet: Programs such as Notes, which helps groups of workers collaborate. ''TOTAL UNDERDOG.'' Such a sharp contrast between one have and many have-nots worries industry executives. They fear there will be few major players, more consolidation, and less money for everybody except Microsoft. They also warn of a chill on software startups. John M. Grillos, who manages technology investing for Robertson Stephens'' venture-capital arm, says that there are still new Opportunities for startups and scores are on the drawing boards—in promising new areas such as multimedia. But he has a long list of phone numbers at Microsoft and checks the behemoth's plans before going ahead with an investment. Does he call very often? ''You bet,'' he says. ''I'm not crazy.'' 'Microsoft is extremely aggressive in using everything they can to their advantage''

PIERLUIGI
ZAPPACOSTA
Logitech

Gates, the billionaire mastermind of the Microsoft empire, says such worries are nonsense. Is Microsoft too powerful? ''The answer is simply no,'' he says. He points out that Microsoft still lags in some important markets. ''Take networking. We're the total underdog.'' And. he asserts, in markets such as spreadsheets and word processing, Microsoft's presence has prodded the competition to im prove their wares.

Gates also points out that his commanding position does not guarantee him success in the next generation of software: operating systems that will let networks of personal computers take on the big computing jobs now done by mainframes, minicomputers, and workstations. Microsoft's entry, Windows NT, will square off with Novell's UnixWare, Sun Microsystems'' Solaris, IBM's OS/2, and NeXT's NextStep.

Still. none of those competitors has the momentum that Microsoft gets from Windows. That should help Gates reach his stated goal of selling 1 million copies of NT the first year. But he insists that doesn't mean NT is already the winner. ''This is a hypercompetitive market,'' Gates says. ''Scale is not all positive in this business. Cleverness is the positive in this business.''

To be sure, competitors such as Lotus and Borland have contributed to the myth of Microsoft's invincibility through their own less than clever moves. Equally true, there are examples of software companies that have kept well ahead of Microsoft. Many, such as Intuit Inc., a maker of personal finance software, are masters of lucrative niches (page 88).

The biggest player to successfully fend off Microsoft so far has been Novell Inc., the $933 million Provo (Utah) maker of networking software. But Microsoft is aiming for this key software market by building some features similar to Novell's NetWare into Windows NT. Says Kanwal S. Rekhi, a Novell executive vice-president: ''Microsoft will keep us on our toes.'' Then, half-joking-hit. Even Borland is developing software for it. Says CEO Kahn: ''There's no choice. The issue is not whether NT is good or bad. The issue is NT is being pushed by Microsoft.''

And Microsoft is already talking about an operating system beyond NT. It's called Cairo. and it's due by 1995. The company says that package will match features of Novell's most advanced networking programs and the object-oriented programming features of NextStep and Pink, the operating system due by 1995 from Taligent. the joint venture between IBM and Apple. F.U.D. MISSILES. Gates says Microsoft preannounces systems software because customers and outside developers need details to plan ahead. And once Microsoft tells developers, word spreads fast. ''We tell 100 developers,'' Gates says. ''And believe me. that is out in the press the next day.''

Whatever the legitimate purpose, preannouncing is part of a larger strategy computer makers say IBM used effectively for years. It's called F. U. D.—for fear'' uncertainty, and doubt—and it really works only for the big guy. It's essentially a whispering campaign suggesting it would be terribly unsafe to bet on a competitor. Gates snorts at the notion Microsoft uses F.U.D. as a weapon. ''We have a whole department in charge of F. U. D.,'' he jokes. Seriously, he adds that Microsoft simply gives its opinions and expects customers to judge for themselves. ''We're giving our honest view of how wise it is to buy these products.'' he says.

Where any discussion of Microsoft's power gets dead serious is when rivals-and the

FTC—consider the power stemming from Microsoft's dominance in operating software. Like IBM, whose aggressive tactics for preserving its dominance in mainframes led to the Justice Dept.'s 1969 antitrust suit, Microsoft seems most bareknuckled when perpetuating its position in operating sytems.

Microsoft's most controversial tactic IS a ''per-processor'' discount plan for MSDOS, which it offers to the highest-volume PC makers. On average, PC makers pay $13 to $14 per copy. For the steepest discounts, the PC maker must agree to pay for a copy of MS-DOS for each PC it ships, whether or not the software is actually installed. That makes it ''undesirable for a manufacturer to ship anything but MS. DOS,'' says a PC executive. Microsoft hays that PC makers are offered a number of ways to buy MS-DOS. But with other plans the discounts are smaller, and PC makers locked in a bloody price war can ill afford to pass up the steepest discounts. DOS & DON'TS. When, pricing isn't inducement enough, Microsoft allegedly uses other means. One PC maker says it told Microsoft that it planned to ship DR.DOS, Novell's clone of MS-DOS, on about 10% of its machines. By shipping MS-DOS on 90% of its PCs, the company figured it would still get the best discount. Microsoft's response: It doubled that customer's price on MS-DOS, which quickly forced the PC maker to drop the idea of offering a choice to customers. Says a company executive: ''In my opinion, any monopoly situation is not good for the customer.'' A senior Microsoft executive says he wasn't aware of this charge but says it would not be common practice.

Such alleged tactics may seem a tad over the top, but maintaining dominance in PC operating systems is critical. Like IBM's dominance in mainframes, it gives Microsoft an extremely reliable, enormously profitable revenue stream. ''Microsoft's mainframe is its operating system,'' says one software executive.

Analysts estimate that between 1989 and 1992, MS-DOS and Windows generated revenues of $2.3 billion, with $998 million of that in 1992 alone. Net profits on those sales last year were $278 million, according to Sanford C. Bernstein & Co. Such profits have helped fund forays into almost every major software market. Microsoft's new data-base program, Access, cost. a staggering $60 million to develop—and it was just one of a dozen products Microsoft brought to market last year. By contrast, last year's entire R&D budget at Borland was $50 million. At Lotus, it was $85 million.

That's not all. Microsoft also had the money to offer an introductory price of $99 for Access—less than one-third the retail price for similar packages. Result: Microsoft sold 700,000 copies in just three months. The entire market in 1992 was only 1.2 million units.

Gates shrugs off the notion that operating systems are his cash cow. ''That's the biggest joke I ever heard.'' he snaps and points out that products such as ??vs Carl Stork, the Microsoft manager ??works with hardware makers. For ??anee, Microsoft still designs its operting system fastest on Intel chips.

For his part, Chief Executive Officer ??ndrew S. Grove points out that Intel is ?? completely dependent on Microsoft ??oftware, either. OS/2 and Unix are al??eady available on Intel chips and NeXT ?? Inc.'s NextStep and Sun's So?? soon will be. And, says Ronald J. ??hittier, vice-president and general manager of Intel's software technology group, most customers aren't likely to switch to RISC hardware for NT because that would require buying all-new applications programs instead of keeping existing programs as owners of Intel-based NT systems will be able to do. ''The thing Corporate America wants is simplicity,'' he says.

??. Where Intel could be vulnerable, however, is in the market for network servers, a key objective for Windows Nr. These machines, which feed centralized information to personal computers over a network, are replacing minicomputers and mainframes in corporations. And that means they're replacing large computer software, not desktop software. In that market, Intel has no advantage, and buyers can look for the best performance. That means RISC chips, which generally run about 50% faster than Pentium, Intel's most powerful chip yet, due out this March. ''Would we look at other platforms in the future? Sure,'' says Edward F. Driscoll, an assistant vice-president at CIGNA Systems, which buys computers for the insurer. ''The key is what happens at the server end.''

If the RISC chips start to invade Intel's turf on servers running Windows NT, they could soon move toward desktops. And that could shake Intel's hold on the computer market. Microsoft, on the other hand, would still be selling software for all those machines.

By Richard Brandt in San Francisco

Word and Excel are his most profitable. Yet in the next sentence, as he elaborates on the returns from operating systems. he says: ''If you just took the cash cow business and did not factor in [the development costs of] NT and Cairo, yes, you'd get a huge profitability.''

Gates is accurate when he points out that his applications business now generates more profits—about 50% of net income—than operating software. But it took years to reach that point—years during which Microsoft funded many versions of Word before it was good enough to grab substantial market share. Only when the Windows 3.0 version appeared, in 1990, did it take off.

The operating system business does more than spin'' profits. Competitors charge that because Microsoft writes operating systems, it also has an unfair edge in writing the applications programs that work with them. They say Microsoft's applications developers get a pe??k at the inner workings of new operating systems early so they can write programs to take advantage of new features first. In the FTC document, investigators referred to this as Microsoft's ''fake Chinese Wall'' and listed a dozen ''MICROSOFT IS GOOD, BUT IT'S NOT GOD'' Scott Cook was stunned by a phone call in late 1990. It was a senior Microsoft Corp. executive telling Cook, the co-founder and chief executive of tiny Intuit Inc., that the software goliath was about to enter Intuit's market—programs for check writing and household budgeting. Because the two companies had once talked about collaborating on a finance program for Windows, the executive said he felt obliged to let Cook know.

Small consolation. After their talks had broken off, Cook shelved plans for a Windows package, and he thought that Microsoft had abandoned its efforts. Now, Cook had little choice: He had to have a Windows version of Quicken in a hurry. In just 10 months, the Menlo Park (Calif.) company was done, just three weeks after Microsoft launched Money. ''The advantage we were counting on was lost,'' says Bruce Jacobsen, general manager of the Microsoft unit that sells Money.

Then, the real battle began. Both products got good reviews, and both carried a list price of $70. Cook cut wholesale prices so dealers could undercut Microsoft's $45 retail price. He also began advertising on TV. All told, Intuit managed to hold on to its 60% market share. Jacobsen concedes that Microsoft was caught off guard.

The episode illustrates that Microsoft is not invincible. And although Microsoft loses only rarely, its performance with Money is not an isolated case. Says Robertson, Stephens & Co. analyst Peter J. Rogers: ''Microsoft is good, but it's not God.''

Some software makers have even taken back markets that Microsoft dominated. Until a year ago, Microsoft's Works program had close to 90% of the $50 million market for integrated software for Macintosh computers. Such packages combine basic word processing, spreadsheet, communications, and data-base functions. But Claris Corp., Apple's software subsidiary, figured it could build a better product. Its ClarisWorks arrived in late 1991 and within a year had 77% of the market, leaving Microsoft with 20%.

Sometimes, Microsoft's aggressiveness backfires. When it comes to creating multimedia CD-ROM disks, for instance, Microsoft often insists on buying rights to the content of the disks. That can scare off book publishers who worry about losing control in the new medium. Comptons NewMedia, a San Diego-based unit of Encyclopaedia Britannica Inc., on the other hand, helps publishers create and distribute new works for CD-ROM without buying content rights. Result: Comptons now distributes more than 40% of all retail CD-ROM titles in the U.S., while Microsoft only has five titles on the market. Says Link Resources Inc. Cook pulled out the stops to market a Windows version of Quicken in time to spoil Microsoft's picnic analyst Steve Reynolds: ''The Comptons approach will be more prevalent.'' FOLLOWED HOME. If Microsoft has a consistent weakness, it may be in consumer products. Microsoft dominates the corporate market for PC software, which requires building relationships with computer managers and giving volume discounts. The home market, on the other hand, is based on catchy in-store promotions, direct marketing, and meticulous attention to making software easy to use.

That's where Intuit has excelled. A former Procter & Gamble Co. manager, Cook has built his company from about $6 million in 1988 to $84 million in 1992 by studying how ordinary people manage their finances. He

has even had product developers follow customers from the store to their homes to see what difficulties they encounter when loading and using Quicken.

Of course, Microsoft isn't throwing in the towel. To finally win some mar ket share from Intuit, Microsoft now has dealers selling Money for $15, com pared to Quicken's typical retail price of $35. ''Microsoft is relentless,'' says Cook. ''It never gives up.''

By Evan L Schwartz in New York other ways Microsoft allegedly abuses its position. Microsoft denies any unfair crossover or inside knowledge.

Software developers also complain that Microsoft is slow or even reluctant to deliver needed information about operating systems. Perhaps the most ironic such charge comes from Claris Corp., Apple's software subsidiary, Executives there say they tried for a year to get information for writing Windows applications from Microsoft, to no avail. Claris says Microsoft was worried there were cracks in the Chinese Wall between Claris and Apple's operating system team—just what rivals say occurs at Microsoft. But after executive meetings and assurances of no cracks, the situation was resolved. Microsoft's head of developer relations says he wasn't aware of the Claris problem but does ''Microsoft is the IBM of the ''90s and uses exactly the same marketing toctics IBM used to'' PHILIPPE KAHN Borland International concede a general ''concern about giving information to our operating system competitors.'' Microsoft says it's doing its best to get information out to thousands of companies and that it doesn't withhold information to favor itself. Says Pat Bellamah, a manager in Microsoft's developer group: ''It's ironic to us that people feel they're having a hard time getting information when that's all we're putting out there.'' Gates estimates Microsoft spends $80 million a year dissemihating information to developers.

One reason Microsoft draws so much criticism is simply that wherever it com petes, it seems to play a particularly hard-core game of hardball. Take its dealings with Logitech Inc. Until last June, Logitech had a license to buy Microsoft Windows 3.0 at a discount, then sell it together with Logitech's mice. But Microsoft abruptly canceled the deal, saying that it was losing money on such ''bundles'' involving inexpensive hardware. according to Logitech President Pierluig?? Zappacosta. Only Microsoft still continued to sell Windows bundled with its own mice—for about $10 more than Logitech had been charging.

After Zappacosta publicized his situation in September, Microsoft relented. But there was a catch: The new license fee would be 30% higher. Zappacosta says that priced him out of the market, depriving his company of about $20 million annually. Microsoft continues to sell its Windows-and-mouse bundle. Says Zappacosta: ''Microsoft is extremely aggressive in using everything it can to its advantage.'' Microsoft denies that it forced Logitech out of the market but declines to discuss its pricing. STAC ATTACK. Occasionally, Microsoft's hardball tactics have resulted in civil suits. The latest was filed in January by Stsc Electronics, a maker of data-compression software. In its suit, Stsc claims that Microsoft violated its patent by including Stac's technology in test versions of MS-DOS 6.0 without permission. Stsc says it was negotiating with Microsoft to license the technology, but talks broke down when Microsoft did not offer a sufficient royalty. The suit claims that Microsoft executives then showed Stsc a spreadsheet, detailing the ''adverse impact on sales of Stacker'' if Microsoft opted for another company's technology. Microsoft denies the claim. saying it bargained in good faith and offered ''real money'' for a license.

As the stories multiply, it also becomes clear that Microsoft long ago became everybody's favorite whipping boy.

There's certainly resentment on the part of bright young software entrepreneurs who may never see millions, much less Gates's billions. And for all the companies that grouse about their dealings with the industry giant, there are dozens that are ardent admirers. Says Morton H. Rosenthal, CEO of software distributor Corporate Software: ''We all live in a Microsoft-centric world. Working with Microsoft is like skiing behind the Queen Mary. It's a good ride. But getting up is a little rocky.''

Indeed, with Big Blue's waning influence, there's a genuine need for a leader. Customers want good software and good prices. They also want a relationship with a software maker that's going to be around for the long run. They want a new IBM. ''If I were a software company, I'd be complaining about Microsoft, too,'' says Greg Chetel, director of systems planning and research at Gillette Co. ''But I don't care who wins. I just want quality products.''

In the end, that may be the key to assessing whether Microsoft does indeed have too much power. Software makers are right to cry foul when they think Microsoft's practices have been anticompetitive. They have done so. and the FTC has listened. But as long as Microsoft's dominance stems from keeping customers like Gillette satisfied, it is hard to argue that its power, per se, is harmful.

The danger is that Microsoft will start to use the power of its position, rather than the appeal of its products and services, to stay on top. ''If Microsoft runs out of bandwidth,'' says McNamee of Integral Partners, ''then there will be a problem.'' That's when there will be reason to fear that competition will be stifled mad innovation squelched.

If the history of Big Blue is a guide, Microsoft's dominance will be in danger of waning long before it can distort the market with nefarious practices. When the Justice Dept. began its antitrust suit in I969, IBM's hold on the mainframe market made it seem invincible. By the time federal prosecutors withdrew their suit in 1982, however, the market had taken care of the problem: New technologies such as minicomputers and PCs had made IBM'S near-monopoly in mainframes largely irrelevant.

History could repeat itself: Says Joe Guglielmi, a former IBM executive, now CEO of Taligent: ''Today, everyone is in fear of Microsoft.'' ''But in the end, everyone will compete. There are thousands of Bill Gateses out there who will find pieces of this market and win them.'' Just the way Microsoft won its place in the sun.

By Kathy Rebello in Redmond, Wash., with Evan I. Schwartz and John W. Verity in New York, Mark Lewyn in Washington, Jonathan Levine in Paris, and bureau?? reports

TAB 5

SPECIAL REPORT TO APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT IN CIVIL ACTION NO. 94–1564 (SS) SIGNED BY GARY REBACK

SOFTWARE NO SLACK FOR MICROSOFTS RIVALS

They complain it hasn't been reined in at all by Justice When Microsoft Corp. signed a consent decree in July with U.S. Justice Dept. trustbusters, it emerged virtually unscathed from the feds'' five-year probe. Still, the investigation was a protracted—and expensive—headache for Chairman William H. Gates III. And the settlement banned some of Microsoft's most aggressive licensing practices. The experience, rival executives figured, surely would leave Microsoft chastened. No such luck. ''The consent decree seems to have set [Microsoft] free,'' gripes Robert J. Frankents it hasn't strayed from the bounds of normal licensing practices There is little doubt that Microsoft is competing aggressively: Even while the software giant presses its market-share advantages in operating systems and applications programs, it is bolting into new consumer markets with its own on-line service and a plan to buy Intuit Inc., the top maker of personal-finance software. The $1.5 billion deal requires approval of Justice, and rivals once again are regaling Justice staffers with tales of Microsoft's alleged anticompetitive behavior. WINDOWS PAIN. What really stirs fresh fear and loathing in the computer business, however, is Windows 95. Microsoft plans to begin shipping the up-grade of Windows by mid-1995, and the industry already is complaining about the software giant's pricing and marketing plans for the software. Computer makers, for example, have been startled to learn that they will be asked to swallow a huge price hike for their use of Windows 95—to as much as $70 per PC, vs. roughly $35 today. At the same time, Microsoft has established more rigorous technical requirements for hardware and software makers who want to claim their products are compatible with Windows. ''Prices are going up and terms are becoming more restrictive,'' says John B. Landry, senior vice-president at Lotus Development Corp.

There are ways PC makers can lower their costs—if they agree to shipment goals and marketing tactics designed to give Windows 95 an early boost. Indeed. a new ''Market Development Agreement'' that Microsoft has distributed to PC makers spells out a dozen ways to cut the Windows 95 license fee. For example, a company can save $3 per system by preloading Windows 95 on at least 50% of its personal computers in the first month Windows 95 is available. In a business with evershrinking margins, that's a deal many PC makers can't afford to pass up, ensuring Microsoft lots of promotional help.

In Europe, where Windows'' grip on the market isn't as firm as it ms in the U.S., Microsoft's pricing has prompted a minirebellion. Vobis Microcomputer, the No. 1 PC maker in Germany, announced in late

November that it plans to bundle IBM's 0S/2 operating system, rather than Windows, with its machines starting Jan. 1. Says Theo Lieven, Vobis'' CEO: ''Every penny counts.''

CONTINENTAL DRIFT. Lieven contends his rebellion already is working. He says sales have jumped since mid-November, when Vobis began effering 0S/2 in addition to Windows, and ''we think OS/2 helped'' contribute to the increase. Other European computer makers, including Peacock computer. have also quietly begun shipping 0S/2 on their machines.

U.S. PC makers aren't likely to follow the Vobis lead—partly because the American market is less receptive to OS/2. But that doesn't mean they're all happy about the Windows 95 pricing. Hewlett-Packard Co. executives, for example, say they are comcerned that the higher cost of Windows 95 may cause a pricing differential between Windows PCs and those equipped with 0S/2. Still, says a spokesman, HP expects to bundile Windows 95—and not OS/2—into its machines. And other big U.S. PC makers also remain loyal. ''We plan to move to Windows 95 as quickly as we can.'' says Lorie L. Strong, a vice-president at Compaq Computer Corp.

Still, with Microsoft on thin offensive again, some rival software companies believe the Justice Dept. should use the Intuit inquiry to look once again at broad questions about Microsoft's dominance of the soft ware market. Indeed, rivals say Justice has been asking them probing questions about Microsoft's potential dominance of new distribution channels much as on-line services. But others call another move from Justice wishfull thinking. ''We're just going to need to slug it out in the marketplace,'' says a resigned Frankenberg at Novell. The way things are going, that's just going to get tougher and tougher.

By Amy Cortese in New York, with Richard Brandt in San Francisco. Gail Edmundson in Pa??, and bureau reports

TAB 6

TO APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT IN CIVIL ACTION NO. 94–1564 (SS) SIGNED BY GARY REBACK

BYTE May 1992 Volume 17, Number Introducing Microsoft C/C + +.

Microsoft Borland*

Windows Class Libraries C/C++7.0 BC++3.0

Covers entire Windows API Y N

Menu support Y N

GDI support Y N

OLE 1.0 support Y N

Exception handling Y N

Diagnostiucs support Y N

Code Generation: DES

Encryption Test C/C++7.0 BC++3.0

EXE size 5K 7.3K

Execution time 820 sec 1500 sec

BYTE Build Test C/C++7.0 BC++3.0

Using fast compile 300 sec 420 sec

pre-compiled headers

Optimized EXE size 162.4K 202.6K

Compiler Features C/C++7.0 BC++3.0

Code in pre-compiled headers Y N

Inline any C/C++ code Y N

Auto-inclining Y N

P-code Y N

Windows Tools C/C++7.0 BC/++3.0

Windows resource Y Y

editors tolls

Profiler for Windows Y Y

& MS-DOS

Windows setup builder Y N

Total documentation 5408pp 4038 pp

Windows 3.1 Y $199

debug hernel extra

Total Price* $495 $948+

By almost any measure, new Microsoft C/C++ Version 7.0 development system for Windows'' is the best way to create all your applications for the Windows and MS-DOS operating systems.

With better code generation and precompiled headers, you'll have all the tools you need to write better code, faster.

And because the Microsoft Foundation Classes have the most complete framework for Windows, you'll use the same building blocks for your products that we use for ours.

C/C++ 7.0 also includes the Windows 3.1 debugging kernel which can help you find the bugs. Plus, all the tools you'll ever need to edit your resources, compile the help fries and even build your very own graphical setup programs for Windows.

Judge for yourself. Try new Microsoft C/C++ 7.0 and, as a Microsoft, Borland or Zortech customer, you'll be able to upgrade for just $139'- and for a limited time, you'll get a free copy of Qualitas'' 386MAX?? in the box!

So call your local reseller now, or call Microsoft at (800) 541–1261, Department Z71. Get your tools from the people who make Windows, because we've been building Windows tools longer. ??

The best C/C++ tools for Windows are from the company that makes Windows.

TAB 7

TO APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT IN CIVIL ACTION NO. 94–1564 (SS)

SIGNED BY GARY REBACK

The Newspaper of information Systems Management October 10, 1994, Vol. 28. No. 41. 168 Pages. $.??opy, $48/Year

COMPUTERWORLD

News

Server suite could squeeze market Microsoft product linking plans point to another bid for dominance

By Sluarl J. Johnsion and Fal Seannett

Microsoft Corp.'s recently announced BackOffice server sidle is the first step in an evolution designed to ac complish much tighter integration during the next few years between the company's enterprise building blocks of servers and its operating systems.

lit fact. by the time Microsoft's Cairo version of Windews NT arrives in late 1995, the fit may be so tight that a competitor's knife blade will not fit between the blocks.

Problems could arise for competitors if Microsoft shares information only with its own developers on how to tightly integrate with the object-oriented Cairo file system, suggested Warren Smith, a certified public at??tant and certified information systems auditor in Pac??e Bell's auditing department.

If Microsoft puts shortents into Cairo that turn out to be better than the industry standard implementation of Cairo, Smith said the situation could be a return to the .days when other third-party vendors complained about Microsoft using application programming interfaces ''that no one else knew about in some of their applications.''

At least one other observer agreed.

''All of this is an inevitability,'' predicted Jerry Sehneider. president of Sehneider Associates, Inc., a consul taney in Burke, Va., and former president of the Capitol PO User Group. ''The [operating system] is always go ing to be getting more, and more aggressive. No one is sate anymore.''

The very thought may further unhinge competitors, some of which are still smarting from the recent ,Justice Department antitrust settlement with Microsoft. However, many large users do not appear concerned. In fact, sonic said they welcome a model along the lines of the old IBM that positions Microsoft as the new empire builder.

''Where Microsoft is at right now reminds me of where IBM was in the t970s and 1980s, [and] if it continues to do things right, the users will benefit,'' said Scott Piper, a network analyst at Public Service Co. of Colorado in Denyet.

''Generally, I don't find Microsoft's proprietary elements to be an impediment, [and] by]; taking life simpler, it's going to be positive,'' said Colin Carpi, president and founder of Churtwell Advisory Services, Inc. ill Penn Valley, Pa., which is developing a large on-line financial services system.

''Big is usually good [for users] because if you're gotug to have things work, their you [must] have standards, and that lakes one [dominant] company,'' said Briscoe Stephens, coordinator for splice ?? in the Advanced Scientific information Systems Group at NASA in Huntsville, Ala.

Enhancing that vision of dominance are recent acknowledgments by Microsoft officials that over time, the line between server applications and systems software will begin to blur. The first step will be to provide tighter integration among tile components in Microsoft's recently announced BackOffice server suite.

A major jumping-off point will come. however, when Microsoft ships tile next major release of Windows NT, code-named Cairo, which will include a new file system that will store information as objects instead of files.

Total control

Cairo's Object File System well provide many core fun??tions that users currently think of as database fun?? lions—functions that can become part of a standard computing architecture that Microsoft controls from top to bottom Cairo Is scheduled to ship late next year, but many analysts and industry observers said they do not believe it will be out until 1990, at the earliest.

By the time the entire strategy unfolds, users may depend on Microsoft for virtually all their computing needs, which Amy Wohl, editor of the ''TrendsLetter'' industry newsletter in Narberth, Pa., suggests may not be a good thing.

''Microsoft is becoming[like] IBM, land I tit,, downside for users is the more they do that, the less open they're going to be [so that] it becomes harder to swap in your favorite database,'' Wohl said.

Microsoft officials deny their plans will make their systems more closed. Many timers agree, arguing that competitors will always he able to come up with innova tive products to help keep the systems open.

TAB 8

TO APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT

IN CIVIL ACTION NO. 94–1564 (SS)

SIGNED BY GARY REBACK

Desktop Computing Carole Patton Bundles are bad news Windows 95 is not just in operating system. When it arrives next spring, this tour de force from Microsoft will replace nit those (formerly) separate utilities you probably have on your PC right now. such as fax software. E-mail and communications capabilities. Especially neat here is that all these built-in Windows applications will be ?? integrated into a single common interface and even a central database of names and addresses.

In fact, Windows 95. the next generation of Windows. is such a complete operating environment that you may never have to purchase another Windows utility again. Nice for you. Not so nice for software developers such as Lotus. Delrina or Symlmtec, whose Windown products are about to become ''buggy whips'' in the name of progress. Microsoft is even including a somewhat feature-limited version of its best-selling suite. Microsoft's Office. in Windows 95.

This strut??y is a prescription for destroying the Windows service appications market and damaging (if not terminating) the market for core business software. For example, what if you buy a laptop preloaded with Windows 95 and Microsoft's Office. Will you then go out and buy SmartSuite from Lotus or PerfectOffice from Novell? Probably not. Consumers aren't interested In replacing ''good enough'' with ''great.'' Most new car buyers keep the standard radio their car came with. Only a handful are willing to shop around and pay a prem??um for better audio quality. Bundle bandwagon Microsoft is not alone in pursuing a bundling strategy. IBM's OS/2 Wurp Verston 3.0 ships with a Bonus Pak that includes a word processor and a spreadsheet (IBM Works), plus a host of third-party software.

These ''free'' goodies help sell the product and un?? those vendors whose software is bundled—''It's in there: it must be good.'' users think. But such a strategy also leaves out in h cold any vendor whose software was overlooked. While bundling is arguably anticomp??ive, the issue has expanded with Windows 95. IBM's Warp cannot claim the same high le??t of integration of Microsoft's standards. such as the internal communitarians process embodied in Object Linking and Embedding (CLE). Tuke, for instance. Lotus'' SmartSuite 3.0 for Windows. released in September. For all intents and purposes SmartSuite is an office in a box. You get a word processor (Ami Pros. Lotus famed 1–2–3 spreadsheet. a database (Approach). a calendar program called Organizer and Freelance Graphics presentation software. Lotus'' SmartCenter tool for switching among these applications is nifty.) However. Lotus SmartSuite programmers were able to provide support for only part of the OLE 2.0 specification: the drag-and-drop among 1–2–3. Approach and SmartCenter. Microsoft's Office. on the other hand, supports OLE 2.0 across the board. (It is Microsoft's standard. after all.) It is so ??ghtly integrated with Windows 95 that removing it to make room for SmartSuite may not be practical.

I've long thought that by selling both systems and applications. Microsoft would gain advantages that could eventually terminate competition among Windows vendors. This is especially evident now. With hardware prices dropping so fast. Windows (and Windows applications) could become ''disposable'' thanks to Windows 95. You won't ever have to replace or upgrade programs. Just buy a new PC that comes complete with all the software anyone is ever likely to need. Seen their side I can't blame Microsoft or IBM for trying to create a complete operating environment. We are ??ing the era when users cured about software and took the time to learn a variety of different packages and understand the differences. Most computers today are being bought by novice PC users. and these newcomers requires software that is easy to use. They want Windows point-and-click software, not arcane commands.

But I believe competition is, for all practical purposes. ''locked out'' when operating systems developers can m??grate their own applications and so much ''free'' third-party software in a single, seamie?? package. If this doesn't raise a red flag in the offices of the U.S. Justice Department, then our regulators are asleep at the switch.

Here's the bottom one: Will you be better off five years from now without Lotus'' SmartSuite Windows? Without PerfectOffice? Without WinFax? Without any choice?

Patton is chief analyst at the ?? Technology Group at Mend?? N.J. and publisher of ''Windows Letter.'' a ?? better for corporate decision-maters Her book. US/? Gold??, will be available ?? Van Nostrand Heihold in March. Contact ??

COMPUTI[RWORLO NOVEMBER In. 199& 57

TAB 9

TO APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT

IN CIVIL ACTION NO. 94–1564 (SS)

SIGNED BY GARY REBACK

Developing for next generation or Windows may mean running on NT ??

TAB 10

TO APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT

IN CIVIL ACTION NO. 94–1564 (SS)

SIGNED BY GARY REBACK

Can Microsoft get SQL Server on everything from big iron to steam irons? If you think OLE everywhere is the future, the answer is yes.

By J. William Semich

The LONG VIEW from Microsoft: Component DBMSs THEY JUST DON'T GET IT. Informix, Oracle, Sybase- all the top database-system companies. They watch in a dither for a year while Microsoft messes up their space with its dirt-cheap SQL Server For NT database technologies, and they think that Microsoft is being random (as Bill Gates might put it) with pricing that just doesn't make sense. Dangerously random. But the UNIX database oligopoly is only haft right. They got the danger part right. Because it turns out Microsoft has a plan. When the company announced its future SQL Server 95 last June. the SQL Server crew had its three-year strategy all mapped out. 'Course, they didn't show that map at the announcement—only Micros offs top management had seen and approved it. But we got an in-depth look after hours, and we'd like to share it with you.

Microsoft is taking a three-pronged strategy with its SQL Server technology. For symmetry's sake. We'll label the prongs ''Three Hundred Million Servers.'' ''Three Hundred Processors,'' and ''Three Hundred Objects.'' If Microsoft succeeds ma all three fronts, the face of computing will change, and so will the trajectories of the high-flying database vendors.

THREE HUNDRED MILLION SERVERS

First. there's the Three Hundred Million Servers strategy. That's basically a price strategy. Microsoft thinks it can push the price of the powerful database server software central to enterprisewide distributed computing so low that all your future computing systems will be based on database servers running on super powerful, cheap boxes. This is no: a ''servers attack the mainframe'' strategy, though, cautions Microsoft's director of enterprise computing. David Vaskevitch. It's more of a ''servers run the business: approach.

''There are 11 million places of business in the U.S. alone. They're ''all doing things right now that servers could help them do better.'' Vaskevitch explains. ''And there are other things they never dreamed of being able to do; servers can make those things happen, too.'' That blue-sky approach means, for example, that SQL servers could run your phone system, copying system, cash registers, all that stuff. Not hard to get to 300 million that way, eh?

This won't happen overnight, adds Vaskevitch. but he sees it as inevitable over the long term.

THREE HUNDRED PROCESSORS

Second. there's Microsoft's high-end corporate-computing strategy. By this time next year. when Microsoft ships the next upgrade of SQL Server For NT (code-named SQL Server 95, now officially named Microsoft SQL Server),'' its data-base server will be able to run on the most powerful mainframe-class multiprocessor computers and virtually match the power. Features. and functions of the latest multiprocessor and parallel-processing products From the UNIX vendors.

You could call this the Three Hundred Processors Strategy and you'd not be half wrong. Well. maybe not 300 processors-at least not right away.

The Three Hundred Processors Strategy. is actually one way Microsoft plans to become a major player in large-scale, mission-critical computing technologies. Microsoft recently restructured itself to better Focus resources on making it happen.

Last year. prior to restructuring, Microsoft sold just under S5 billion worth of PC

software in a market that totals barely S10 billion. With its high-end corporate strategy, Microsoft intends to move into the S?0 billion+ market for business software, so it can grow lickety split to something like $20 billion.

''We'll need to be selling into a $100 billion software market to Bet to that S20 million.'' says Richard Tong, marketing director for Microsoft's new IS-focused Business Systems Division.

Of course, sitting squarely in the middle of that enterprise computing market are the likes of Computer Associates. Oracle. Sybase-you know the names. They won't let on that they're really concerned about the competition From Microsoft. They say Microsoft's big talk is just smoke. So how does Microsoft intend to prove them wrong?

Early prowess toward the long-term Three Hundred Million Servers kraal will help Microsoft achieve its aggressive revenue growth forecast, but performance improvements will help more.

By 1996. when Microsoft ships its even more advanced SQL Server For Cairo. it expects it to actually outperform Informix-Online Dynamic Server 6.0. Oracle7.1. and Sybase System l0 (see ''MS-SQL,

MS—-$QL Server: Good Today, Better Tomorrow Think you'll ever seriously consider swapping your mission-critical DB2-based financial management system, or oracle 7-based airline reservation system, or even your Sybase SQL Server 10-based loan approval system for a realty complex Excel spreadsheet with a SQL Server engine? Hah!

But Bill Gates is betting the company that you will. Not exactly an Excel spreadsheet, of course—but a whole new kind of mission-critical, high-availability, heavy-duty, object-oriented, component-based enterprise system that includes the next generations of Microsoft's Windows NT operating system (dubbed Calro), the new SQL Server 95 (and the w??announced SQL Server For Calro), and its coming distributed OLE technology. All this will happen in the next year or two, a not-so-distant future that Microsoft internally refers to as ''the Calro timeframe.'' At right is the techno-time line Microsoft hopes will turn into reality:

Server: Good Today, Better Tomorrow'').

THREE HUNDRED OBJECTS

Third, there's the Three Hundred Objects prong of Microsoft's strategy, the component-software-system pieces. In order to build enterprise-computing systems From reusable mix-and-match software components, you need more than the object-oriented operating system Cairo, distributed OLE, and the Visual Basic enterprise development tool technologies. You need a technology that turns desktops and servers into peers when it comes to storing, sharing, and finding objects.

To help make this happen. Microsoft is moving SQL Server technology down- The Metamorphosis of Microsoft SQL Server 1994

SQL Server 4.21s ?? 1996 scale, onto the desktop.

The plan is to use pieces of MS-SQL Server technology to rebuild desktop apps like Microsoft Access and Excel so desktops and server components can talk to each other. ''There's this huge mismatch, in terms of semantics, between the big server-based database systems and the tools that run on the desktop.'' saves Gary Voth. ?? The SQL Server NT Decision: One Insider's Advice

By an anonymous lilac resort technology partner You'd be crazy not to start looking seriously at Microsoft s SQL Server 95 technology. But you'd also be crazy-OK, not crazy, just adventuresome—to commit your company today to Microsoft's component enterprise-computing plan lock, stock, and betel.

Even so, rye looked at SQL Server 95 and 96 up close and undressed, sort of, and it is something really slick. Microsoft recently demonstrated an early, early version to my company In the hopes that we would port our apps to SQL Server For NT. I can't tell you my company's name, but it's one of the leading midrange manufacturing packaged software application vendors.

First off, I was surprised and impressed at the level of the technology they're showing in SQL 95 and SQL 96. Microsoft looks like it's paying attention to the issues that are Important to making SQL Server an enterprise-quality database management system.

They seem to be building In a scalabilary capability for symmetric multiprocessors, and they're leveraging the multithreaded capability of the NT operating system. That gives them leg up on the other database products, which rely on different versions of UNIX. Some versions of UNIX don't support multi-threading, so everything goes through a single queue. Microsoft isn't constrained by that.

SQL Server 95's new system administration toolsets [Starfighter] are very impressive. Microsoft is plying a lot of attention to things like ease of use and the kinds of data replication issues that are necessary to manage performance and backup, and necessary for bet-back-up capabilities, parlor. mange monitoring, and job scheduling. The SQL 95 job scheduler is integrated into NT. That technology alone shows that Microsoft is trying to listen to enterprisewide needs. I don't see SQL 96 as a scaled-down version of Sybase System 10 at all. It appears to have the same robust capability that Sybase has.

That said, I still chose Sybase System 20 for the next version of my company's packaged software. Why? Because my customers can buy it today, and I know it works and works well. And if I were a CI0 or CTO at a large enterprise, I would do the same thing.

SQL Server 96 is an ''NT only'' solution—whatever advanced functionality Microsoft's building into it now is predicated on the success of fir. That's still an open question.

Besides, Microsoft's track record on delivering both functional and technical quality products out of the box isn't what I'd like it to be for k kinds of solutions I'm trying to still. I'm net soiling spreadsheets and wad processors. Plus, Microsoft has no track record celling enterprise systems ?? applications. It's a gamble.

My recommendation ?? don't bet your job or your company on Microsoft SQL Server and NT Server to. Let Microsoft's existing dedicated INT users do that instead.

Software systems across geographically dispersed servers with stuff like drag-and-drop replication, automated restore and restart. The tools, which Microsoft previously code-named Starfighter but has officially named Enterprise Administration Tools For SQL Server 95. are ''all OLE objects. Starfighter lets users build their own database management scripts using a new 32-bit version of Visual Basic. SQL Server 95 itself is. in effect. an OLE automation server for these OLE tools and scripts.

In other words. Microsoft is rebuilding SQL Server so that it can contain and manage software components. When SQL Server For Cairo is shipping, Microsoft's world of computing will become a world of OLE objects-components that a developer can link together using OLE's APIs into an application. Then SQL Server won't just store data-it will contain components.

Explains Casey Kiernan. Microsoft's program manager for SQL Server tools: ?? ''All of our server apps-SQL Server. Systems Management Server. Information Exchange Server, and SNA Server—will have this single integrated model in Cairo,'' he explains. n

The company is serious about this, too, Vaskevitch says. No matter how long it takes, or h6w much work has to be done to make the technology compelling to commercial users, the company is committed to making its NT-based SQL Server the enterprise launching pad for its Cairo component-computing system.

''We've already invested three years in the planning process for SQL Server. and it doesn't bother us if it takes five. even eight years to Let to where we want to be—we don't give up.'' says Vaskevitch. It probably doesn't hurt to have deep pockets. either.

THE FUTURE Of TECHNOLOGY & PRICING

So there it is-the future of enterprise computing according to Microsoft. the world's richest software company. And where will ''all the UNIX database companies be, come Cairo time? Today, at least, they still act like they don't have a due.

They still think they can advance the technology by making their database systems into bigger, better, faster (and pricier) versions of what they've been selling for the past decade and a half-with, of course, the magic sobriquet ''open'' pasted onto it ''all

They may think that. But according to Microsoft's plan, all these big. distributed UNIX megaliths will soon seem just as rigid, overpriced, oversized, and outdated

TAB 11

TO APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENTIN OPPOSITION TO PROPOSED FINAL JUDGMENT

IN CIVIL ACTION NO. 94–1564 (SS)

SIGNED BY GARY REBACK

Preface

The year 1993 was one of dramatic change in the PC software industry. This report will highlight the major events of 1993 in personal computing software. We analyze the positioning and directions of the top 10 vendors, dissect our data, and then analyze applications by category., operating system,

and region. We conclude with our forecast of future trends in the industry.

Data included in this report is listed as needed for our discussion. For a comprehensive list of our historical data and forecasts, refer to the Persona/ Computing Software Worldwide Market Statistics, a series of three reports published in June 1994 (product codes: PCSW–WW–MS–9401, –9402, and –9403).

Dataquest's PC Software service tracks all major PC software business productivity applications running on the DOS, Windows, Macintosh, OS/2, and Windows NT operating systems and environments. Other services concentrate on other areas of the software market our Multi-media service tracks entertainment and education .software; our Client/Server service tracks development tools and server databases; and our Digital Documents and Operating Systems services complete the offerings.

In Appendix A, we define our market coverage boundaries. In Appendix B, we discuss the methodology used to arrive at our decisions. We hope that you find this information useful Please contact us if you have any questions regarding the data or analysis.

The PC Software Team

Karl Wong, Principal Analyst

internet: kwong@dataquest.com; phone: (408) 437–8213

Bryan Fukuda, Industry Analyst

internet: bfukuda@dataquest.com; phone: (408) 437–8153

Suzanne Snygg, Industry Analyst

internet: ssnyggdataquest.com; phone: (408) 437–8R24

[ingsheng Huang,, Research Analyst

internet: jhuangdataquest.com; phone: (408) 437–8g160

FILED FEB 14

Clerk, U.S. District Court

District of Columbim

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Personal Computing Software Worldwide

Figure 4–2

1993 Unit Shipments Growth by Category

Analysis of Each Category

This section will analyze the 1993 results for each category. Future trends for each category will be discussed in Chapter 7. For a definition of each category, see Appendix C.

Accounting

Intuit, a new entry in the accounting market in 1992, jumped to the top spot in revenue in 1993 (see Table 4–1). Realworld, Peachtree, and Great Plains all ship products that have a higher ASP than Intuit; however, revenue for all four companies is very closely matched in the U.S.$20 million range. A slow transition to thin Windows platform contributed to the revenue decline in I993.

Communication

The communication market exploded in 1993. Bundling arrangements with modem OEMs contributed significantly to the 167 percent growth in unit shipments (see Table 4–2)). Revenue increased by an impressive 47 percent. Delrina's WinFax: Pro and Datastorm's Procomm Plus led the charge. The growth of the laptop market also spurred unit sales. There is still room for growth in this [market, but 1993 will be remembered as the year this market really took off.

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TABLE 4–12.—TOP VENDORS IN THE SPREADSHEET MARKET

[Revenue in Millions of U.S. Dollars]

	1993 Revenue	1992 Revenue	1993 Market Share (%)	Revenue Change (%)
Lotus	445.9	502.2	46.1	−11.2
Microsoft	357.0	484.4	36.9	−26.3
Borland	69.5	121.4	7.2	−42.8
Total Spreadsheet—Market	968.0	1,262.3	100.0	−23.3

Source: Dataquest (May 1994)

TABLE 4–13.—TOP VENDORS IN THE SUITES MARKET

[Revenue in Millions of U.S. Dollars]

	1993 Revenue	1992 Revenue	1993 Market Share (%)	Revenue Change (%)
Microsoft	821.2	213.0	85.4	285.5
Lotus 114.8	16.1	11.9	612.7	
Borland 17.7	0	1.8	NA	
Total Suite Market 961.5	229.1	100.0	319.7	

NA* Not applicable
Source: Dataquest (May 1994)

Utilities/Application

WordPerfect's Grammatik for both DOS and Windows were the two leading applications in 1993. WordPerfect garnered a 36 percent market share based on revenue in 1993 (see Table 4–14). This is a small market that involves small companies able to find a niche market. This is not a market where we will likely see one or two vendors dominate.

TABLE 4–14.—TOP VENDORS IN THE APPLICATION UTILITIES MARKET

[Revenue in Millions of U.S. Dollars]

	1993 Revenue	1992 Revenue	1993 Market Share (%)	Revenue Change (%) (1992–1993)
WordPerfect	24.1	0	36.2	NA
Wordstar	5.8	9.2	8.8	−36.5
Adobe	4.9	5.7	7.3	−14.0
T/Maker	4.0	3.7	6.0	8.8
Total Application—Utilities Market	66.6	69.8	100.0	−4.6

NA = Not applicable
Source: Dataquest (May 1994)

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June 27. 1994
TAB 12
TO APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT
IN CIVIL ACTION NO. 94–1564 (SS)
SIGNED BY GARY REBACK
FILED FOR IMMEDIATE RELEASE
SATURDAY, JULY 16, 1994
Clerk, U.S. District Court
District of Columbia AT
(202) 616–2771
TDD (202) 514–1888
MICROSOFT AGREES TO END UNFAIR MONOPOLISTIC PRACTICES

WASHINGTON, DC—Microsoft, the world's largest and dominant computer software company, agreed to end its illegal monopolistic practices after the Department of Justice charged that the company used unfair contracts that choked off competition and preserved its monopoly position.

The company agreed to settle the charges with a consent decree that will prohibit Microsoft from engaging in these monopolistic practices in the future.

Microsoft, which makes the MS-DOS and Windows operating systems used in more than 120 million personal computers, was accused of building a barricade of exclusionary and unreasonably restrictive licensing agreements to deny others an opportunity to develop and market competing products.

Attorney General Janet Reno said, ''Microsoft's unfair contracting practices have denied other U.S. companies a fair chance to compete, deprived consumers of an effective choice among competing PC operating systems, and slowed innovation.

(MORE)

Today's settlement levels the playing field and opens the door for competition.''

''Microsoft is an American success story but there is no excuse for any company to try to cement its success through unlawful means, as Microsoft has done with its contracting practices,'' said Anne K. Bingaman, Assistant Attorney General in charge of the Antitrust Division.

The settlement is the result of close coordination between the Department of Justice and the competition enforcement authorities of the European Commission, which has been investigating Microsoft since mid-1993, and which also initiated an undertaking containing essentially the same terms. This complaint and settlement marks the first coordinated effort of the two enforcement bodies in initiating and settling an antitrust enforcement action.

Bingaman, praised the Commission, noting that, ''This unprecedented, historic cooperative action sends a powerful message to firms around the world that the antitrust authorities of the United States and the European Commission are prepared to move decisively and promptly to pool resources to attack conduct by multinational firms that violate the antitrust laws of the two Jurisdictions.''

The civil complaint and consent decree were filed last night, July 15, in U.S. District Court in Washington, DC The consent decree, if approved by the court, would settle the suit.

Until approved, Microsoft has agreed in a stipulation filed with the court to abide by the terms of the decree.

The Department alleged that Microsoft used the following unfair practices:

Exclusionary Per Processor Licenses—Microsoft makes its MS-DOS and Windows technology available on a ''per processor'' basis, which requires PC manufacturers to pay a fee to Microsoft for each computer shipped, whether or not the computer contains Microsoft operating system software. The complaint alleges that this arrangement gives Microsoft an unfair advantage by causing a manufacturer selling a non-Microsoft operating system to pay at least two royalties—one to Microsoft and one to its competitor— thereby making a non-Microsoft unit more expensive.

Microsoft has used its monopoly power, in effect, to levy a ''tax'' on PC manufacturers who would otherwise like to offer an alternative system,'' said Bingaman. ''As a result, the ability of rival operating systems to compete has been impeded, innovation has been slowed and consumer choices have been limited.'' She noted that Microsoft has maintained the price of its operating systems while the price of other components has fallen dramatically. Since 1988, Microsoft's share of the market has never dropped below 70 percent.

Unreasonably Lonq Licenses—The Department further alleged that Microsoft's contracts are unreasonably long. By binding manufacturers to the purchase of Microsoft products for an excessive period of time, beyond the lifetime of most operating system products, the agreements foreclose new entrants from gaining a sufficient toe-hold in the market.

Restrictive Non-Disclosure Agreements—The Department also charged that Microsoft introduced overly restrictive non- disclosure agreements to unreasonably restrict the ability of independent software companies to work with developers of non- Microsoft operating systems. Microsoft sought the agreements from companies participating in trial testing of the new version of Windows, to be released later this year. The terms of these agreements preclude applications developers from working with Microsoft's competitors for an unreasonable amount of time.

The settlement ends these practices and will help to rectify the effects of Microsoft's past unlawful conduct. In particular, the settlement prohibits Microsoft from:

—Entering into per processor licenses.

—Obligating licensees (manufacturers of personal computers) to purchase any minimum number of Microsoft's operating systems;

—Entering into any licenses with terms longer than one year (although licensees may renew for another year on the same terms).

—Requiring licensees to pay Microsoft on a ''lump sum'' basis.

—Requiring licensees to purchase any other Microsoft product as a condition for licensing a particular Microsoft operating system.

—Requiring developers of applications software to sign unlawfully restrictive non-disclosure agreements.

The settlement is effective immediately and will be in effect for six and a half years.

Bingaman said ''this settlement resolves the competitive problems created by Microsoft's unlawful conduct quickly and effectively.''

Microsoft's main corporate office is in Redmond, Washington.

94–387
ORIGINAL
DEPARTMENT OF JUSTICE PRESS CONFERENCE
With Attorney General Janet Reno and Assistant Attorney General Anne Bingaman
Regarding the Microsoft Settlement
Saturday, July 16, 1994
(Transcribed from a provided audiotape.)
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P R O C E E D I N G S

ATTORNEY GENERAL RENO: Good afternoon.

The Justice Department has charged Microsoft, the world's largest software company, with using unfair marketing and contracting practices to choke off competition to preserve its monopoly position. Microsoft has agreed, yesterday, to settle the charges with a consent decree that will prohibit the company from continuing to engage in monopolistic practices in the future.

While the company fairly and lawfully climbed to the top of the industry ladder, it used unfair and illegal practices to maintain its dominant position, and kept honest competition from other U.S. companies.

The Justice Department has taken an action that is critical to the personal computer industry and the efforts to make it competitive. This settlement will save consumers money, enable them to have a choice when selecting PC operating systems, and it will stimulate innovation in this critical market.

Today's settlement is the result of close coordination between the Department of Justice and the Competition Enforcement Authorities of the European Commission, which, today, also has indicated an undertaking containing essentially the same terms.

This complaint and settlement marks the first coordinated effort of the two enforcement bodies in initiating and settling an antitrust enforcement action.

I want to thank and to recognize Anne Bingaman and the fine staff of the Antitrust Division, who have worked through long hours of negotiations to resolve quickly this significant case, and achieve the best results for the consumers of America.

And now I would like to ask Anne——

MS. BINGAMAN: Thank you.

We are proud of the achievement that the settlement filed in Federal District Court in Washington, the District of Columbia, at 9:30 last night represents. It is a significant—in fact, historic—breakthrough for the software industry, for innovation, for the competitiveness of the American economy.

Let me describe for you briefly what the case we filed is about and what the settlement achieves, because they are significant.

Number one, the settlement will open the playing field; it will level the playing field for Microsoft's competitors in the operating system software market, to enter this important market, to bring down prices to consumers, to innovate, to produce better products.

Microsoft, for years, and has today, monopoly Dower in the software—operating system software market AS this chart shows, Microsoft has 79-plus percent of that market. Its competitors are other American companies who have been struggling for years to enter this market to provide better, cheaper products to American consumers, and Microsoft's contracting practices, which are challenged in this lawsuit and which are ended by the settlement we achieved, have prevented those competitors from entering the market. They have deprived consumers of choice. And they have stopped innovation—slowed innovation in this important market.

Let me describe to you the four major things that Microsoft did and which this settlement ends. Number one, the per-processor license, I'll describe in a moment.

Number two, contracts of extraordinarily long duration which blocks the market. Number three, huge, 100 percent minimum commitments for years, which amounted to take-or-pay contracts, which blocked the market.

And, four, restrictive non-disclosure agreements for software writers which prevented them from writing for other software companies in some cases. Let me turn first to the per-processor license, what that is and what this settlement does to stop it. Number one, the settlement bans it outright. That is first. What the per-processor license has done until last night at 9:30 was to lock up 60 percent of this market in the United States in per-processor contracts which Microsoft began using in 1988. Per-processor contracts are contracts which Microsoft imposed by virtue of its dominant monopoly position on computer manufacturers, such as Dell, Compaq, Gateway, you name it, the OEM's they are called in the business, the computer makers, who have to license from Microsoft because it has had this monopoly position and the products are demanded in the marketplace.

Nothing wrong with that, but rather than simply sell those products fair and square on the merits and on price, in 1988, Microsoft invented a form of contracting called the per-processor license, under which it required the computer manufacturers—induced them with extremely low prices to pay for every processor they shipped of a certain type not just to Microsoft, but to the competitors. So it worked this way: Under a per-processor license, which 60 percent of the industry has had until last night, Microsoft got paid for every processor shipped by a computer maker, whether or not that processor had a Microsoft operating system loaded on it.

Now, if you are a competitor of Microsoft and you wanted to sell your competing product to a consumer, you do that through these computer manufacturers. But they had to pay Microsoft.

NOW, if Microsoft—take this hypothetical— operating system was $15, and you came in with a better operating system or cheaper, it worked just as well, hypothetically $10—these numbers are lower than average, but for ease—under the per-processor license, the computer manufacturer pays Microsoft 15 and the competitor 10 for a total of $25 on what really is a $10 item.

The result, computer manufacturer were reluctant 10—extremely reluctant—to buy from competitors. And that was the purpose and the effect of the per-processor license. It's obvious what it does. It drives prices up to consumers. It raises prices. It locks out competitors. And it slows innovation.

So, this settlement stops the per-processor license.

Two, Microsoft used contracts of three to five years in an industry that was rapidly turning over. These extraordinarily long contracts made it very difficult for competitors to get in. The settlement we achieved today reduces contract lengths to one year, with one, one-year extension on the same terms and conditions which the computer manufacturer, in its sole option, can elect.

So, we have 9one to one-year contracts, banning of per-processor.

The third important feature of this settlement is abolishing minimum commitments. Microsoft's third way to lock up this market was to say to the computer makers who had to deal with it, We will give you a lower price if you estimate a large volume.

Nothing inherently wrong with that volume discounting. The problem is Microsoft quoted these low prices in conjunction with 100 percent minimum commitments —i.e., you get that price only if you sign on the dotted line to pay us every cent regardless of whether you actually ship our product or not—a take-or-pay contract. You pay no matter what.

Well, what does that mean? Over a long-term contract, what that means is if the computer manufacturer's business has not gone quite as well as it thought, it is locked into Microsoft no matter what because it owes them this minimum commitment, even if it has not sold any machines. So, minimum commitments was a third way that Microsoft locked up this market, locked out competitors, and minimum commitments are abolished. They are zero in the settlement we achieved yesterday. Finally, NDA's, non-disclosure agreements, were restrictive agreements which Microsoft, this winter, imposed in a manner that had never been done before in the software industry on certain applications writers. It would have—the NDA's challenged in this lawsuit and which Microsoft in the consent decree agrees to stop would have prevented applications writers from discussing Microsoft's operating systems for as long as three years after public disclosure of the operating system.

The effect could take those application writers, the software writers, forever out of business, in effect, except for Microsoft. It is another way to, in effect, lock up the market—this time by locking up the important software applications writers.

Microsoft itself has said these NDA's were a mistake. It has agreed in this consent decree to never engage in such practices while this consent decree is in effect. And that also is a significant achievement of this settlement.

The last thing the settlement does is prohibit the use of lump-sum contracts, which would have been another way that Microsoft could have locked up this market. They had not needed to use them in the past because they had these other methods, but looking forward, our concern was that they might. And so the settlement also bans lump-sum contracts.

This settlement is everything we could have hoped for in a fully litigated case and possibly more. It is an historic achievement. I tell you, the charts we have prepared today were prepared for the lawsuit we planned to file yesterday. The lawsuit was not filed because of the settlement. We filed instead a complaint with a settlement. We are extremely proud of this result.

And the last point that the Attorney General noted, I think, deserves mention. This is the first time in history that the Competition Authorities of the European Commission and the Department of Justice have cooperated closely in investigating a major worldwide company, whose anti-competitive practices affected important markets both in Europe and the United States.

we took this under a letter—the EC and I and the Department of Justice asked Microsoft last October to waive any confidentiality restrictions under our respective statutes so that we could work together and think about the case we were jointly—not jointly to them—but that we had each initiated. Microsoft agreed to that in writing. We worked with the EC throughout the winter. We shared documents. We worked closely with them. We settled this together on terms that are substantially identical. We negotiated in Brussels the week of July 4th with Microsoft. We negotiated this week at the Department of Justice with EC officials here. And this also is a truly historic aspect of this settlement.

So, we are extremely proud of this. We are gratified that it concluded with a consent decree which achieves the really 100 percent results that any lawsuit could have achieved, and possibly more. And I want to especially note that this was the ultimate team effort. We had a group of lawyers, led by Sam Miller, who is here today, and Don Russell, who is on his way back from Brussels —he has been in Brussels all week coordinating this hour by hour with the EC over there—we have had extraordinary people on this case. We had a team of lawyers I would put against anybody, and I would feel for the other side.

And I want to simply state the names on the complaint we filed last night, because I am so proud to have been part of this group. The complaint was signed by Sam Miller, Don Russell, Joyce Bartu, Bob Zastrow, Dick Irvin, Peter Gray, Justin Dempsey, Gil O'Hana, and Larry Frankel. And there were more, and we had a paralegals. And this was an effort of a remarkable, extraordinary, incredible group of lawyers that I am so proud to have been part of. And I am proud of our partnership with the EC.

So, with that, what can I tell you about any questions you have?

QUESTION: What kind of room does this give Microsoft's competitors—(inaudible)—civil actions?

MS. BINGAMAN: That is up to the competitors. I do not actually believe this case changes the legal status of any competitor's suit, because, by settling, Microsoft has admitted to no facts. It has consented to entry of the decree that was filed with our complaint. But facts are not established of record by a settlement, the way they are by a litigated case to conclusion, with a jury trial. So, my own horseback impression is that the action, as such, does not change the legal status. But, as far as private suits by competitors, it has enormous impact for competitors in opening the market. This is exactly what has been needed for years and years in the software industry. And I think, in the market-opening respects and for innovation, prices to consumers, it will have tremendous impact.

QUESTION: Why has this taken so long, and why is there no monetary penalty? And I notice it says that—you say in the press release that it bans these practices in the future, but then says it only lasts six-and-a-half years.

MS. BINGAMAN: Okay. You have got several questions there. Number one, we have had this case for a little less than one year. The FTC had it for, I think, two-and-a-half or three years before that. As everyone knows, or a lot of people, the FTC deadlocked two to two. We took the case acting as a fifth commissioner. We have looked carefully at this case because it is an important case, and we wanted to understand it fully ourselves.

So, I have no concerns whatsoever about a one-year action by the Justice Department that ends these practices.

There are no monetary penalties because they are not provided by any law and never have been. When the Justice Department settles a civil case, the Antitrust Division—the antitrust laws do not provide for civil penalties, period.

We obtain adjunctive reliefs to open the market. Under the American legal system, private actions obtain any monetary damages, and that is just the way it is in all of our cases. They are no different. You had a third aspect.

QUESTION: The length of time, you say—

MS. BINGAMAN: Oh, the six-and-a-half years. Our decrees normally last 10 years. We negotiated long and hard with Microsoft over the length of the decree. The EC's decrees last four-and-a-half years. We obtained immediate effect of this decree. That was a crucial aspect of the decree. And we believe we added, in effect, three to three-and-a-half years on the front end of the decree because the contract duration stops right now. The per-processor stops as of last night.

The illegal practices that had locked up the market are ended. And they do not have to wait for contracts now in effect to run out.

And it was our belief that based on all of those facts, plus the EC's practice of four-and-a-half year decrees, that this was a fair balance under the circumstances.

Let me mention something. I neglected to thank—and it was a major oversight on my part and I want to correct it—Henry Kawati is sitting here, who worked long and hard on this case, he is an economist with our Economic Section; Rich Gilbert, who is head of that section, was in Brussels with me; and Mark Schecter, who killed himself on the case, along with Bob Lighten, but I want to thank Henry Kawati and Ken Hire and Rich Gilbert, because the economics aspect of this case, as you can imagine, was critical. We had outstanding outside economists who Henry worked with tirelessly for many, many months. And he was a critical part of it, as was Rich Gilbert and Ken. So, I wanted to say that.

QUESTION: Can you estimate how much these practices may have cost consumers over the years?

MS. BINGAMAN: We have not. Because we do not bring damage actions, we do not put efforts into trying to figure out monetary total impact. But I can, to illustrate, tell you this. If you were a consumer and wanted to buy a competing operating system, and despite Microsoft's practices, there have been, in fact, four major competitors in this market to Microsoft, who have clawed and grabbed and have managed to obtain some market share, if you bought one of those competing companies, and 20 percent of the American public does, and you were under a per-processor license, and many of these licenses, as we saw, are per-processor, you paid not just Microsoft anywhere from $15 to $50 for its operating system, you paid the competing price on top of that.

And so Microsoft, in effect, taxed every consumer who bought a competing operating system and bought it from a maker who had one of these per-processor contracts, or a similar one. And so it's not insignificant. We have not, as I said, made any effort to quantify it, but it is— there are millions and tens of millions of PC's shipped every year, and it is a major amount of money. We can try to come up with some numbers after the press conference. But with all the other things we have done, that has not—our focus has been opening the market, truly, and obtaining the relief we needed.

QUESTION: To follow that up, do you have any estimate of how many computers were shipped under these agreements that would have been effected?

MS. BINGAMAN: I can come up with numbers on that. We have not tried to. It is in the tens of millions. There are 120 million total computers with Microsoft operating systems on them. Many, many were shipped with this—under these kinds of practices. And it has been a major market problem for competitors, and has restricted choice for consumers.

Let me tell you why else this is so important to the American economy. We are about innovation and competition in this economy. That is what we are for. And Microsoft has its shot at the market. No problem. All we are saying is others should have their shot at the market, fair and square, a level playing field. That is the American way.

And they may have a better mousetrap. They may not. But what we are saying is people should get a chance to judge it fairly on quality and price and the other factors. And that is what this case is about. It levels the playing field, opens the door.

And if a competitor has a better product that can run computers faster, run them better, support better applications, build a base, cut into Microsoft's market share so that applications writers will write for it, that could have profound consequences for the American economy. What we are about is precisely that—promoting competition, innovation, better products at cheaper prices, and letting the market take care of whatever happens. We are not about driving the market; we are about letting the market operate freely.

QUESTION: Had this settlement not been reached, what broader or further action could Microsoft have been subjected to? And, a second question is, had there been any serious consideration about splitting Microsoft into two?

MS. BINGAMAN: I cannot discuss our internal considerations as such. I can tell you that we looked at every possible legal theory and at all the facts throughout the course of a long, tough winter, that the legal team I mentioned went through. And it was our conclusion at the end of that that the case to be filed was the case we did file. We did not bargain off any case in exchange for a settlement. This was the case that was there after thousands of hours of work. And it needed to be brought, and it was brought.

And that is really as much as I think confidentiality permits me to talk about specifics.

QUESTION: Potentially, had this gone into litigation, what could we have seen perhaps in terms of time and cost?

MS. BINGAMAN: Had this been litigated, we hoped to conclude it within a year. We planned to file it in a district in which the dockets are not crowded and we could have obtained a quick resolution, because the markets need to be open. This needed to get done. But it would have been a minimum of a year at the very best. It undoubtedly would have been appealed. And the key point is, after all that, two to two-and-a-half years at best through appeal, we could not have achieved one thing more than we got in this settlement.

And, frankly, I am not sure we would have gotten as much. I do not know, because I do not know what a judge would have done. But this settlement is 100 percent of what we would have gotten with a lawsuit.

QUESTION: Can you tell us more about the EC cooperation, how and when was that initiated? And wasn't there a British investigation as well?

MS. BINGAMAN: No, there was no British investigation. It was the European Commission. It was a result, actually—last September, I went to Europe for consultations, which are annual consultations with the EC that we have done for years, the Antitrust Division—it's a mutual cooperative thing—and Klaus Ailerman, the head of the Competition Directorate said to me, What are you doing about Microsoft, because we have a Microsoft case, too, you know, and I am very interested to talk to you about it?

And I looked at him and I said, Klaus, I do not think I can say a word to you about Microsoft. Everything I know is under confidential documents. I am forbidden from talking about it. I can't speak to you.

And he said, Well, what a great pity, because we've got, as far as I can tell from press reports, the same case.

And I said, Well, it is a great pity. And I came back to the United States—that was the end of September—and 10 days or two weeks later, it just hit me out of the blue one day, we should ask Microsoft to waive confidentiality so that we could cooperate and decide whether in fact there is a case and coordinate remedies.

And the coordination of remedies is really crucial for a company in Microsoft's position, which operates worldwide, literally, in—I do not know—tens of countries in the world. They need, for their own business reasons, to have the same contracting practices. It would be terribly disruptive—and I called the EC. We asked Microsoft. Microsoft, for its own reasons, said that would actually—they didn't have a problem. They waived confidentiality. And that is how it began last October, and it has continued since then.

QUESTION: How is the Justice Department going to monitor the new agreements, the new contracts that Microsoft will sign with its OEM's? And what guarantees are there that Microsoft isn't going to turn around and say, you know, if we cannot do the kinds of volume deals that we have done in the past, we are going to charge 5, 10, 15 percent for the operating system than we have in the past?

MS. BINGAMAN: If they charge more for their operating system, the competitors are there, without question, with comparable products. And the market should take care of that. That is the whole idea of this settlement. The market should take care of it. We are allowed, in the monitoring provisions of this decree, which you should have, to request documents from Microsoft, to inspect their contracts, to talk to their people. We are further—the decree specifically provides we can cooperate with the EC in this monitoring, so we will continue our cooperation and close work with them. And we are watching. We are very much on the case.

QUESTION: A question about the per-processor issue. From your presentation it wasn't entirely clear to me, but it sounds as though Microsoft main pressure on computer companies was that they got—they would offer huge, huge discounts to the companies that would accept a per-processor kind of agreement. That being the case, it seems to me that, on one level, the sin is that Microsoft is simply charging too little for the operating system. And, to follow up on that, to follow up on that, it seems to me that the marketplace situation may not be a whole lot different, because Microsoft can continue, it seems to me, to charge that same low, low price.

MS. BINGAMAN: Ed, you been talking to Microsoft? That is their line. They are not telling you right. If that was so easy, why did they have per-processor licenses? They are the only company in the industry that did. Why did they have three- to five-year contracts? They are the only company that in the industry that did. Why did they have 100 percent minimum commitments? They are the only company in the industry that enforced that.

If this was so simple, why were they locking up the market with practices which every computer manufacturer despised and which the competitors despised and which Microsoft hung tough through four years of Government investigation to hang on to? Do you think that is because it did not matter to them? That is the story they are putting out.

You are darned right they are trying to spin it their way. That is not right. And let me tell you. Volume discounts, of course they can volume discount. No question. There is nothing wrong with volume discounting. It is done in all kinds of industries, in all kinds of situations. And the decree does not address volume discounts as such. The problem with Microsoft's practices is that they were using volume discounts to lock up the market with per-processor contracts and 100 percent minimum commitments, which then were like iron. You could not get out of. You could not escape.

To get those low prices, you had to sell your soul and never leave Microsoft. And that is what this decree changes.

Microsoft can compete on the basis of low price. We have no problem with that. That is good. We want that. What we do not want is competing on the basis of low price and then using that to impose contract terms which exclude every other competitor.

And, Ed, the reason they were able to do that is because of their monopoly position in this market. I mean, this is an important question you are asking, because they are going to try to claim that this decree changes nothing. That is wrong. That is a lie. And people need to understand that.

Because volume discounting, in and of itself, is not a problem. There are ways volume discounting can be abused. I have discussed those ways with Microsoft and Bill Gates. We are watching. We are watching closely what they do with volume discounts. They know it. I know it. And we are going to see what happens here.

But volume discounting, in and of itself, is not a problem. There can be problems in how you structure them, whether you force—it's a technical discussion. But, in any event, believe me, they did not hang tough on this for so long, right to the brink of a joint lawsuit by the U.S. and the EC yesterday because these practices'' were so harmless and meaningless and so forth. But I can see why they say it.

(Laughter.)

QUESTION: Is there going to be an immediate effect that we will notice for consumers?

MS. BINGAMAN: I hope consumers, within a short period of time, will have more choice of operating systems, genuine choice, more innovation in computers. Certainly, the prices will lower for consumers who already buy competing operating systems. Any of these companies in the market right now can now sell just for their price, not for this double tax that Microsoft has gotten.

So, I think prices will immediately lower, and I think, over the medium to long range, this will, I hope and believe, have profound market opening impacts. It will help innovation, help the competition give us better products. You may be using a different operating system three years from now because of this—maybe. And if you are, great. If you still want whatever, great. But the point is you should have a choice. Everyone should have a choice. And the companies that compete with Microsoft should be able to offer you that choice fairly and evenly.

VOICE: Thank you.

QUESTION: Microsoft's competitors in applications have complained about the access that they have had to all kinds of information about the operating system code. Did the Justice Department not find that Microsoft had unfairly restricted applications developers to various aspects of the software?

MS. BINGAMAN: The nondisclosure agreement, the so-called NDA part of the case, focused on nondisclosure agreements required—are you talking about something else?

QUESTION: I mean, certainly the NDA has been part of it, but other companies—

MS. BINGAMAN: The so-called interoperability?

QUESTION: Yes, yes, hidden calls and all of the charges that have been raised over the past few—

MS. BINGAMAN: I can tell you we have looked closely at all aspects of this case. We have examined it closely. And I think all that I can say, because of the strictures of confidentiality and the law, is that we have looked at it and this is the case we chose to bring because this is the case that is there and needed to be brought. And I think that is all I should say. VOICE: Okay. Thank you.

VOICE: Thank you.

MS. BINGAMAN: Okay. Thank you.

VOICE: Thank you very much.

(End of proceedings.)

TAB 13

TO APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT

IN CIVIL ACTION NO. 94–1564 (SS)

SIGNED BY GARY REBACK

Microsoft's Grip on Software Tightened by Antitrust Deal

94–1564

Clerk, U.S. District Court District of Columbia

Andrew Schulman

On Friday, July 15. Microsoft signed a consent decree with the Antitrust Division of the U.S. Department of Justice (DoJ), ending a four-year investigation by U.S. antimonopoly agencies-first the Federal Trade Commission (FTC) and later the DoJ—into Microsoft's trade practices. At the same time, Microsoft signed a nearly identical settlement with the Directorate-General for Competition of the European Commission. The judgment lasts for six and a half years in the U.S., four and a half in Europe.

Microsoft agreed to immediately abandon several arrangements for licensing the MS-DOS and Windows operating systems to PC hardware vendors. It also agreed to halt some ''unnecessarily restrictive'' clauses in its nondisclosure agreements (NDAs) for the forthcoming ''Chicago'' version of Windows. The consent decree explicitly excludes Windows NT.

The consent decree is still subject to a 60-day public review. The full text of the DoJ's July 15 complaint against Microsoft for violations of sections 1 and 2 of the Sherman antitrust act. the U.S. District Court final judgment in U.S. v. Microsoft, and the

''Stipulation'' signed by the DoJ and Microsoft consenting to the final judgment. are available via Internet Gopher from the DoJ's Gopher server. Who Won?

The consent decree was first viewed as a victory for the DoJ and Microsoft's competitors. The New York Trines (July 17) cartied the front-page headline. ''Microsoft's Grip on Software Loosened by Antitrust Deal,'' and crowed that ''the pact could reshape the world of computing .... The accord could undermine Microsoft's near total control of tile market for operating systems.'' The Boston Globe's headline was equally enthusiastic: ''Microsoft Accord to Greate Competition in US. Europe.''

Indeed. the consent decree sounds at first as if it should cramp Microsoft's style, and lead to more competition in PC software. For years. Microsoft tins provided PC hardware manufacturers (original equipment manufacturers, or OEMs) with per-processor licenses to MS-DOS and Windows. in which the vendor pays Microsoft based on the number of machines it think it will ship, rather than the number of copies of DOS or Windows it actually uses. In 1993, such per-processor agreements accounted for about 60 percent of MS-DOS OEM sales, and 43 percent of Windows OEM sales. According to the DoJ, ''Microsoft's per processor contracts penalize OEMs. during the Life of the contract, for installing a nonMicrosoft operating system. OEMs that have signed per processor contracts with Microsoft are deterred from using competitive alternatives to Microsoft operating systems.''

The consent decree put an immediate stop to this practice, leading to the hope that non-Microsoft operating systems would now have a shot at the desktop.

But the morning after, nearly everyone realized that. in fact, U.S. v. Microsoft is a victory, for Microsoft. Directly contradicting the previous day's headline, a New York Times (July 18) news analysis by John Markoff spoke of ''Microsoft's Barely Limited Future'': ''Rather than reining in the Microsoft Corporation, the consent decree... frees the company to define compurer industry's ground rules through the rest of the decade.'' The Wall Street Journal had a similar take: ''A Winning Deal: Microsoft Will Remain Dominant Despite Pact In Antitrust Dispute.'' According to the Journal Gates -has just won big again, this time by letting the Justice Department rake in a small pot while his company retains the power to dominate the nation's desktops.

In the Fast day of trading after the settlement. Wall Street made its statement on the consent decree: Microsoft stock rose $1.87, to $50,50. Rick Sherlund, an analyst for Goldman Sachs, stated that with the settlement. Microsoft ''should dominate the market for desktop software for the next 10 years.'' Another frequently quoted analyst. Richard Shaffer, announced that -The operating system wars are over—Microsoft is the winner .... Microsoft is the Standard Oil of its day.'' But how could a ban on an important Microsoft trade practice be viewed as cementing Microsoft's hold on the industry? First. to achieve the DoJ's goals, the change from per-processor to per-copy licensing probably comes about four years too late. Despite some brave words from IBM and Novell after the consent decree. it seems unlikely that the change will lead to a larger presence for OS/2 or Novell DOS. As a spokesman for Compaq (which already offers OS/2 to its customers) noted, ''Windows is the standard—not much will change.''

Nor does the consent decree address the key questions about Microsoft's role in the PC software industry. Companies such as Lotus and Borland that compete with Microsoft in application areas such as word processors and spreadsheets have long asserted that Microsoft ''leverages'' its control of the operating system to benefit its applications—particularly the Microsoft Office ''suite,'' which bundles together Microsoft Word. Excel, Access, Mail, and PowerPoint—at the expense of applications and suites from other vendors. Grabbing the Whole Pie More and more. Microsoft's applications seem like part of the operating system. Many PCs today come. not only with MS- DOS and Windows preinstalled on the hard disk, but also with Microsoft Office. The forthcoming ''Chicago'' release of Windows will include numerous features once considered the province of dried-party applications developers. Microsoft not only has a near-monopoly on the operating system. but is constantly expanding the definition of what belongs in the operating system.

Some commentators see these increasing ties, and the DoJ's apparent refusal to touch them, as a good thing. For example, Steward Alsop was quoted in the New York Times (July 18) as saying, ''If you really care about improving the personal computer, you want Microsoft to take over all the pieces of the pie.''

There is a certain logic in this. For example, one reason the Apple Macintosh was for so long far easier to use than a PC was that Apple had a closed architecture and completely dominated the market, guaranteeing that almost everything carne from a single vendor. Monopoly has some clear benefits. In certain situations. such as public utilities, monopoly may he the only viable industry structure, leading to a so-called ''natural monopoly.''

Dr Dobb's Journal, October 1994

Interestingly. the superb biography Gates, by Stephen Manes and Paul Andrews Doubleday, 1993), quotes a 1981 statement by Microsoft chairman Bill Gates where he noted that volume and standards in PC software can lead to a ''natural monopoly'' But companies in such a favored position usually are forced to make an Important trade-off: so-called natural monopolies are generally regulated, are prevented from expanding their monopoly into new areas, and so on. Microsoft continues to deny that it monopolizes the PC software industry Microsoft already has MS-DOS installed on about 120 million PCs in the and Windows on about 50 million. With the DoJ consent decree, Microsoft can move even more rapidly toward its goal of becoming an unregulated, nonpublic utility providing total, one-stop shopping for all your software needs.

Exposing Microsoft's Monopoly Microsoft continues to deny that it monopolizes the PC software industry. Nor has it admitted to any guilt by consenting to the court's final judgment. The consent is explicitly ''without trial or adjudication of any issue of fact or law: and without this Final Judgment constituting any evidence or admission by any party with respect to any issue of fact or law.''

Nonetheless. the PC software industry has been treated to some puzzling denunciations of Microsoft trade practices from high government officials. After the signing of the consent decree. U.S. Attorney General Janet Reno said. ''Microsoft's unfair contracting practices have denied other U.S. companies a fair chance to compete, deprived consumers of an effective choice among competing PC operating systems, and slowed innovation.''

The Assistant Attorney General for Antitrust. Anne Bingaman, noted that 'Microsoft is an American success story but there is no excuse for any company to try to cement its success through unlawful means, as Microsoft has done with its contracting practices.''

'Microsoft has used its monopoly power, in effect, to levy a 'tax'' on PC manufacturers who would otherwise like to offer an alternative system.'' said Binga??an. ''As a result, the ability of rival operating systems to compete has been impeded. innovation has been slowed and consumer choices have been limited.'' According to a DoJ press release. Bingaman noted that Microsoft has maintained the price of its operating systems even while the price of other components has fallen dramatically, and that. since 1988. Microsoft's share of the market has never dropped below 10 percent.

The Road Not Taken

No matter what else it says, the fact remares that the consent decree addresses only a narrow issue: OEM sales represent less than 25 percent of Microsoft revenue. The complaint notes that ''At least 50,000 applications now run on MS-DOS and over 5000 have been written to run on Windows. Microsoft sells a variety of its own very successful and profitable applications.'' But that is all it has to say about applications!

The complaint also notes that ''All versions of Windows released to date require the presence of an underlying operating system, either MS-DOS or a close substitute.'' but says nothing about alleged tying arrangements between Windows and MSDOS (see ''Examining the Windows AARD Detection Code'' DDJ. September 1993).

Similarly, the complaint mentions 'critical information about the interfaces in the operating system that connect with applications—information which the ISVs need to write applications that run on the operating system''—yet doesn't address the issue of whether or not Microsoft unfairly withholds some critical information. trying to give its developers exclusive use of undocumented interfaces.

Likewise, the DoJ was well aware of. and quite interested in. the Issues surrounding Microsoft's ownership of the vastly Important DOS and Windows standard, Yet none of this is addressed in the consent decree, which ends up looking quite similar to what Microsoft probably could have got from the

FTC a year ago. Even Bill Gates, who was apparently in the habit of denouncing even the mildest FTC and DoJ questions as ''communistic'' and ''socialistic.'' had to admit that the final settlement was no big deal saying, after years of investigation, that ''this us what they came up with'' (Wall Street Journal, July 18).

Why So Little?

Why did the DoJ settle for so little? How could they seemingly ignore the entreaties of so many PC software vendors? One theory is that the Clinton administration views Microsoft as a ''national treasure.'' and put pressure on DoJ to leave Microsoft alone. The press made much of a May 25 meeting between Bill Gates anti Clinton's chief economic advisor. Robert Rubin. The date is significant because j?? one week later. Gates testified under a

Dr. Dobbs Journal. October too.

(continued from page 144)

before the DoJ. According to one anonymous source. Gates pointed out to Rubin that Microsoft is responsible for a substantial portion of U.S. software exports (Information Week. June 27).

Frankly. I don't buy Clinton administration pressure as an explanation for the DoJ's limited settlement. Microsoft may be highly visible, but it simply isn't that important to the U.S. economy, at least when compared to companies such as IBM or GM that make tangible goods. Microsoft, remember, produces software. While software is a crucial part of the modern world economy, consider that even ''giant'' Microsoft has only about 15,000 employees and that its quarterly'' sales are about $1.25 billion, compared to $13.3 billion for IBM. or even $2.5 billion for Apple.

What makes Microsoft different is its incredibly low costs. This is very nice for Microsoft, but it's hard to see what it does for the U.S. economy, especially when 45 of Microsoft's stock is owned by insiders. Had it wanted, the DoJ could have made a moderately plausible case to the American public that Microsoft. far from being a 'national treasure,'' is simply a grossly profitable monopolist, with few employees and few stockholders, that gives back little to the public.

Another explanation is that DoJ feared a repeat of U.S. v. IBM, which dragged on for 13 years, only to be dropped as ''without foundation.'' While you could easily imagine lawyers for the DoJ not wanting to stake their careers on a losing battle, you have to wonder whether U.S. v. IBM was such a complete washout, after all. Even though the case was eventually dropped, for years it had a serious effect on IBM. You could even argue that it was this supposedly unsuccessful case that caused IBM to unbundle software from hardware, thereby opening the way to an independent software market, making room for software upstarts, including a company called Microsoft. In many cases, Microsoft was a beneficiary of U.S. v. IBM, and ''the next Microsoft'' could have been a beneficiary of a U.S. v. Microsoft case.

Ultimately, I think that the DoJ didn't push for more against Microsoft for the very simple reason that they felt they couldn't win anything else. Responding to widespread criticism of the settlement as a DoJ sell-out, Anne Bingaman protests, ''folks, we looked at every aspect of this. We brought the case that was there to bring.'' According to the DoJ, the Microsoft settlement was ''everything we could have hoped for in a fully litigated case. and possibly more.'' This is probably true. Law like politics. is an ''art of the possible.'' While the settlement gives the Microsoft steamroller the green light, at the same time it's hard to see what the DoJ could have done differently. The DoJ's job is to enforce the antitrust laws. not to make industries more competitive—and the two are not the same.

Market Share (Perc??nt)

OPERATING SYSTEMS. WORD PROCESSORS SPREADAHEETS

Microsoft	66	47	52
Novell/WordPertect	14	35	—
Lotus	—	3	37
IBM	17	—	—
Apple	2	—	—
Borland	—	—	6

What all this means is that those Microsoft practices studied by the DoJ, but not covered in the settlement, are either not illegal, or would be too difficult to prove illegal.

Where To Now?

While there might be some private antitrust action from Novell, Lotus, or Borland. and while the terms of the settlement are subject to public review, Microsoft must be feeling emboldened by the limited scope of the consent de cree. Microsoft should be able to go fullsteam ahead with its plans to greatly expand the operating systems dimensions in Chicago. Microsoft Office will increasingly seem like an essential part of Windows. With policies such as its new. heavy, requirements for using the ''Windows Compatible'' logo (see ''How to Adapt an App for Chicago: Requirements for the New Windows Logo.'' Microsoft Developer Network News, July 1994). Microsoft is raising the Windows developmerit bar ever higher.

The PC-software industry is rapidly headed in the same direction as many other technology-based industries before it: rapid consolidation to a handful of vendors. There once were hundreds of U.S. car manufacturers: now there are just a few. With Novell's ?? of WordPertect and parts or the Bor??and product line, with Symante??s acquisition of Central Point, and Microsoft's purchasing a minority share in Stac Electronics, we are already seeing the same (,probably inevitable) process occurring in software. As Table I shows, market More and more, Microsoft's applications seem like pan of the operating system shares reflect an already highly concentrated industry.

On most scales. Microsoft is about twice the size of its two nearest competitors combined. Lotus had 4450 employees and Novell also had 4450; Microsoft has 14,450. In 1993, Lotus sales were $981 million and Novell sales were $1.123 billion; Microsoft sales were $3.753 billion.

Given that the DoJ could apparently do very little about this increasing concentration in the software industry, what are software developers and vendors to do?

It is probably stating the obvious, but there is Little point in trying to compete with Microsoft over productivity apps and office suites. These are rapidly becoming a quasi part of Windows itself, and even Novell and Lotus probably have little chance in this area. Microsoft Office is everywhere and everything. Perhaps there is still some room in databases. desktop publishing, and personal-finance software.

As always, another interesting area is plugging holes in Microsoft's own offerings: add-ins to Microsoft Office, remedying the inevitable temporary problems in Chicago, and so on.

The best bet is to find areas where Microsoft doesn't have a product, and where there is a chance of a several-year window of opportunity before it does have a product. On the other hand, the only market I've ever heard of that Microsoft didn't want to get into was pornographic screen savers and related multimedia titles. As one company employee told me, ''We looked carefully at adult software. and decided to leave that money on the table.''

TAB 14

TO APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT

IN CIVIL ACTION NO. 94–1564 (SS)

SIGNED BY GARY REBACK

The Economist

A survey of the computer industry

Trade's new diplomats

FILED FEB 14 1995

Clerk, U.S. District Court

District of Columbia

94–1564 SS

THE COMPUTER INDUSTRY

FOR three decades the computer industry seemed to epitomise the marriage of technological wizardry and business acumen. Led by IBM. the industry masterfully exploited a pace of technological change that would have left managers m most other industries gasping. It grew through boom and bust, and revolutionised the way nearly all other businesses worked. Best of all, it consistently made enormous profits.

Computer executives saw themselves as both innovators and adventurers. Some pioneered new ways to manage armies of highly educated, independently minded employees. A few left the security and prestige of a corporate career, or went straight from the university classroom, to start corn-Dames from scratch. Naturally some computer firms failed. But the industry, as a whole was largely immune to the travails that periodically beset more mundane businesses. For many people, computers were the quintessential industry of tomorrow. Tomorrow has arrived and it is not a pretty sight. For the past two years the computer industry has been in turmoil: plummeting profits, flat sales, tens of thousands of jobs lost, vicious price wan. The industry's reversal of fortune has been so abrupt that it has left many of its leading comparues floundering. IBM, the biggest computer maker and long one of the most successful companies in the world, lost $4.9 billion in 1992, one of the biggest corporate losses in

history. In January John Akers. Its boss, resigned. Last year the company shed 40,000 of its 340,000 employees in an effort to control costs (which still look hopelessly bloated). Its stockmarket value is now about the same as Microsoft, a firm which employs only 12,000 people. And the once-mighty Big Blue is not alone, DEC, the world's second-biggest computer firm, ousted its founder and chairman in 1992 and lost a whopping $2.8 billion. Olivetti, Siemens-Nixdorf. Groupe Bull, Fujitsu, Hitachi and NEC have all seen profits collapse over the past two years. Wang, a high flier until the early 1980s, ended up in a bankruptcy court.

Clearly computers are no longer recession-proof. But global recession is not the only, or even the primary, cause for the industry's recent tribulations. Recession has simply accelerated changes that have been reshaping the industry anyway. Un?? the mid-1980s the computer business was dominated by a handful of large firms—foremost among them IBM—whose marketing and technological prowess let them educate, reassure and control the corporate customers who bought most computers. Smaller compantes often introduced the latest technology to the market; but usually their innovations were not widely accepted until they, got the im?? of Big Blue. These smaller firms seldom posed much of a threat.

The invention of the personal computer (PC) in the late 1970s brought in a motley collection of brash, new firms. At first the growing popularity or PCs had little effect on me fortunes of the inqustry's leading firms. Indeed. IBM itself became the world's biggest manuracturer of PCS, and its marketing clout helped their sales to soar. For 20 wars IBM had skilfully coped with technological advances that appeared to be far more radical, or disruptive, than the personal computer. Few people inside or outside the company thought that mere relatively any and rather simple machines were much of a threat to IBM's hegemony or to the stability of the industry as a whole.

Getting personal

They, were spectacularly wrong, in the past few years, personal computers and the microprocessor chips on which they, are based have upturned the economics of the business. This has happened so quickly that many computer executives are bewildered. Their industry has become one of con fusing extremes. In any large industry the fortunes of different firms will vary. But in today's computer industry the differences are stark.

While many computer firms sacked thousands of workers and last huge amounts of money last year, others thrived despite price wars and recession. On the day in August 1992 that Wang filed for chapter-11 bankruptcy, Dell, a personal-computer maker, reported quarterly sales up 129% and net profits up 77%. In 1992 some companies, such as Apple and Compaq, which looked doomed because of the price wars ravaging the PC market, staged stunning comebacks (though they too had to cut)obs and other costs). Price-cutting spread from hardware to software. And yet profits at Microsoft, the world's biggest personal-computer software company, leapt 53%. The computer business still boasts many of the world's fastest-growing and mast profitable firms. But it now has some of the change is sweeping away the established computer industry. Firms are scrambling to find their place in the new industry that will replace the old. But even for those that survive, the turmoil will continue. David Manasian reports Disappearing profits Return on sates* world's biggest loss-makers too. Today's industry offers other remarkable contrasts. Despite the fact that its overall profitability has fallen so sharp??y (see chart 1). hordes of new competitors continue to enter almost every part of it. And far from slowing the pace of innovation, as might be expected, hard times seem to have quickened it. An unprecedented number of new products came to market last year. This stream is about to become a flood. With chip technology improving faster than ever, a plethora of new products will reach the market over the next few years: pen-based PCs, hand-held computing and communication devices, ever more powerful versions of today's desktop and notebook computers, sophisticated network and database software. cheaper and fancier supercomputers.

Moreover, a growing part of the computer market shows many of the classic characteristics of a commodity business: there are few discernible differences between products except price, low bamers to entry and razor-thin profit margins. This is a novelty for such a high-tech, inventive business. The large amount of intellectual property contained in computer products, and their complexity, ought to make it easy for companies to keep out new ovals, differentiate their products and command fat matins. Instead, even in many esoteric niches of the industry, growing competition is eroding margins.

Equally remarkable is the web of collaborative deals that spans the industry. As competition has become fiercer, the number of joint ventures, alliances and mahatma agreements has multiplied rapidly, although this has done nothing to soothe the growing ferocity of competition. Nearly every firm, whether small or large, now has a vanity of ties with dozens of others. Confusingly, many alliances seem designed to compete with other alliances containing some of the same firms, as companies place multiple bets on new technologies or market wends. Although these agreements are often between companies with complementary products, many are between once-bitter rivals, such as Apple and IBM, who stress that their collaboration does not rule out tough competition between them now or in the future.

Perhaps one of the most puzzling things about the computer industry is that, for all its vitality, its glory days of high growth and gushing profits are probably over. In a recent report on the industry. McKinsey, a management-consulting firm, predicts that the industry's sales will grow by 6% or less 3 year—scarcely more than me nominal growth rate for me world economy as a Whine. ''Just surviving will be a struggle and even many of today's healthy companies could become extinct,'' says Michael Nevens, one of the report's authors. Others agree with this gloomy assessment. IBM predicts that software and services will grow at some 11–13% a year between now and 1997; but sales of hardware will lag well behind economic growth.

Evangelical fervor One reason is that the cost of computing power continues to drop by 30% or more a year, became of advances in chip technology that show no signs of slowing. This inexorable improvement has now begun to outstrip the demand for more computing power from customers. Another reason for stow growth is that, with more than $300 billion in sales, the computer industry is now so large that it probably cannot expect to capture a much bigger chunk of corporate or consumer spending. Most businesses, laboratories and classrooms already have some type of computer, Many are crammed with them. Because of the rocketing popularity of notebook and laptop computers, so are many, briefcases.

A barrage of new products will be needed just to keep spending at current levels. In fact, the amount spent on computers per white-collar worker (the biggest users of computers) has been flat in America since 1983, and has recently levelled off in Europe and Asia as well (see chart 2). The total stock of hardware and software in developed economies is also set to level off in the next few years, according to many forecasters.

Even if the industry must learn to live with humdrum growth, there will be nothing dull about the computer business itself. This survey will spend little time on the myriad ways computers are used or how they are changing lives. Instead it will try to examine the peculiar economics of computers, and to make sense of the blizzard of news the industry generates every day. Why does it present in many conundrums? And why has no shakeout yet ended what, compared with most other large industries, looks like intolerable instability?

The growing number of competitors and the pace of technological change are raising the level of uncertainty, for both computer firms and that customers. As a result, the bosses of most computer companies are no longer the smug technologists or buttoned-down managers of a decade ago. They are preachers fervently trying to sway customers, suppliers, investors, employees—and often themselves—with their vision of the future. One of the industry's favorite verbs is to ''evangelicise.'' This is an odd choice for sober-suited managers carefully investing billions of dollars. But it is all too appropriate to the opportunists or true believers now best equipped to survive in the computer business.

THE COMPUTER INDUSTRY SURVEY'S

Personal best

TO UNDERSTAND how drastically those little personal computers have changed the industry, and why they have suddenly left it in such a fragmented state, a little history is needed. Until the late 1970s, nearly all computers were large machines used to grind through mind-numbing calculations and routine book-keeping chores. Computers were especially useful in making the administration of large organizations more efficient. Outside laboratories, they were bought in the greatest numbers by large companies, which could afford to pay their

hefty prices and to employ the professional programmers and technicians needed to keep the temperamental machines from breaking down.

Machines came in various sizes, the two broadest categories being mainframes and minicomputers. Both types could have several users at once, who sat at terminals to put data into the machines or to take it out. Mainframes soon stood at the heart of most of the world's biggest companies. Smaller and less expensive (though still quite pricey; minicomputers were often used by the divisions of the same firms, or by medium-sized firms which could not justify spending enough to buy a mainframe.

IBM bestrode the industry, accounting in 1980 for 38% of the industry's revenues and 60% of its profits. Even if IBM had not become such a dominant firm, a small group of large firms would probably have controlled the industry in any case. There are two reasons for believing this. First, computers were the most complicated machines ever made, in Pact, they were so complicated that even individual machines were called ''systems''. And second, though the Industry was large in revenue terms, relatively few machines were sold each year. As recently as 1980, fewer than 10,000 mainframes and 105,000 minicomputers were sold worldwide each year. Such volumes are significant for suppliers of capital equipment, but they are minuscule compared with those of the car or other consumer industries. Customers were reluctant to buy these cranky machines from anyone but large, established suppliers. So newcomers had a hard time breaking into the lousiness.

The complexity of computers produced another crucial characteristic of the industry; it virtually ensured that computer makers would opt for vertical integration—that is, to make most of the parts of the machines themselves, with the software to run them, rather than buying parts from outside suppliers, and to do most of their own marketing, distribution, sales and service as well. A few of the smaller firms could not manage this. They, either specialized in supplying pieces of equipment, such as terminals, tape drives or printers, which were attached to computers, or they, bout hr what they could from outside suppliers. This put them at a huge disadvantage, for the simple reason that there were so few independent suppliers for the many components needed to build a computer. So the bit computer firms built their own machines from the ground up.

The resulting structure of the industry looked something like the diagram above. Customers cared little about the various layers identified in this diagram, because they almost always bought all the layers in a stogie package from one supplier. It is useful to pause here to define these terms, because they will loom large later on.

Basic circuitry refers to the thousands of wires, transistors and other electronic bits which were mall computers. In the 1970s and 1980s most of these bits and bobs were gradually replaced with integrated circuits printed onto small pieces of silicon—ie, microchips. This allowed some specialized chip firms, such as Intel. Motorola and Texas instruments, to become parts suppliers to computer makers. But many of the biggest computer makers, most notably IBM and Japan's Fujitsu, NEC and Hitachi, made their own chips.

Computer platforms refers to the assembled machines. These were useless without operating system software, the programs needed to make the machines do anything but hum. Once the operating system enabled the machine to respond to vanous commands, application software told the machine what to do: compile the payroll, store data, solve abstruse equations, perform word-processing or whatever. Several applications usually ran on the same computer. As the diagram shows, firms did most of their own distribution, although some machines were sold through computer-leasing firms or ''systems integrators''.

One more point must be made: all computer makers used ''proprietary'' standards both to build their hardware and write their software. Except for a few firms which tried to mimic IBM's standards, no firm's software worked with any other firm's software, or ran on any other firm's machine. This locked customers into a single computer supplier.

As a customer's investment in computers grew, the more dependent on his supplier he became, The cost of scrapping all of a firm's existing hardware or application software (which big firms sometimes wrote themselves) to switch to another supplier became prohibitive. Occasionally a customer became restless, especially if a supplier was charging too much, fell too far behind the rest of the industry technologically or failed to service hrs machines properly. A few small, specialized firms sprang up to engineer so-called ''gateways'', bits of hardware Days of yore, when IBM was king and software that would allow machines from different companies to work together.

For the most part, though, customers had to commit the bulk of their spending on computers to a stogie supplier. The safest thing to do for anyone who had to make this purchasing decision—in big companies usually the data-processing manager— was to buy from the biggest supplier, no matter what the cost And that, by a long way, was IBM.

Chips with everything From its inception, the personal-computer market assumed a different pattern from the established industry. PCs became possible only because chip manufacturers had managed to cram a simple version of a computer's central processing unit, the circutes that did most of the actual computing, on to a single chip. Appropriately, this was called a micro-processor. Around a stogie microprocessor, a small, cheap machine could be assembled from readily available parts used to supply the consumer-electronics industry. So most personal-computer makers were never vertically integrated. Separate groups of firms supplied pare, fully assembled machines (platforms), operating-system software and application software.

Personal computers were primitive compared with mainframes and minicomputers. But they, could perform simple tasks such as word processing, keeping mailing lists or playing games, and they proved surprisingly popular. To grab some of the revenue from this small but burgeoning market, IBM launched its own PC in 1981. Because it wanted to do this quickly, it assembled its machine from off-the-shelf components made by firms which were also supplying other Pc: makers. It arranged to buy the two most important parts of the machine—the microprocessor and the operating-system soft ware—from (respectively) Intel and a small Seattle-based company called Microsoft.

With IBM's backing, personae-computer sales skyrocketed. At first this was great news for IBM. which had the ?? share of sales and considered Pc revenues simply a welcome supplement to its mainstream computer business. Thousands of small software companies ocean writing application programs for IBM's machines, boosting demand for mere still further.

Still, from several points of view IBM had badly miscalculated. Buying the key parts of its machines from Intel and Microsoft, without demanding any kind of exclusive deal, effectively left control of the technical standards in these companies'' hands. Scores of other firms, many of them new ones such as Compaq, quickly learnt to ''clone'' copies of IBM'S machines using Intel chips and Microsoft's MS-Dos operating system. Their machines also ran all the software written for IBM's machines. To the user, therefore, there was no real difference between them. Users began buying the machines primarily on the basis of price. As demand for the machines took off (see chart 3), hundreds of small, low-cost producers jumped into the market. Prices began to collapse, even while the growing power of microprocessors rapidly boosted the capabilities of PCS.

Until the mid-1980s, many PCs were sold customers—individuals, schools, small businesses, professional firms—who would never have been reached by tram or other established computer makers. But when big corporate customers began tying the mast powerful PCs together into networks as alternatives to minicomputers and mainframes, IBM became alarmed. In 1987 it belatedly tried to gain control of the personal-computer market with new models containing a patented technology called Microchannel, which rivals could not copy and which made IBM's machines incompatible with everyone else's. Competitors aptly dubbed these machines ''clone killers''. But by then it too late. The PC market had slipped beyond IBM's grasp and the Microchannel machines flopped. Big Blue, like any other manufacturer, had to make its machines fit the industry's standards. Three were now set by millions of personal-computes users and owned by. Intel and Microsoft.

In only a few wars, before IBM or the other established computer makers had realized what was happening, an entirely new computer industry had grown up next to the old one.

Harsh new world

The companies which made a comfortable living for so long in the old computer industry face a challenge rather like switching from making battleships to rowing-

boats in just a few years. Almost every defining feature of the old industry, has been reversed in the new one. Instead of selling thousands of expensive machines to an easily identifiable set of corporate and institutional customers, the new industry, sells tens of millions of cheap machines each war to individuals, businesses of any size and sham, and every type of organization imaginable. Unlike mainframes or minicomputers, personal computers need little maintenance. And most of their software can be bought off-the-shelf, like a can of beans, rather than custom-designed for each user by teams of expert programmers. As a result, even in large corporations the computer-purchasing decisions are now made by hundreds of people with little technical knowledge, instead of just one or two computer nerds. Instead of the proprietary hardware and operating-system software of the old industry, ''open'' standards now prevail. These permit the products of a growing number of computer firms to work together, which has opened the door to thousands of new firms that now compete at every link of the ''value chain'', from chips to distribution. Peter Shavoir. IBM's chief business strategist, estimates that 2,500 firms took some pan in the computer industry of 1965, but that 50,000 jostle for business now. Most of the new ones entered the industry, m the 19805 along with the personal computer.

Despite this upheaval, the old computer industry will survive for some time yet. And mainframes, in particular, may never entirely disappear. Lame organizations will need to process huge mountains of data quickly and store it securely in a single, central machine for a long time to come. ''Some customers will always require robust, bullet-proof, bet-your-business kind of applications. These really do belong on a mainframe,'' argues Nick Dono??io, head of IBM's mainframe unit.

However, sales of such big machines are shrinking. Networking, the fastest-growing segment of the new computer industry, strikes at the heart of the old. At first PCs were strung together in networks to allow the users of individual machines to send information to one another. In the industry's jargon this is known as ''peer-to-peer'' computing. Some peer-to-met users no longer needed to be connected to a larger computer to communicate.

More ominously for the makers of big machines, the honest trend in the industry is now the much more sophisticated ''client-serve'' network. In this type of network, a large number of personal computers (''clients'') are connected to a central personal computer (''the server'') which, at a fraction of the cost, does many of the things a minicomputer or mainframe once did, such as storing data, managing the flow of information between users and enabling them to work on the same documents. Many of these networks are built around a powerful type of personal computer called a work-station, based on a microprocessor called a RISC chip. Pioneered by Sun Microsystems, work, stations were first used by, engineers. Now they are being used by, businesses for a variety, of tasks and have become one of the fastest growing, and most fiercely contested, pans of the computer market.

The rapid growth of client-server networks is eliminating the need for big computers in many organizations. Companies like IBM and DEC, which sell big machines, reply that in many cases big machines themselves will function as the server for a host of ''client'' PCS. Nevertheless, with spending on hardware unlikely to grow, some class of machine must suffer, and higher-cost mainframes and minicomputers seem the most likely losers.

Even if demand for bill machines holds up longer than expected, the creation of the new computer industry, has wreaked havoc with the economics of the old. Spoilt by the convenience, choice and ever-falling paces offered by personal computers, buyers have demanded the same low mature, nance, open standards and price reductions from large machines. The growing use of microprocessors in mainframes and minicomputers has enabled the old-style computer makers to provide some of what their customers want. But this has also left them adrift with armies of surplus salesmen, service staff and factory workers, which accounts for the thousands of layoffs in the past year. Today all firms need a niche

SURVEY THE COMPUTER INDUSTRY

Less is more

?? or PC computing power views If microprocessor technology continues to advance as rapidly as it has clone in the past (see chart 41— and everyone in the industry expects, it to do so-by me end of the 1990s even mainframes could be the size of PCs. They might be just as cheap too.

Well before mat happens. It is likely that the new industry will have swallowed the old one. Because it represents the future, and is airea?? where most of the action takes place, the rest of this survey will concentrate on the new computer industry and refer to the old only in passing.

Horizontal desires

Discerning a clear structure in the new industry is hard, but the diagram below is one attempt to do it. Like any such diagram. It is a simplification: technology and competition could soon change it. And yet it is a useful guide to the industry today, so will be used as the map for the rest of this survey. Begin by comparing it with the much simpler diagram on page 9 of the old computer industry. The most stoking thing is that the new industry Is a series of horizontal layers, each containing many companies, rather than the vertical, single-company towers of the old industry. Each layer represents a distinct market. The barriers to entry, for new firms vary from layer to layer: but in no layer are they as high as they were for the old computer industry as a whole, in which any new firm hoping to challenge the established computer companies head-on had to build an entire vertical tower of its own. As a result, competition in every layer of the new industry is much fiercer than it ever was in the old. This explains why profits for the entire industry have dropped since 198&

The diagram is borrowed from Andy Grove, the boss of a successful American chip maker, Intel. It is easy to see why he is fond of it.'' For us. who deal in the fundamental technology, it's wonderful.'' he says. Intel's dominance of the microprocessor level (layer 1) is matched only by Microsoft's hegemony in the client/stand-alone operating-system software level (layer 3) two steps above. Barriers to entry in both these layers are relatively high, because Intel and Microsoft have established de facto industry standards with their products. Supplanting them would be hard but (more on this shortly) neither Intel nor Microsoft is unassailable.

Layer 2, computer platforms, includes assembled personal computers of every size and shape— desktops, workstations, laptops and notebooks. Largely because Intel's dominance of microprocessors has established an industry standard in this layer, barriers to entry are minimal. Any technician who can buy intel, or intel-standard, chips land intel sells to anyone Jean ??oit together a respectable desktop PC from readily available components. So. predictably, this layer is where competition is fiercest. The continual newspaper and television advertising of computers which most people see, and the brutal price war which has captured so much attention in the business press over the past two years, come from firms competing in this layer.

The next layer, operating-system software, is divided between the basic software needed to operate the central server of a network and the software needed to run diem machines in the same network or stand-alone PCs. The top half of the layer is much bigger than the bottom half—some 90m machines run these operating systems compared with just a few million functioning as servers. But the bottom layer is growing fast and is highly profitable. For the purposes of this diagram, their relative sizes are not relevant and so they are shown as equivalent.

Layer 4. applications software, is the arena in which Microsoft, Lotus, WordPerfect, and Borland battle for marker share. This layer projects into a third dimension because a few of the biggest application categories—spreadsheets, word processing, database management and graphics—are distinct markets in themselves, although all fit into the layer. Barriers to entry for any new firm hoping to grab business in one of these categories are somewhat higher than to computer platforms, became writing such complicated programs is time-consuming and expensive. The need for a strong brand name, and the ability to market and distribute such general, purpose software packages also act as barriers to newcomers. But tens of thousands of small firms compete in the application layer outside these areas with specialized software packages.

The layer above that is probably the most competitive of all, as firms scramble to find the most efficient way to reach customers with machines and software. In recent years, some of the industry's biggest winners and losers have been here. Dell grew from nothing in 1984 to just over $2 billion in sales in 1992 because It invented a new, lower-cost way to distribute personal computers: mad order sales backed by telephone hot-lines offering technical advice. The barriers to entry, in this layer are low. Dell already has a host of imitators snapping at its heels, though this has yet to slow the firm.

Parts of the industry are left out of this map. They include memory chips, which work with microprocessors, and other components such as disk drives: peripherals such as printers and modems, and services, a fast-growing part of the industry. Services come in various forms: ''outsourcing'' (performing all the data-processing chores for a corporate or institutional customer); consulting (advising customers on how to reorganize their businesses to take advantage of computers): and systems integration (making a customer's computers work together).

One reason why such services are growing so quickly is that big corporate customers are confused by all the products being offered by the new computer industry. Every lame company from the old computer industry—IBM. DEC. Bull, Unisys and others—is now hoping to win much of the service business by exploiting the large marketing and service operations which they built to support the sale of their large machines.

Although memories, peripherals and services are sizable and growing segments of the computer industry, they are supplements to its core, represented in the diagram, where most of the strategic choices must be made and the technology is moving fastest. This is where me industry's crucial competitive Battles are being fought, and where firms will emerge as either victors or victims.

Do it my way

THE noisiest of those competitive battles wall be bout standards. The eyes of mast sane people tend to glaze over at the very mention of technical standards. But in the computer industry, new standards can be the source of enormous wealth, or the death of corporate empires. With so much at stake. standards arouse violent passions. Much of the propaganda pumped out by individual firms is aimed at convincing customers and other firms that their product has become a ''standard''.

It is for the customer's sake that standards matter. All industries need them, simply because so many things made by different companies must fit together to be of any use. Standards can either be a set of specifications and practices, or they can be embodied in a single product, without some standards or other, no new industry can get off the ground. In its first two decades, the car industry Fought fiercely over standards for everything from the size of nuts and bolts to whether vehicles would have steering wheels or boat-like tillers. Eventually, car makers managed to establish standards for enough key features and components to reach a mass market. But even in today's cat industry, not everything is standardized, as anyone who has fumbled with the controls of an unfamiliar rental car will know.

The world is full of standards that are entirely neutral, belong to nobody and simply make life easier (sliced bread fits mast toasters). But standards, and who owns them, have always been a critical competitive issue in the computer industry. In the old industry, standards were mealy set, and owned, by, vertically integrated manufacturers and used to lack in customers and lack out competitors. By contrast, the new computer industry has rejected, at least rhetorically, such proprietary standards in favour of ''open'' standards to which all firms have access. Customers like open standards so much that they have resisted the old computer industry adopt them as well. Mainframe and mini-computer makers now declare themselves keen advocates of openness, although mast of their products still do not connect easily to those of rivals.

Once established, open standards offer what economists call ''network economies'', which can entrench standards even when they are not the best available or abreast of the latest technology. In the case of personal computers, such network economies were enormous. Customers had strong reasons to buy machines built to the standard because they felt confident that large amounts of software would be available to run on them, and that most other machines would be compatible. Conversely, even tiny software firms suddenly had what promised to be a huge market at which to aim. Firms like Lotus, WordPerfect and Borland racked up hundreds of millions of dollars-worth of sales from a stogie hit product. A ''virtuous cycle'' had been created. As mote software was written for IBM-compatible personal computers, more people wanted these machines. AS more machines were sold, demand for software increased.

And yet open standards represent a trade-off for both computer firms and that customers. If the standard is embodied in a component that contains much of the value of the finished product—as it was in Intel's microprocessor—firms which use that component can find it difficult to differentiate their products without violating the standard. The result in personal computers has been brutal price competition. And any standard, open or not, eventually becomes an obstacle to technological progress. With both microprocessor and software technology changing so rapidly, this conflict is especially acute in the computer industry. As a result, even agreed standards tend to be undermined by new technologies within a few years, compelling companies to pay the high costs of abandoning the old standard, and sparking a struggle among firms to establish a new one.

Open standards have become the religion of the new computer industry, to which everyone pays obeisance, so perhaps it is not surprising that schismatic wars have broken out over the meaning of the term. All firms now claim that their products are open, but that those of their competitors are not.

''The eskimos have 21 words for snow. These guys need 21 words for 'open'.'' says Tim Bresnahan, an economist at Stanford University. Generally there are two ways to set open standards: through negotiations by several firms or by the adoption of a standard established by a single firm.

There have been repeated efforts to establish multi-firm standards, especially for operating-system software. Most of these have been based around an operating system first developed by AT&T called Unix. different versions of which can run on every size of machine from mainframes to personal computers. AT&T pledged to license the basic programming code of Unix to any other company at minimal cost. But most multi-firm efforts have failed for the simple reason that the participating firms cannot trust each other. There are now many rival versions of Unix sponsored by various firms from IBM to Sun Microsystems, all of which are, to a significant degree, incompatible with one another, although all are promoted as open.

Standard-bearers

In fact, widespread adoption of a single firm's product is the only way truly open standards have been established in the new computer industry. ''The irony of open standards is that they have to be based on a monopoly, which then earns enormous amounts of money for whatever firm owns it, observes Todd Hixon, a technology analyst with the Boston Consulting Group. The most famous—some industry executives would say infamous-example ?? Microsoft's MS–DOS operating-system software, which now runs on 80m PCs.

Any firm in Microsoft's position has to make some difficult decisions. Owning a standard product is like possessing any monopoly; it is worthless unless a firm can derive income from it. But if a firm charges too much, other firms will rebel, and either try to copy the product or pay the cost of switching to another as a standard. Microsoft has played this delicate game with consummate skill. It has charged too little for MS–DOS to spark much rebellion, while assiduously encouraging other software firms to write application programmes which run on it. As the power of microprocessors grew, the company was also careful to develop new versions which took advantage of the new chips, but which were compatible with all earlier versions, so that users never had to scrap all their old software when they bought a new personal computer. Today nearly all PCs, except workstations and Apple's machines (which use Apple's proprietary operating system), come with MS–DOS already installed. Nevertheless, even MS–DOS's days are numbered, because of technological advances.

Every firm in the computer industry, no matter what layer it competes in, now dreams of repeating Microsoft's triumph. ''Even as late as 1988 no one in the industry really understood how lucrative owning a standard could be,'' says David Yoffie, a professor at Harvard Business School and a board member at Intel. ''Now everyone sees it. As a result no one is willing to let another company establish it. That is what makes the prospects for profitability so problematic in this industry.''

A huge battle is shaping up in operating-system software. Microsoft has a big lead with a product called Windows, which runs on MS–DOS machines and mimics the easy point-and-click icons of Apple's computers. It has already sold more than 20m copies. But IBM is heavily promoting OS/2, its rival to Windows. In network operating-systems, which run on the machines at the centre of client-server networks, Novell has scored a success similar to Microsoft's. Its netware has become the standard. Netware's dominance is unlikely to last a decade, as Microsoft's MS–DOS has done. By the middle of next year. Microsoft has promised to launch a product called Windows NT (for ''new technology'') to compete with Netware.

Meanwhile Taligent, a joint venture established by Apple and IBM, is also working on an operating system that will run both on networks and on stand-alone machines. And many people in the industry believe that some version of Unix will ultimately prevail. In December Novell bought Unix Systems Laboratories from AT&T and 11 minority shareholders, with the obvious intent of making Unix an alternative standard to whatever is offered by Microsoft. The battle over operating systems will produce the most spectacular fireworks over the next few years. Nonetheless, scores of similar struggles to establish and control ''open'' standards are occurring in every cornet of the computer industry.

Decisions, decisions

MANAGING any business, from a fruit stall to an oil company, is a complicated task. Demand and price go up and down, competitors disrupt the most carefully laid plans, interest rates fluctuate, laws change, employees blunder. The list of possible calamities is long, that of opportunities lamentably short. And yet for most businesses the rules of the game, and so tile types of calamities or opportunities to be faced, stay much the same for years, or even decades, at a time.

For computer companies, the rules of the game itself keep changing, which multiplies all the normal complexities and risks of running any firm. There are a number of reasons for this. First, the basic technologies of the computer business—micro-processors, memory chips, screens and software—continue to change quickly, creating new products and altering both the capabilities and pricing of existing products in every layer of the industry, which has knock-on effects in all the other layers.

Second, these technologies are so widely dispersed that predicting which firms will succeed with a new technology, or suddenly spring up as a new competitor, is far more difficult than in most other industries. A vast corps of electronics engineers and programmers have been trained over the past two decades. Their job mobility and willingness to take risks are legendary. Firms have little difficulty recruiting talent, and lots of new companies are formed every year. Even in microprocessors—a capital-intensive, specialized business—intel now faces competition from a small, Texas-based firm called Cyrix, started by two engineers in 1988, in the late 1980s Toshiba, a distant also-ran in personal computers, shocked the industry when its laptop models, not those of the industry's established leaders, became a hit everywhere. Toshiba, in its turn, was shocked when its early lead was eroded by a wave of imitators, most of them American.

Third, far more often than most companies, computer firms are not selling their products to an established market, but trying to create demand for an entirely new product. This involves a lot of sheer guesswork. In 1991 many firms expected pen computers to take the industry by storm (these allow people to enter information by writing with a stylus on an electronic notepad rather than using a keyboard). Since then, sales have been disappointing. Pen computers are now seen as a niche product with limited potential.

Technological change is not unique to the computer industry. But its pace, and the fact that it is happening in so many areas at once, may be. So to succeed, or even to survive, computer firms now have to put an inordinate amount of effort into doing three things:

Collaborating. The multi-layered structure of the new computer industry and the large number of firms it now contains, mean that any single firm. no matter how powerful, must work closely with many others. Often this is in order to Detain access to technology or manufacturing expertise. A web of thousands of joint ventures, cross-equity holdings and marketing pacts now entangles every, firm in the industry. Even firms with a revolutionary product need to create a ''community'' of other firms to exploit it, argues James More, of Geo Partners, a computer-industry consultant. ''A firm has to attract help from all others in the value chain and deny it to competing communities of firms.''

Successful alliances are notoriously tricky to achieve in any business. An added complication in most computer-industry deals is that few alliances are exclusive. Firms usually retain the right to do business, or strike a similar alliance, with other firms. And alliances are often between firms that compete fiercely in other areas. Apple and IBM are jointly developing new chips, operating systems and multi-media products, all critical to both firms'' future. But Apple, like much of the rest of the new computer industry, also remains determined to steal business from IBM's corporate customers.

Given so many uncertainties, many of the grandest computer alliances predictably fail. The most spectacular break-up has been between Microsoft and IBM. The two spent wars and hundreds of millions of dollars jointly developing OS/2, an operating system to replace MS–DOS. When an early version of OS/2 sold poorly in 1990, Microsoft threw most of its marketing efforts behind its own Windows operating system. IBM felt betrayed. It has since signed marketing pacts with Microsoft's rivals. Novell and Lotus.

Watching other firms. Firms must keep a close eye on the actions of others, even those with whom they have no formal alliance or do not compete. Most firms depend on those In other layers of the industry, to succeed. If a firm stumbles in one layer, it can deal a mortal blow to firms in other layers. In the 1980s Compaq owed much of its extraordinary success in the market for assembled PCs to Intel's willingness to provide it with early supplies of its latest microprocessor. But when new RISC micro-processors designed by Run and others looked as if they would leave Intel's chips Par behind. Compaq had no choice but to join Microsoft, and 19 other firms whose products depended on Intel's chips, a consortium tailed ACE assembled to search For an alternative. Alarmed. Intel accelerated plans to bring out a new generation of microprocessors and eventually persuaded ACE's members that it could keep up with RISC technology. In late 1992 ACE was disbanded. Similarly. Lotus bet that IBM would succeed with OS/2 after its split with Microsoft. When sales of Windows took off and those of OS/2 sputtered. Lotus was not prepared with a Windows version of 1–2–3, its popular spreadsheet program. As a result, Lotus lest market share to the Windows version of Excel. Microsoft's own spreadsheet. Lotus is still scrambling to catch up.

Monitoring technology. Like any type of company, computer firms must track their direct competitors to avoid being caught off guard by a technological breakthrough. However, technology is changing so fast in the computer Industry that just watching competitors is not enough. Our map of the industry on page 18 will probably be completely redrawn in a few years. New technologies promise to blur the boundaries between today's layers, pitting supplier against customer and turning firms which now happily co-operate into competitors. Chip makers are learning to put more and mote of the electronic bits in complete machines on to a single piece of silicon along with the microprocessor. This is a direct threat to assemblers of personal computers, who are already struggling to find ways to add value to machines and so earn profits.

In the next few years, microprocessors themselves will become so powerful that they will incorporate many of the functions of current operating-system software, or run ''emulations'' which allow them to operate with software written for other types of microprocessors. There is disagreement about whether such emulations will be efficient enough to be invisible to the user, or whether they, will slow computers down. If they prove efficient and invisible, the implications for the microprocessor and software markets are difficult to fathom.

It could prove a blow to Microsoft, Novell and others which sell operating systems. Or it could liberate them from specific chip makers. Microsoft has said that Windows NT will run on a venery of RISC microprocessors, as well as on Inters chips. If all operating systems can run on all microprocessors. then the latter could become a commodity, like memory chips, sold primarily on price. On the other hand. emulation may also allow operating systems to mimic each other. Which would mean that software written for MS–DOS or Windows could run easily on Unix. Apples operating system, and any others may come along. This, in turn could make operating systems indistinguishable commodities.

Microsoft's boss, Bill Gates, dismisses any such idea as really, rea?? wrong. It ignores the idea that there is incredibly innovative work going on in operating systems.'' That is just the problem, complain many application-software firms. They worry that Microsoft will incorporate so many functions into its new operating systems that there MR be hitie Opportunity for them to Innovate and acid value. Though Microsoft is a big application-software firm itself, it is wary of alienating other application firms because it does not want them to devote their best efforts to writing software for rival operating systems. On the other hand, the intensely competitive Mr Gates finds it difficult not to seize an opportunity, sitting right under his nose.

Meanwhile Lotus is attempting to appropriate some of the functions, and value,

of the layer below the application-software layer where it normally competes with a product called Notes, which allows users on large networks of personal computers to communicate easily and share databases. Though ostensibly an applications program—it runs on various operating systems—Notes is also something of an operating system itself. Lotus is encouraging other firms to wine applications which, in rum. exploit the capabilities of Notes. Already industry pundits are calling Notes ''middleware''. an entirely new industry layer between operating systems and applications. Microsoft plans to incorporate many of the same features offered by Notes into its new server operating-system. Windows NT. when it appears this year, which might promptly squeeze middleware out of existence.

Given all these risks, one question companies must continually ask themselves is whether or not they should be operating in the layer above or below their main business—in other words, how vertically integrated should they be? There is no single answer to this: and, because of technological changes, whatever answer looks right today may be wrong tomorrow. Apple and Sun Microsystems claim that being in both hardware and software is an advantage for making both work together, though they are now devoting the bulk of their R&D efforts to software. Mr Gates says being in both hardware and software is too risky, though he sees an advantage in being in both operating systems and application software. IBM, which is in every layer and every, market, is floundering.

MOST of the computer companies mentioned in this survey art American. That is no oversight. The industry's direction has been set in America, which is also where most of the innovation occurs. Although large, the European and Japanese computer industries are rooted in their home markets. During the past two difficult veal. European companies have lost market share even at home to American rivals. Japanese companies have fared better. Their lead in memory-chip production and their skills at low-cost manufacturing have brought them modest gains in the share of world hardware sales. But at home they are facing an onslaught from American and other companies in the personal-computer market. And they have yet to make much of a dent in software.

Japanese firms could play a bigger role, especially if mobile, hand-held computers become as big a nit as many people predict. Until that nappens, however, strategic choices made by American firms will determine the direction of the industry This article examines the strategies of four or tile most significant American firms.

As the leader of the old computer industry. IBM faces enormous challenges finding its place in the new industry. Its efforts to do so will be one of the great dramas in modern corporate history. For IBM. 1992 was a disastrous year. Even worse, it capped a precipitous slide in the company's fortunes. Since 1985 its share of the total computer market, including hardware, software and services. has slid from 30% to less than 19%. Its market capitalisation has dropped like a stone, from a peak of $106 billion to 1987 to $27 billion.

IBM has already, made wrenching changes, cutting its workforce by a quarter to 300,000 and reducing manufacturing capacity by 40% since 1986. This year it is cuing another 25.000 people. It has also reorganised its business five times over the same period. In December 1991 it announced the most drastic reorganisation of all. the division of the company into 13 autonomous businesses, each with its own balance sheet, profit and loss account and financial targets. These businesses are supposed to establish an internal marks, with prices equivalent to those offered by outsiders, which should expose hidden subsidies and obvious laggards. Whether it will make ISM as a whole more competitive is debatable. ''Markets and companies are very different things,'' says David Teece, a professor at Haas School of Business at the University of California's Berkeley campus. ''ISM may not get the full benefits of either.''

Despite its troubles, IBM remains huge. Its sales are more than three times the computer sales of Fujitsu, the world's second-biggest computer company. And amid the carnage of the past few years, it has scored some remarkable successes. Its mintcomputers and workstations, two markets which it entered years too late. have said well.

Today technology is coming out of IBM'S vast R&D establishment much more quickly, producing a wave of new products in 1992. It has also launched a range of low-cast personal computers and copied the direct marketing and telephone technical support pioneered by Dell. The inadvertent creator of the new computer industry, IBM has now had to adopt the new industry's ethos, pledging to make all its products connect easily to those of other companies. It has collaborative deals with thousands of firms, including many of those whose success has done so much to destroy its hegemony. Lotus, Novell. Apple and others are all too happy to let IBM's huge salesforce flog their products to large corporate customers. Whether Big Blue gets much out of this is Itself difficult to say. The company's top managers say they are now determined to give customers whatever they want, even if that means selling someone else's product, or helping a customer scrap an expensive ISM mainframe in fayour of a cheaper network of workstations and personal computers.

If it is to remain a single entity. IBM has no choice but to adopt this strategy of being all things to all customers. But IBM IS competing against thousands of specialised firms aiming at every cor''or of its market and every lover of its value-added chain. Even if its mainframe patrimony, still its piggest business, survives longer than sceptics suggest. IBM may not be able to remain either so vertically integrated or so ubiquitous in an industry which is fragmenting quickly. IBM executives seem at a loss about what to do next. A new boss at the company may break it up.

Cool operator

Microsoft has replaced IBM as the industry's most feared and admired company. Its financial performance has been spectacular, largely because of its near-monopoly in PC operating systems, which account for 40% of its sales. Other firms in the industry. are gunning for Microsoft. Complaints by rivals of anti-competitive behaviour have sparked an investigation of the firm by America s Federal Trade Commission. which could cause Microsoft big headaches m the future. IBM's alliances with Apple. Novell and Lotus are clearly designed to deny Microsoft dominance of the next generation of operating systems, whether on stand-alone machines or the servers at the heart of client-server networks. Sun Microsystems aims to do the same thing. Mr Gates shrugs off criticisms from other firms. ''Custamers don't care much about whaler other companies in the industry are comfortable with us,'' he says. ''Who gives a damn? He rubbishes rival products. IBM'S OS/2 operating system, he states flatly, will be dead in two years.

Behind the outward taunting, Mr Gates has dis. played great skill and determination in building Microsoft into a powerhouse. Ironically, in the 1980s the firm's application programs for its own

TAB 15

TO

APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT

IN CIVIL ACTION NO. 94–1564 (SS)

SIGNED BY GARY REBACK

Electronic Engineering

TIMES

February 18, 1991

Windows stars at SD91

BY RAY WEISS

Santa Clara. Calif.—The tenor of last week's System Development Conference was clear evidence that Microsoft Corp.'s Win. dows is well on its way to becoming the dominant operating-software platform for personal computers. SD91. here. was essentially a Windows show: More than one-third of the vendors in attendance had Windows-related products. Developers flocked to see Windows products, while software vendors launched the second wave of Windows 3.0 development software.

A typical reaction was that of Craig A. Snow. manager, software engineering, at Sophia Systems Inc. (Palo Alto. Calif.): ''Everybody is going to Windows. It's inevitable. Everybody is looking for the right tool or vehicle to build Windows products.''

Microsoft's dominance of Windows development tools was cha??lenged by a number of tool vendors. Archrival Borland International debuted its next- generation Borland C + + product for Windows. which can build Windows programs without the heretofore required Microsoft System Development Kit (SDK). Jenson & Partners Inc. (JPI) announced its integrated set of Top-speed compiler/tools for Windows and DOS. JPI's tools, too. are complete Windows tool kits.

But Microsoft (Redmond. Wash.) is fighting back by preparing a new set of tools for reiease this year. To hold the fort in the meantime. Microsoft integrated its SDK and C6.0 C compiler, and dropped the combined price by 25 percent.

Breakthrough product Borland's C + + is considered by many Windows programmers

to be a breakthrough product—easier and faster to use than the older Microsoft C6.0 and SDK tools.

''This is the tool I've been looking for.'' said B.J. Safdie. a technology analyst with Sony Corp.

(Woodcliff. N.J.).

Borland C + + has a fully integrated development environme, nt. including the Turbo Debugger, which can run in a DOS window in Windows'' standard protect mode. The package includes the interactive WhiteWater Group Resource Toolkit. with which to build Windows applications resources (bitmaps, fonts, dialog boxes, etc.)— a job normally handled by the Microsoft SDK resource editors. Many developers welcome Borland's offering.

The new C + + package supports Windows code. Users can build Windows programs, including DLLs (dynamic linked libraries). Additionally, Borland C + + minimizes compilation time by precompiling program header (.h) files. This saves tune. for some .h files, like Windows??h ??used in all Windows programs), have more than 20.000 lines of code.

Interestingly. as Borland Challenges Microsoft. Borland itself is being challenged by Jensen & Partners. a sp??off of Borland International. Its CEO. Niels Jensen, was one of the cofounders of Borland.

JPI's Topspeed Professional Techkit targets Borland's traditional strength: Turbo Pascal. ''Unlike our competitors.'' said Jensen. ''our Pascal compilers are ISO compatible, as is our C compiler.'' Microsoft is fighting back by preparing a new set of tools for release.

The new compilers announced by JPI at SD91 brought a new tack to PC software tools. JPI debuted four compilers for Windows development: C. C + +. Modula-2 and ISO Pascal. Unlike any other PC compilers, all of these run in a single environment (as DLLs) and share a common code generator Users can buy and add as many compilers as they want. Addition. ally. they can compile mixed code concurrently, and the libraries are shared, i.e.. C or Pascal programs can access Pascal or C library procedures/functions.

What's more. the JPI compilers feature some technical break. throughs, including virtual pointers (typed pointers, which, when de-referenced, cause a function to be called) and DOS-based dynamic linking with DLLs (an overlay manager that uses the Windows DLL format). Also included with the languages is a pre-emptive. multitasking kernel that runs on top of DOS.

'We'll be there'' Microsoft is busily working on its own advanced tool sets. ''You can bet that we will be there with nextgeneration tools.'' said Fred Gray. Languages general manager at Microsoft. The company is working at both better Windows development tools and a C + + compiler. Additionally, the company already has a 32-bit compiler as part of the new SDK for OS/2.

Many analysts expect Microsoft to field that 32-bit compiler for Win. dows, undercutting Borland and JPI. whose compilers are still 16-bit architectures, despite the fact that many developers are now running on 32-bit 386 and 496 machines.

Microsoft actually helped Borland in getting its Windows product out. ''We have a tool-independent program,'' said Gray, ''that treats our own languages group the same as any other ISV (independent software vendor). Microsoft is out to get Windows accepted and will help compeutors like Borland. In fact. we get Windows and other operating system releases the same tune as do the ISVs.''

Other vendors at SD91 presented products that support the emerging Windows development market. These include 32-bit cornpilers from Zortech (C + +) and Warcom (C). as well as Windows GUI (graphical user interface) builders, such as Professional WindowsMaker from Blue Sky Software Corp. (Las Vegas. Nev.) and VZ Programmer for Windows.

Additionally, two key Windows products bowed that fill critical needs for Windows developers: Pcsteam, a hardware ICE for Windows that monitors 386 systems out to 33 MHz with a fully compliant Code View debugger, and Distinct, the first TCP/IP package for Windows—it includes Berkeley Sockets. RPC/X.DR and NFS, Linking Windows applications to the Unix networking world.

Getting attention

Windows is attracting a lot of attention. ''Windows provides a full graphics environment,'' said Isadore Sobkowski, principal. Knowledge Associates Ltd. (Riverdale. N.Y.). ''It's a perfect base for our new generalized expert system. ACE.''

Another company. Expert-Ease Systems Inc., is moving its process-control software to Windows. ''People want Windows—it's a nstrig market.'' said Dave Kuhlman. senior software engineer. ExpertEase (Belmont. Calif.). ''But I will continue to develop using OS.2— you can just do a lot more with 0S,2 than with Windows.''

Many programmers accept Windows as inevitable. ''Windows has the market attention.'' said Sony's Safdie. ''But it's a lot like those kits people used to buy and put on a Volkswagen. making it look like a Maserati or some luxury car. Under the hood is still a Volkswagen.''

Ronald Surratt, principal, C Carp Designs (Laytonville, Calif.), plans to use Windows as a user-interface for software tools. ''Windows is here and accepted. It Lakes care of the graphical user interface as well.'' Surratt will combine Windows with Small for development. ''You can do an awful lot with a small amount of Smalltalk code: with Windows it minimizes development time,'' he said.

But there are others that cannot live with Windows internals. ''Win. dows is not deterministic.'' said Christopher Bajorek, president of Telephone Response Technologies Inc. ''We do real-time voice systerns and have built a pre-emptive multitasking operating system on top of DOS for our needs.'' Bruce Wallace. a development engineer at Quantum Institute, at the University of California at Santa Barbara, uses OS/2 for real-time controt of a free electron laser.

TAB 16

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IN CIVIL ACTION NO. 94–1564 (SS)

SIGNED BY GARY REBACK

Inventing-and reinventing the proprietary architectures for open How Architecture Wins Tech??

by Charles R. Morris and Charles H. Ferguson

The global computer industry is undergoing radical transformation. IBM, the industry's flagship, is reeling from unaccustomed losses and is reducing staff by the tens of thousands. The very survival of DEC, the industry's number two company, is open to question. A roll call of the larger computer corn. panies—Data General, Unisys, Bull, Olivetti, Siemens, Prime-reads like a waiting list in the emergency room.

What's more, the usual explanations for the industry's turmoil are at best inadequate. It is true, for example, that centralized computing is being replaced by desktop technology. But how to explain the recent troubles at Compaq, the desktop standard setter through much of the 1980s? Or the battering suffered by IBM's PC business and most of the rest of the desktop clone makers, Asian and Western alike?

And the Japanese, for once, are unconvincing as a culprit. The fear that Japanese manufacturing prowess would sweep away the Western computer industry has not materialized. True, Japanese corn. panies dominate many commodity markets, but they have been losing share, even in products they were expected to control, like laptop computers. Earnings at their leading electronics and computer companies have been as inglorious as those of Western companies.

Explanations that look to the continuing shift in value added from hardware to software, while containing an important truth, are still too limited. Lotus has one of the largest installed customer bases in the industry. Nevertheless, the company has been suffering through some very rough times. Meanwhile, Borland continues to pile up losses.

Nor are innovation and design skills a surefire recipe for success. LSI Logic and Cypress Semiconductor are among the most innovative and wellmanaged companies in the industry, yet they still lose money. Design-based ''fabless,'' ''computer. less'' companies such as MIPS have fared very hadly too. MIPS was saved from bankruptcy only by a friendly takeover. And Chips and Technologies is m dire straits.

Government protection and subsidies are no panacea either. The European computer industry is the most heavily subsidized in the world but still has no serious players m global computer markets. Charles R. Morns is a partner in Devonshire Partners. a Cambridge. Massachusetts technology consulting and financial advisory firm. Charles H. Ferguson. an MIT Ph.D. and former MIT researcher, is an independent consultant, also in Cambridge, This article is based on their book Computer Wars: How the West Can Min in ??ost IBM World which was lust published by Fimes Books.

Scale, friendly government policies, world-class manufacturing prowess, a strong position in desktop markets, excellent software, top design and innovative skills-

none of these, it seems, is sufficient, either by itself or in combination with each other, to ensure competitive success in this field.

A new paradigm is required to explain patterns of competitive success and failure in information technology. Simply stated, competitive success flows to the company that manages to establish proprietary architectural control over a broad, fastmoving, competitive space.

Architectural strategies have become of paramount importance in information technology because of the astonishing rate of improvement in microprocessors and other semiconductor components. The performance/price ratio of cheap processors is roughly doubling every eighteen months or so, sweeping greater and greater expanses of the information industry within the reach of ever-smaller and less expensive machines. Since no single vendor can keep pace with the deluge of cheap, powerful, mass-produced components, customers insist on stitching together their own local system solutions. Architectures impose order on the system and make the interconnections possible.

An architectural controller is a company that controls one or more of the standards by which the HARVARD BUSINESS REVIEW March-April 1993 entire information package is assembled. Much current conventional wisdom argues that, in an ''open-systems'' era, proprietary architectural control is no longer possible, or even desirable. In fact, the exact opposite is true. In an open-systems era, architectural coherence becomes even more necessary. While any single product is apt to become quickly outdated, a well-designed and open-ended architecture can evolve along with critical tech. nologies, providing a fixed point of stability for customers and serving as the platform for a radiating and long-lived product family.

Proprietary architectures in open systems are not only possible but also indispensable to competitive success—and are also in the best interest of the consumer. They will become increasingly critical as the worlds of computers, telecommunication, and consumer electronics continue to converge.

Architectures in Open Systems

In order to understand architecture as a tool for competitive success in information technology, consider first the many components that make up a typical information system and the types of companies that supply those components.

Take the computer configuration in a typical Wall Street trading or brokerage operation. Pow??ul workstations with 50 MIPS millions of instructions per second)—comparable to the power of standard mainframes-sit on every desk. The workstations are connected in a network so they can communicate with each other or with several others at a time. Teams of workstations can be harnessed together to crunch away on a truly big problem. Powerful computers called servers support the network and manage the huge databases-bond pricing histories, for instance—from which the workstations draw.

Such a modern network will be almost entirely open, or externally accessible by other vendors; critical elements, from perhaps as many as a hundred vendors, plug interchangeably into the network. The workstations themselves are from companies like Sun Microsystems, Hewlett-Packard, and IBM, or they may be powerful personal computers from Apple or any of a number of IBM-compatible PC manufacturers. IBM and Hewlett-Packard make their own workstation microprocessors; most workstation or personal computer makers buy microprocessors from companies like Intel, Motorola, Texas Instruments. LSI Logic, AMD, and Cyrix. Almost all the display screens are made in Japan by Sony, NEC, and many other companies; the disk drives come from American companies like Seagate or Conner Peripherals. The memory chips are made in Japan or Korea. The network printers will typically have laser printing engines from Japan or, if they are high-performance printers, from Xerox or IBM; the powerful processors needed to control modern printers will come from AMD, Motorola, or Intel. The rest of the standardized hardware components on the network, like modems, accelerator boards, coprocessors, network interface boards, and the like, will be made by a wide variety of Asian and American companies.

The network will have many layers of software, most of it ''shrink-wrapped'' from American companies. The operating system-the software that controls the basic interaction of a computer's corn. ponents-may be a version of AT&T's UNIX, specially tailored by the workstation vendor, as with Sun and IBM, or it may come from a third party, like Microsoft. Many vendors, like Lotus and Borland will supply applications software. The complex software required to manage the interaction of the servers and workstations on the network will, in most cases, be supplied by Novell The software that converts digital data into instructions for printer engines is sold by Hewlett-Packard. Adobe. or one of their many clones. Each smaller element in the system, like a modem or video accelerator, will have its own specialized software, often supplied by a vendor other than the manufacturer.

It is possible to construct open systems of this kind because for each layer of the network there are published standards and interface protocols that allow hardware and software products from many vendors to blend seamlessly into the network. The standards define how programs and commands will work and how data will move around the system the communication protocols and formats that hardware components must adhere to, the rules for exchanging signals between applications software and the operating system, the processor's command structure, the allowable font descriptions for a printer, and so forth. We call this complex of standards and rules an ''architecture.''

A small handful of the companies supplying components to the network will define and control the system's critical architectures, each for a specific layer of the system. The architectural standard setters typically include the microprocessor designer (such as Sun or Intel); operating system vendors (possibly Sun or Microsoft); the network system (usually Novell); the printer page-description system (Adobe or Hewlett-Packard); and a small number of others, depending on the nature of the network. Each of these is a proprietary architecture; although the rules for transmitting signals to an Intel processor, for example, are published openly for all vendors, the underlying design of the processor is owned by Intel, just as the design of Sun's operating system is owned by Sun, and so on for Microsoft's Windows/DOS, Novell's Netware, or Adobe's PostScript.

Companies that control proprietary architectural standards have an advantage over other vendors. Since they control the architecture, they are usually better positioned to develop products that maximize its capabilities; by modifying the architecture. they can discipline competing product vendors. In an open-systems era, the most consistently successful information technology companies wall be the ones who manage to establish a proprietary architectural standard over a substantial competitive space and defend it against the assaults of both clones and rival architectural sponsors.

It has been conventional wisdom to argue that users, and the cause of technological progress, are better served by nonproprietary systems architectures. This is emphatically untrue. There are many examples of nonproprietary architectures, like the CCITT fax standard or the NTSC television standard, most of them established by government bodies or industry groups. Because they are set by committees, they usually settle on lowest-common-denominator, compromise solutions. And they are hard to change. The NTSC has been upgraded only once (for color) in a half-century; committees have been squabbling over an improved fax standard for years. Proprietary architectures, by contrast, because they are such extremely valuable franchises, are under constant competitive attack and must be vigorously defended. It is this dynamic that compels a very rapid pace of technological improvement.

Architectural Competitions

The computer industry has been competing on architecture for years. Take the example of the product that established IBM's dominance in the mainframe computer business-the IBM System/360. The 360 was arguably the first pervasive, partially open, information technology architecture. In the late 1960s, once the System/360 became the dominant mainframe solution, IBM began to unbundle component pricing and selectively open the system, in part because of government pressure. Published standards permitted competitors and component suppliers to produce a wide range of IBM-compatible products and programs that were interchangeable with, and sometimes superior to, IBM's own. By licensing its MVS operating system to Amdahl, for example, IBM made it possible for Fujitsu, Amdahl's partner, to produce clones of the IBM mainframe. Much of what was not licensed away voluntarily was acquired anyway by the Japanese through massive intellectual property theft.

Hundreds of new companies selling IBM-compatible mainframe products and software

placed in HARVARD BUSINESS REVIEW March-April 1993 tense competitive pressure on IBM. But they also assured that the IBM standard would always be pervasive throughout the mainframe computing world. As a result, even today IBM controls some two-thirds of the IBM-compatible mainframe market and an even higher share of its profits, not only for central processing units but also for disk drives, systems software, and aftermarket products like expanded memory. Because they have no choice but to maintain compatibility with the IBM standard, competitors must wait to reverse-engineer IBM products after they are introduced. Typically, by the time competitive products are on the market, IBM is well down the learning curve or already moving on to the next generation. And as the owner of the dominant architecture, IBM can subtly and precisely raise the hurdles whenever a particular competitor begins to pose a threat. For over 20 years, in generation after generation, IBM has played this game brilliantly and won every time.

Ironically, IBM badly fumbled an equivalent opportunity in desktop computing, handing over the two most critical PC architectural control points-the systems software and the microprocessor-to Microsoft and Intel. Since any clone maker could acquire the operating system software from Microsoft and the microprocessor from Intel, making PCs became a brutal commodity business. As a high-cost manufacturer, IBM now holds only about l 5 % of the market it created.

In a related error, Compaq made the mistake of assuming that IBM would always control the PC architectural standard. On that premise, the company geared its cost structure and pricing policy to IBM's, only to find itself almost fatally vulnerable when the savage PC price wars of the early 1990s exposed the commoditized character of PC manufacturing. Tellingly, while IBM and Compaq struggle to eke out profits from their PC businesses, Microsoft and Intel are enjoying after-tax margins of about 20%, on sales of more than $4 billion and $6 billion respectively, and together they have more cash than IBM.

For a similar example, consider the case of Lotus. Lotus got its start in a market-spreadsheet software—where products are complex and featurerich, hardly commodities. And over the years, the

3. Successful architectures are proprietary, but open. Closed architectures do not win broad tranchises. Choosing the right degree or openness is one or the most subtle and difficult decisions in architectural contests. IBM opened its PC architecture too broadly—it should have, and could have, retamed control of either or both the operating system and microprocessor standard. Apple made the opposite mistake of bundling the Mac operating system too closely to its own hardware. Sun, in contrast to Apple, opened its SPARC RISC architecture very early, both to software developers and processor cloners; it has the lead position in workstations, and its broad base of third-party software support has helped maintain customer loyalty though a series of technical stumbles. Autodesk's computer-aided design (CAD) software for builders is open to add-on third-party packages, like kitchen design tools, and its broad base of supporting software has given it control of a small but very profitable franchise.

4. General-purpose architectures absorb special-purpose solutions. Architectures that cannot evolve to occupy an ever-broader competitive space are dead ends. Wang's lucrative word processor franchise was absorbed by general-purpose PCs. Special-purpose CAD workstations from Daisy, Applicon, and others were absorbed by more general-purpose desktop machines. Special-purpose game machines will, in all likelihood, be absorbed by more general-purpose consumer systems.

5. Low-end systems swallow high-end systems. Minicomputers poached away huge chunks of mainframe territory and were assaulted in turn by workstations and networks. Workstations are under pressure by increasingly high performance PCs. Traditional supercomputers and very high-end mainframes are vulnerable to parallel arrays of inexpensive microprocessors. High-end data-storage systems are similarly under attack from arrays of inexpensive, redundant disks. Although IBM helped create the personal computer revolution, it steadfastly refused to recognize its implications. Until relatively recently, it even called its desktop products division ''Entry Systems,'' ignoring the fact that today's microprocessor-based machines are a replacement for traditional computers, not an entry point or way station to them.

However, managers must keep in mind that even those companies that best follow these principles are not necessarily guaranteed continued success in the marketplace Architectural contests typically move through a number of different phases and only those companies that successfully Architectures that cannot evoke to occupy an everbroader competitive space are dead ends.

navigate them all, maintaining their pace and direction in the fluid environment of rapidly evolving technologies, emerge as winners over the long term. It's a delicate balancing act, and one that requires ever-increasing flexibility as the technologies mature.

There are five principal phases to architectural competition:

Commitment. Architectural challenges usually emerge from the early-stage chaos of competing point products. Before the IBM PC, personal computers were rigid, closed systems that tended to bundle their own operating systems and applications software. Compaq had the insight that by purchasing a Microsoft operating system identical to that of the PC, it could ride the wave of the PC's success. Microsoft then insisted that all subsequent clone makers buy the same operating system and so seized the critical PC software architectural standard. Microsoft's insight was to realize that it was in an architectural contest and to take the appropriate steps, including steadily expanding the generality and scope of its systems to come out the winner.

Diffusion. Large proms come from broad franchises. Open architectures are successful because they can be broadly diffused. Xerox's Interpress page-description software, which converts digital data into printer instructions, is excellent but can be purchased only with Xerox high-end printers. Adobe, by contrast, has widely licensed its PostScript language and has become the industry standard setter. Intel widely licensed the early versions of its xx86 processors, then sharply restricted licensing of its 386 chip after the Intel standard had become firmly entrenched. IBM, on the other hand. has long resisted diffusing its mainframe and minicomputer software. Of course, diffusion decisions are not without risk. Once again, balance and timing are essential. For example, Philips licensed its cornpact disc technology to Sony to increase market penetration. But Sony outperformed Philips and Took, half the market. Philips's standard was a static one that it never developed further.

Lock-to. A company has a ''lock'' on an architecture when competitors are trained to wait until the architectural leader introduces each new product generation. Intel and Microsoft, at least temporarily, seem to have achieved this position in PC markets. Sun was on the verge of a locked in franchise in workstations but may have fallen short; the performance of its SPARC RISC processor design has been lagging behind the competition, and the company neglected to solidify its franchise by moving rapidly down to lower end platforms.

But lock-in is sustainable only when a company aggressively and continuously cannibalizes its own product line and continually and compatibly extends the architecture itself. This is a strategic choice that many companies find difficult to make. Often, managers become overprotective of the products that brought them their original success. IBM, for example, has frittered away a powerful lock on back-office transaction processing and operating systems. In a misguided effort to protect hardware sales, It has refused to release products, long since developed internally, that would adapt Its best-selling AS400 minicomputer software to the RS6000 workstation. Such reflexive self-protecnon simply hands over a valuable franchise to the Microsofts and other vendors storming up from the low end.

Harvest. Of course, the ultimate objective of architectural competition is to win a market leader's share of the profits, lust to give one dramatic example, profit margins on Intel's xx86 family of chips are m the 40% to 50% range and account for well over 100% of the company's earnings. But no locked-in position is ever completely safe, and companies must be careful when they harvest not to rest on their previous successes. Indeed, Intel may have harvested too aggressively, drawing out spirited recent attacks by clone makers such as AMD and Cyrix.

Obsolescence and Regeneration. lust as products must be cannibal??zed, so must architectures themselves. The better the architecture. the longer its lifespan: but sooner or later every architecture, no matter how well designed becomes obsolete. And before it does, the market leader must be prepared to move ahead, to do away with the old and introduce the new. Industry, leaders often fall to cannibalize their old

architectures, but although nothing IS more painful, to do so is absolutely necessary. Otherwise, competitors quickly move to create and introduce rival franchises, and these eventually dominate the industry. IBM's failure to cannibalize Its mainframe and minicomputer franchises provides a stark example of the catastrophic effects of waiting too long.

DEC provides another example. The company developed outstanding RISC products very early. But DEC declined to cannibalize its profitable VAX-VMS architecture because its VMS operating system, the source of its franchise, was tightly integrated with its aging VAX hardware. Predictably, DEC was beaten out by vendors such as Sun Microsystems and Microsoft, which didn't hesitate to move in with their newer, more powerful alternatives. (The main developer of DEC's advanced systems, Dave Cutler, IS now In charge of developing NT for Microsoft.)

There are three lessons here. First, with better architecture DEC could have kept VMS alive longer. If VMS had been ''portable,'' that is, not restricted to VAX hardware, DEC could have ported VMS to other vendors'' hardware, making VMS an industry standard. Indeed, the company could have used RISC technology itself without losing its VMS franchise. Second, DEC would have been better off cannibalizing itself, rather than waiting to be cannibalized by others.

The third lesson, though, is the most important. As DEC's experiences with VMS and IBM's mistakes with the mainframe and minicomputer franchises show, the cultural and organizational structures useful for managing traditional, closed, integrated businesses will not work for companies that intend to compete with architectural strategy. In fact, we believe that architectural competition is stimulating the development of a new form of business organization.

This new structure, which we call the Silicon Valley Model, has major implications both for information technology and for many other indusfeedback, at levels ranging from individuals to business units. At Microsoft, team members rate each other periodically In peer reviews. Outstanding performers are rewarded; laggards are warned, then fired. Technical expertise is required for a large fracnon or senior management, and communication occurs directly between the relevant parties, unbuffered by hierarchy.

By contrast, performance ratings in traditional bureaucracies are determined by managers at higher levels, and compensation is rarely based on longterm corporate performance. The process is often heavily politicized; dissent is suppressed, and incompetence goes unpunished.

Architectural competition also exposes Silicon Valley Model firms to another form of peer review— product competition. To succeed as industry standard setters, firms must license their architectures to competitors, while also developing critical products themselves. As a result, each layer of the firm land of the architecturel is exposed to direct competition and market feedback. Hence although Microsoft controls Windows, application groups still compete individually: Excel against Lotus and QuattroPro, Word against WordPerfect and AmiPro, and so forth. Architectural leadership provides an advantage, but prevents a cover-up. Silicon Valley Model firms are structured so that excellence is the only defense.

3. Clean boundaries, both internal and external. In architected corporate structures, organizations can create and dissolve alliances rapidly, both internally and externally. Organizations are very flat, and development groups have simple, clean interfaces to each other determined by architectural boundaries. Architecture and point products can be Silicon Valley Model firms take an additional step: the structure of the firm itself mirrors the technical architectures it uses.

kept apart. Moreover, products can invisibly incorporate architected ''engines'' developed by other organizations, including competitors. For example, a start-up called InfoNow has organized alliances involving itself, Microsoft, publishers, computer vendors, and other software companies. InfoNow packages software products, together with reviews and samples of them, which are preloaded for free on computers, the software products, however, are enHARVARD BUSINESS REVIEW March-April 1993 crypted. Users can sample them. read reviews, and then purchase them by telephone, which triggers electronic decryption. Adding new software packages is trivial.

4. Internal proprietary control of architecture and critical implementations, externalized commodities and niches. Silicon Valley Model firms seek to externalize the maximum possible fraction of their total system, while carefully controlling those at. eas required to establish and hold an architectural franchise. Thus core development of the general purpose architecture is always internally controlled. So usually are critical product implementations, which cover the broadest markets and are required either for early diffusion or later harvesting.

Broad, cost-sensitive markets are the strategic high ground, if covered by proprietary architectures. Silicon Valley firms also carefully manage their dependencies, so as not to become unilaterally deigndent on architectural competitors.

On balance, however, Silicon Valley Model firms are much less autarkic than traditional large firms. Niche products, commodity components, and at. chitectures controlled by others are outsourced, and/or relegated to licensees. In fact, Silicon Valley firms actively seek to commoitize regions not under their control.

This yields several benefits. For one, companies can focus on what they do best and on the efforts critical to architectural success. For another, broad outsourcing and licensing create competition among suppliers and licensees, which broadens the market and benefits the architectural leader. PC pricee wars delight Intel, Microsoft, and Novell; IBM and Compaq take the heat.

Interestingly, this contradicts the 1980s conventional wisdom that firms should avoid broad, costsensitive markets in favor of high-price niches. In fact, the broad market is the strategic high ground, if it is covered by a proprietary architecture. Niche product vendors can make profits, but they will remain minor players.

5. Migration and evolution over time. Just as architectures evolve and eventually become obsolete, so too with organizations. Thus the firm's internal structure and external alliances evolve along with its architecture and market position. As new layers are added to an existing architectural position (Windows on top of DOS, then NT underneath Windows), new organizations are created: a similar situation occurs when an architecture must be cannibalized. Some Silicon Valley Model firms will soon face cannibalization; it will be interesting to see how they do.

Broader Implications of the Silicon Valley Model

The Silicon Valley Model is very much a product of a few companies in the computer sector, just as mass production was invented by Ford and just-intime production by Toyota. And as in those cases, we believe that the Silicon Valley Model will diffuse throughout the broader information technology sector as the computer, telecommunications, information services, and consumer electronics industries merge.

In addition, however, as industrial competition in all industries becomes more complex and technological change accelerates, the model may have important effects upon many other fields. We think that it provides a framework that allows proprietary leaders in general to have the greatest span of control and profitability with the least complexity and smallest size. In fact, we think that the model is appropriate for small and large companies alike; it does, however, penalize unnecessary size. (Microsoft, with fewer than 15,000 employees, has a market capitalization equal to IBM's.) We will therefore close with an example of how architectural strategy and the Silicon Valley Model could have been used more than a decade ago, by Xerox.

Xerox became a large, global company through a single proprietary technology-xerography. Xerographic ''marking engines'' are the core of photocopiers, printers, and facsimile machines, all or which Xerox invented. But Xerox chose to exploit its control of xerography using the traditonal strategy of integrated companies.

Where Xerox felt it could not develop products profitably itself, it simply left the market vacant. As a result, when the company's patent position eroded, Japanese competitors took the bulk of the blossoming low-end markets for personal copiers, laser printers, and fax machines. Xerox's market share declined from nearly 100% to about 30%.

Instead, Xerox could have developed an architecture for a broad family of machines and control systems, including interfaces for scanners, document handlers, and ''finishers'' for collating, stapling, and binding. It could have licensed its technology to other firms, and/or sold them xerographic engines. It could have developed products for core markets, leaving others to niche companies.

Every few years, the company could have changed or enhanced its architectures to improve its products and competitive position. The result could have been a Microsoft-like position, with Xerox holding the lion's share of the profits in a highly competitive, dynamic market-yet one under its own effective control. We think that similar strate- gies are available to companies in other complex industries-aerospace and machine tools, among others. If so, the information sector's strategic and organizational innovations might prove as interest- ing as its technology.

TAB 17

TO APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT

IN CIVIL ACTION NO. 94–1564 (SS)

SIGNED BY GARY REBACK

Corn0uter Select, October 1994

HP Professional

HP Professional August 1994 v8 n8 040(2)

The winds of change.

(Microsoft readying three 32–13it operating systems) (PC Tips)

Author

Keyhoe, Miles B.

bstract

Microsoft is readying three new 32-bit operating systems, each of which includes powerful new features and backward compatibility with prior operating systems. Windows NT 3.5, code-named Daytona, features powerful, flexible networking capabilities that will enable Win NT systems to fit anywhere in an organization. Version 3.5 is Windows-based, although MS-DOS can be used if necessary. Windows 4.0, code-named Chicago, will provide the desktop with full 32-bit computing. Version 4.0 does not depend on MS-DOS and the eight-character limit for file names has been eliminated. Files will be referred to as objects. Some of the ''power user'' features, such as the Windows Recorder, will be missing in the first version of Chicago. Microsoft is also developing the replacement for Windows NT, code-named Cairo, but it is not expected to be available until 1996.

Full Text

Change looms on the horizon. By this time next year, most of us will have first-hand experience with at least two of three new major Microsoft operating system releases. Representing a bold leap in technology, all three releases—code named Daytona, Chicago and Cairo—feature full 32-bit implementation, backward compatibility and some powerful new enhancements.

WINDOWS NT COMES OF AGE

Windows NT, the first 32-bit operating environment from Microsoft, has been shipping for almost a year. Although it brings a powerful platform to the enterprise, it is severely limited because it relies on MS-DOS as its foundation. Consequently, it has inherited all of the limitations we've been frustrated with for years: eight character file names, relatively slow and inefficient file systems, and a 16-bit architecture.

The next release of Windows NT (version 3.5), aka Daytona, marks what I believe is Microsoft's first ''professional quality'' release of NT. It features powerful and flexible networking capabilities that let Win NT systems fit anywhere in a corporation. And, with its Advanced Server edition it's primed to serve as an engine for enterprise computing.

Like its predecessor, Daytona can use MS-DOS as its foundation; but unlike earlier versions, Daytona doesn't require MS-DOS—it is finally a Windows operating system. However, giving up MS-DOS doesn't mean giving up MS-DOS compatibility. An important feature of Daytona is its ability to emulate MS-DOS to execute existing applications.

While Microsoft continues to position Daytona as shared resource or file server for networked Windows systems, it offers a great opportunity for power users and programmers to begin experimenting with 32-bit

or multithreaded applications right away.

NEW YEARS IN CHICAGO

After spending a New Year's holiday in Chicago, t know I'd rather be anyplace but on the Lake Michigan shoreline in winter. But by December the direction of the computer winds will be turned toward Chicago. Not the city, of course, but the new Windows client software. Although some people have called the Chicago release ''Windows 4,'' I've heard rumors that the product will be marketed as ''Windows 95.''

FILED FEB 14 1995

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94–1554

Clerk, U.S. District Court

District of Columbia

Computer Select. October 1994

No matter what it's called, Chicago will finally bring full 32-bit computing to the desktop. Unlike Daytona and other Windows NT releases, Chicago is intended to replace Windows 3.1 and Windows for Workgroups 3.11 on everyone's desk. Those of you who have used New Wave will feel right at home with Chicago.

In fact, the first time I saw Chicago working, it had the same dark green desktop that I've known in New Wave for years. Documents and applications are represented by icons. You can drag-and-drop documents onto applications or just double-click the document icons.

Because Chicago does not depend on MS-DOS, file names are no longer limited to eight characters. However, using a scheme similar to New Wave, Chicago maps long file names into unique eight character file names when you use existing Windows and MS-DOS applications.

Speaking of file names, you're likely to hear what we now call files referred to as objects in Chicago— more shades of New Wave. However, Chicago will store file extensions, or file types, along with the visible document name and the operating system will use a scheme much like the existing Registration Database to map applications to document types.

In the first release of Chicago, Microsoft will be giving up some of the traditional ''power user'' features. The Windows Recorder is likely to be missing, as well as a variety of other applications. Help will be much improved, with hypertext links between the help screen and the system utilities. For example, help on setting the system time will include a link to the Date and Time module of the Control Panel to change the time directly. This should make things easier for novices as well as for those of us who support them.

LOOKING FORWARD

Even further away from Chicago is Cairo, the eventual replacement for Windows NT. Don't expect to see this release until 1996. Cairo is to Windows NT what Chicago is to Windows. Like Chicago, it will feature a brand new user interface (probably one like Chicago). But like Windows NT, it will be the workgroup. system that most individuals don't use at their desks. Because its release is so distant, it's hard to know just what will be included. But one thing is for certain—we'll probably wonder how we got by with plain old Windows 3.1.

Type

Column

Company

Microsoft Corp.

Product

Microsoft Windows 95 (Operating system)

Microsoft Windows NT (Operating system)

Topic

Operating System

Product Development

32-Bit

Record # 16 227 640

TO APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT IN CIVIL ACTION NO. 94–1564

SIGNED BY GARY REBACK

InfoWorld December 30, 1991 / January 6, 1992

SECTION: BUSINESS; One on One; Pg. 107

94–1564:

FILED

LENGTH: 955 words

FEB 14 1995

HEADLINE: Maples: No ''Chinese Wall'' at Microsoft

Clerk, U.S. District Court

BODY: District of Columbia

After spending nearly 20 years at IBM, Mike Maples several years ago became head of the applications division at Microsoft Corp. Then-Microsoft-president Jon Shirley said hiring the guy from Big Blue was the riskiest move of his Microsoft career. Well, the risk eventually paid off, because Maples is still guiding Microsoft's applications strategy and even had extra time recently to joust with InfoWorld Seattle bureau chief Stuart J. Johnston.

Johnston: How will modular applications work in the future using 0LE?

Maples: First let me explain that our applications were just getting too big. Word 1.0 had about 37,000 lines of code, while Word for Windows 1.0 had 408,000 lines of code. I didn't want to be here when they built a 4-million-line word processor, so I talked to a number of people at universities about moving to object-oriented programming. ''First fire all your programmers,'' they said. ''Then throw away all your programs, because however you got started isn't good

for object-oriented programming.'' That wasn't exactly what I had in mind.

So we came up with a way to break applications down into shared components. We developed an architecture, which we call OLE, that allowed these objects to be arbitrarily linked together. Then we took the drawing code from PowerPoint and the charting code from Excel out of the products and built these larger objects. That lets you use a charting function from one development effort across multiple products. It's good for the user because it allows them to have absolute consistency.

Johnston: I understand that the OLE spec is actually being driven by the systems side of the house, but a lot of the coding is done by applications.

Maples: The original code wad done only for apps as an internal development. Then we decided it was a generic thing that was valuable to give other vendors. We could have kept it proprietary but didn't. So we gave the responsibility for managing that to systems, which works with ISVs.

Johnston: But wasn't 0LE codeveloped with Lotus, Aldus, and WordPerfect?

Maples: The No. 1 participant was Aldus. Aldus had another specification, so we decided to resolve a single spec. But that was just two app companies trying to make their lives easier.

Johnston: Other companies are saying privately, ''These are systems issues but they are coming from the apps division, so there really isn't a Chinese Wall over there, and that's what scares us in competing with Microsoft.''

Maples: There is no Chinese Wall. We don't want there to be a Chinese Wall, and I don't think we've ever claimed that there is a Chinese Wall. Microsoft is a single company. We have a single management executive in Bill. We don't try to pretend that there is a Chinese Wall, any more than there is at IBM or Apple or any other company.

Johnston: Yet I recall Steve Ballmer using the term Chinese Wall. He said the apps division got the information about beta code and new systems designs at the same time as the people outside and that they were, in fact, two separate companies.

Maples: I never heard that. I wouldn't argue that somebody said that, but I can tell you that I've never said that.

The bigger issue would be, if we were using secrets or undocumented things, and we very consciously avoid that. A long time ago, when Windows was barely being strapped together, there were cases where things were added to make [the applications division's] life easier, but they were added for other apps developers too. But right now, to my knowledge, there isn't a single undocumented thing in Windows that is used by a Microsoft application.

Johnston: Yet this issue was evidently in the Federal Trade Commission's mind after they did the first round of interviews with third parties then expanded their probe of Microsoft.

Maples: The only things that I've ever seen reported was that the FTC got a number of complaints that they were investigating. People can make up complaints about anything. I don't see that we are doing anything illegal, immoral or irrational, and it is certainly in our interest to have a lot of Windows ISVs. As soon as the ISVs believe the playing field's not level they'll pick another platform.

Johnston: At the Applications Horizon meeting last month there was a lot of hoopla attributed to you by The Wall Street Journal about how Microsoft, despite the FTC investigation, is trying to conquer the entire market. Maples: That was very much out of context. The question was about market share on the Mac and how happy would you be if you had that share of Windows? It's fair to say that we want to compete vigorously, but we're doing that based on good products and good service. Every vendor would like world domincation and to have 100 percent market share, but to translate that as a goal is a real stretch of the imagination. Windows is on probably 30 to 40 percent of the machines being sold today. If you took the number of Windows sold as a percentage of the installed base, it's probably 8 percent, 10 percent. To dominate the market, Windows would have to triple its sales rate and you'd have to get every Windows app sale.

Johnston: But at that same conference, Steve Ballmer—or maybe it was Bill Gates—said by two years from now they expect most of the installed base to have migrated to Windows.

Maples: I listened to every speech and I didn't hear that. To believe that Windows in the next year or two could penetrate the installed base would be a very difficult situation.

Mike Maples
Senior V.P. of Applications
Microsoft Corp.
Redmond, Washington
Age: 49
GRAPHIC: Picture, no caption
LANGUAGE: ENGLISH
TO APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT IN CIVIL ACTION NO. 94–1564
SIGNED BY GARY REBACK
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Notebooks See page ??
EMBER 16, 1992 THE VOICE OF PERSOMAL COMPUTING IN THE
ENTERP??ISE VOLUME 14. ISSUE 46
PAGE 98 NOVEMBER 16, 1992
ENTERPRISE COMPUTING
94—1 564
FILED
FEB 14 1995
S. District Court;
Columbia

We may never know the true status of the Federal Trade Commission's investigation of Microsoft Corp. units the agency decides to go public with its case. But based on accounts by davelapel3, a composite of the FTC's potential casa against Microsoft Can be drawn.

Research and interviews by InfoWorld have revealed at least half a dozen cases in which Microsoft allegedly withheld information on its DOS or Windows functions from outside developers, for periods ranging from six months to several years. During these periods. Microsoft's own developers appear to have used these functions in applications or utilities that competed with those eventually developed by Independent software vendors, according to programmers who have examined the code,

In only one case (involving a version Of Microsoft Excel) do the undocumented functions appear to have saver a Microsoft application a performance advantage. But. in each case, the lack of documentation Of the functions may have given Microsoft applications & Lime-to-market lead of six months or more before similar features Could be incorporated into competing developers'' Undocumented Windows calls

Deciphering the charges leveled at Microsoft By B?? ??

Applications, say cri?? of the Redmond, Wash. firm.

?? litVigilS1110& The FTC refers to comment on pending cases (or even confirm that Microsoft is the subject of an investigation). Lacking hard facts, observers have assumed that the FTC is interested in possible anticompetitive be?? that Microsoft may have angagged to when marketing MS-DOS. OS/2. and Windows.

The tone of recent interviews sponsored by the FTC. however, suggests that the inve??tion has moved into a ?? different area: enforcing federal laws against unfair competion.

Microsoft enjoys at lent a near, ?? in W market for its two main products: DOS and Windows, market analysts indicate that Microsoft controls more than 60 percent of the market worldwide for DOS-compa??ble operat]all systems, with most of the rest accounted for by Novell Inc.'s DR DOS (mainly in Europe and Asia). Microsoft's shipments of Windows amount to 100 heroine of the market for Window 3.l-compatible operating systems. Whether this market dominance has been taken advantage of by Microsoft is hotly disputed between Microsoft and its critics in the software Industry.

Federal antitrust laws do not ?? one company from ''benignly achieving an overwhelming share of a market,'' according to Gerry Elman, CEO of Elman & Will a Philadelphia law firm that represents software companies. The Federal Trade Commission Act. however. does prohibit ''unfair methods of competition.'' This includes improper activities by companies that have a monopoly on a particular market, says Elena, who worked for six years m the ?? division of the U.S. Department of Justice.

Because the relevant act is broad, the U.S. Supreme Court m 1972 clarified the definition of unfair competition. The Court upheld an FTC policy against practices that are: 1. prohibited by ''common law, statutory, or other established ?? of unfairness''; ''. ''immoral, unethical, oppressive, or ??'': or 3. cause ''substantial injury to consumers (or competitors or other businessmen).''

This definition Is still quite broad
NOVEMBER 16. 1992

''The court interpreted congressional intent as granting the FTC wide discre ??on in identifying unfair behavior m the marketplace.'' Elman says.

OPERATING SYSTEM DEFINMON. Soft ware developers do not complain about

Microsoft reserving functions of its oper ating systems solely for the internal use of those systems. An operating system must. m fact. keep a certain number o?? functions to itself. Otherwise. applications using these functions could mike the system unstable, It is only when Microsoft's utilities and applications use those ''undocumented'' functions that combating vendors complain.

Software vendors often make substantial amounts of revenue by selling utilities that supplement Microsoft's. Prod ucts such ns the Norton Utilities. Mace Utilities. and PC Tools have been tremendous financial successes. Vendors use these revenues to fund the development of other applications, which may compete with Microsoft more directly. If Microsoft uses undocumented functions, which outside vendors cannot easily obtain, it would cut off a vital flow of cash for software development.

Consider MS-DOS The DOS operating system consists of two hidden files that are installed on a PC's hard disk. In DOS 5.0. these files are called ??.SYS and MSDOS.SYS. These files provide the core services needed for Disk Operating System functionality.

Microsoft also sells utilities, such as COMMAND.COM, which act as ''shells'' for DOS but are not the operating system itself. COMMAND.COM is replaceable and competes with 4DOS, by J.P. Soft ware: NDOS. a part of the Norton Utilities (which is based on 4DOS): and several other DOS shells.

Similarly. other Microsoft utilities. such as FORMAT.COM. are not the operating system, but use services of the 0peraline system. These ''external'' utilities compete with Novell's DR DOS and other vendors trying to sell operating systems compatible with MS-DOS.

Windows, which Microsoft markets as an operating system, also has operating. system components and utilities. The operating system consists of three components: USER.EXE. GDI.EXE, and KRN L,X86.EXE. Shells, such as Program Manager and File Manager. are not part of the Windows operating system. These shells can be replaced by other shells, which are run by Windows'' three essen. tial components. Program Manager and File Manager compete with Norton Desktop for Windows, WinTools, and numerous other products.

The distinction between the kernel of an operating system and utilities that are bundled with that operating system is often unclear, even within Microsoft. ''What are the areas that third patties can and should market?'' asks Cameron Myhrvold, product manager for the Windows Software Development Kit (SDK). ''The shell is not something we have encouraged a lot of people to replace, because of the importance of a consistent interface.''

But DOS and Windows. like most computer operating systems, are clearly made up of an essential OS kernel and simple but useful utilities that use the functions of that kernel. ''Every operating system works that way,'' says Steve Gibson. the developer of SpinRite and other utilities. ''You have a core operating system, and utilities that can't function without that core.'' ENTERPRISE COMPUTING

On top of its two operating systems. and the utilities bundled with them. Microsoft develops and sells applies. irons. These applications usually compete with those of other vendors, who would like to make money selling similar or superior products.

If Microsoft withholds information about important features of its operating systems, then uses these features in applications or utilities that compete with other vendors, is it practicing unfair competition or merely managing its business well?

Developers themselves are of different minds. ''My attitude toward the undocumented functions is it's a sort of a witch hunt.'' says Paul Yap. who leads Power Programming workshops for International Systems Design of Bellevue. Wash. ''Yes, there are undocumented calls. At the end of one chapter of my book [Chapter 5 of Peter Norton's Windows .t. 0 Power Programming Techniques, by Peter Notion and Paul Yap. Bantam. 1990], there is a statement not to use these calls.'' Yao believes developers who use these functions run the risk of their applications not working under a later version of the operating system.

With all these legal and technical issues, what is the FTC looking for in its investigation of Microsoft? The following details could influence a possible FTC challenge to Microsoft. according'' to statements from Microsoft competitors. DID MICROSFT USE UNDOCUMENTED DOS PEATURES? To understand the roots of the current controversy, it is necessary to go back to the release of DOS 2.0.

To a programmer, the behavior of DOS 2.0's PRINT.COM utility was unusual. A user was able to type a command, such as ''Print Bigfile.txt.'' and almost immediately return to the DOS prompt . Users could start and run another program. such as Lotus 1–2–3 or WordStar. while DOS sent Bigfile.txt to the printer in the background. PRINT.COM knew how to terminate, vet stay resident m DOS—it was the first TSR program.

The function calls that allowed PRINT COM to multitask were not described m Microsoft's reference books on DOS. In fact. many other function calls were not documented either.

Since it is a highly desirable feature for a program to be able to work m the background, programmers outside Microsoft began to puzzle out how this marc was accomplished. One result was a TSR called SideKick, released m 1984 by a troy company now known as Borland International Inc.

SideKick. a personal information manager, was a remarkable success and was soon imitated by other programmers. Unfortunately. Because Microsoft had not documented several functions necessary to write a reliable terminateand-stay-resident program, many of these TSRs left out important safeguards. They crashed when more than one was loaded, or worse, they inter. fared with normal, foreground applications.

Under fire from Borland and other companies. Microsoft representatives m 1986 began to discuss publicly some of the secret functions. But the effort was too late. Swamped with mysterious problems, many PC managers adopted policies forbidding the use of TSR programs, Other than SideKick. no TSR became a best-seller.

Yet Microsoft released its own utilities that depended on undocumented TSR function calls. For example. Microsoft's CD ROM Extension program. MSCDEX. EXE. released in,.1987, allows files on a compact disc to appear in the standard DOS file system Microsoft ?? live To?? Rizzo said in The ?? 1987 Microsoft Systems Jour?? ?? grammers magazine currentl?? pu?? by M&T Publishing of Sar Mate Calif. that Ms??d?? used something called the DOS ''network redirect??- But this capab?? remained un?? mented and unavailable to developer of competing file??system pro?? (Technically speaking. Ms?? used undocumented Function 1; of DOS Interrupt 2F.)

Undocumented functions were also used In Microsoft ?? including Debug and CodeView. These debugger, call Interrupt 21. Function 4B. Sun- function 01. Microsoft ?? documentation for DOS listed only Subfunctions 00 and 03 until recent?? Knowing the missing sub??unction is a requirement for any company trying to write a competing debugging environment for programmers DID MICROSOFT USE UNDOCUMENTED FEATURES IN EXCEL? Today. Microsoft Excel is by far the No. 1 selling graph??- cal spreadsheet. Lotus 1–2–3 ??or Windows did not appear on the market until 18 months after Windows 3.0. and Quattro Pro for Windows shipped just last month.

With its now dominant place in the market. it's easy to forget that Excel originally did have stiff competition Under Windows 2.x. Excel had to face well-financed spreadsheet rivals such as Wingz by Wingz Software. and Full Impact from Ashton-Tate.

The failure of these products was widely attributed to their slower performance compared with Excel. Numerous published reviews from that era show Wingz and Full Impact lagging behind Excel

Tim Paterson. the author of DOS 1.0 Critics of Microsoft accuse the company of using undocumented features of DOS and Windows in applications and utilities like the ones that independent software vendors also want to sell. The following are some examples of the controversy:

Function Use by Microsoft Discussion

Microsoft CD-ROM Extensions Undocumented DOS ''network redirector''

Debug and CodeView

Microsoft Excel

Quick C for Windows

Windows 3.0 SDK compiler (1989)

INT 2F Funtrim1 11

INT 21 Function 48 01 '' Define??e Table

GetTaskQueue and Directed Yield

.InitApp, InitTask,, WaitEvent

. OLE 1.0 ?? PowerPoint

Drag-and-Drop File Manager 3.1

Server API

<. NT DLL functions Pview function also used for drive remapping

Undocumented but required to write debugging environments for compilers

Windows 2.x function, undocumented until made obsolete by Winnows 3.0 Windows 3.0 functions; DirectedYield was documented in Windows 3.1 SDK, but not GetTaskQueue, which Microsoft descnbes as useless Functions necessary to compile Windows applications, released to independent compiler vendors in April 1991.

Critics charge PowerPoint was released with OLE support six months before 0LE specs were released to competing vendors Not available to outside developers until after Windows 3.1 shipped.

Win32 developers claim Microsoft's processor-view utility uses functions they cannot access for their own utilities revealed an important reason for this difference in a two-pan article, ''Managing Multiple Data Segment Under Microsoft Windows.'' published in the February and March 1990 issues of Dr. Dobb's Journal (M&T Publishing). Paterson and fellow programmer Steve F??enniken described undocumented function calls in Windows 2.x that allowed Excel to access large amounts of extended memory rapidly.

Specifically, Excel used undocumented functions of Windows 2.x named Define Handle Table. Without these functions, Paterson and Flenniken wrote, an application's data was limited to ''not more than 300K under the best conditions.'' However, they wrote. ''Micro- sows own Windows applications use all of the techniques discussed here ... to build Windows applications with virtually unlimited data capacity.''

The Define Handle Table functions in Windows 2.x were documented by Microsoft in the Windows 3.0 SDK. But developers charge that this was too late, as the functions are no longer needed m Windows 3.0's protected mode.

DID MIC??OSOFT USE UNDOCUMENTED FEATURES IN QUICk C7 On August 31, 1992. Microsoft released an eight-pale statement and a In-page white paper on 16 undocumented Windows 3.0 functions used by Microsoft applications.

These functions were raveled earlier that month in Undocumented Windows (Addison-Wesley, Reading, Mass.), a book by Andrew. Schulman (a former software engineer at Phar Lap Systems), David Maxey (a former Lotus developer), and Matt Pietrek (a California developer).

In its statement, Microsoft says. ''Microsoft applications derive no unfair advantage from the few undocumented APIs that they call.'' Additionally, ''Microsoft has also provided at least 26 ISVs [independent software vendors] with the information on undocumented calls in Windows.''

Regarding some of the undocumented functions used by Microsoft applications, the white paper describes four of these functions as ''documented m the Windows Software Development Kit (SDK), Version 3.1.'' six as obso??eted by Windows 3.1. and six more as undocumented but ''with documented equivalents'' or ''entirely useless.''

For example, the white paper describes the Windows 3.0 function GetTaskQueue as ''undocumented,'' with ''no equivalent, but useless.'' Another Windows 3.0 function call, DirectedYield. is described as being documented m the Windows 3.1 SDK.

Undocumented Windows coauthor Schulman charges, ''It's disbonest for Microsoft to tag as ''Documented in SDK'' functions that have only recently been documented in the 3.1 SDK, but that Microsoft [and others] were using long before .3.1. Timing is everything in this industry.''

Schulman says that the GetTaskQueue and DirectedYield functions are essential to the working of Microsoft's Quick C for Windows and are, in fact, ''crucial to writinc an integrated development environ. ment or debugger for Windows.''

By disasembling OCWIN.EXE, the main executable file m Quick C for Windows, Schulman says he found at least three m-stances of the following code:

if (GetTaskQ??) ?? Directed??

The first line of code determines whether a C apple, application running in Quick C's development environment Juts set up a =task queue'' for massages.

If so, the second line posts a message to that queue. Finally, Quick C yields control to the application so it can process the message. This routine is necessary because sending a me. hate to an appli. cation before it's ready can cause strange system crashes.

''We needed five undocumented to write debugging devices for Windows 3.0.'' says one developer for a major software firm, who spoke to Info World only on condition of anonymity. ''Meanwhile, Microsoft came out with these devices. and it wasn't until sue months after the release of their [Microsoft's] debuggers that Microsoft provided the information.''

?? ??

SAUCE''? According to Undocumented Windows, several undocumented cells known among developers as the secret sauce were used to compile Windows programs using Microsoft's own Windows 3.0 SDK, which Microsoft began selling m 1989. Competitors such as Borland. Zortech/ Symantec, and other C language vendors] could not create their own stand-alone Windows compilers, which did not require Microsoft's SDK. without conducting project to disassemble Windows and discover these se. crets.

After much criticism by competitors, several of these crucial, undocumented functions—including InitApp, InitTask, and WaitEvent—were finally unveiled by Microsoft. Most Of information came out April 9. 1991. in Microsoft's ''Open Tools'' binder, as weft as being documented in the Windows 3.1 SDK later that year.

Unfortunately for Microsoft's cornpetitors in the heated C-language mar. ketplace, Microsoft bad already shipped more than 48,000 copies of its SDK compiler by the tune the Open Tools release took place. Critics of Microsoft argue that this lave the Redmond company a tremendous lead with corporate and commercial programmers, who were actively purchasing tools to create Windows applications.

Microsoft's Cameron Myhrvold argues that, fat from giving Microsoft an advantage, the extra effort that Zortech find Borland put into their compilers increase their market share, at Microsoft's expanse. ''Zortech C was the first [stand-alone] compiler to ship for Windows in August of 1990, then Borland,'' says Myhrvold. ''The first Microsoft C compiler that didn't need the SDK didn't ship until around Windows 3.1.'' As result, Myhrvold says, Borland and Zortech now outsell Microsoft in C language compilers.

??

??A hot new feature of Windows 3.1 is Object Linking and Embedding (OLE), feature that allows users to place text or graphic from one application into another and have it dynamically updated. Microsoft's documentation of the OLE 1.0 specification was released to developers m December 1990.

But Microsoft PowerPoint 2.0, which was shipping to paying customers six months earlier, already had support for OLE between its graphing and display modules, developers point out. PowerPoint had OLE hard-coded into it. rather than relying on external OLE libraries, as became possible later. ''I don't know how to call that one.'' Myhrvold says. ''PowerPoint [developers] went ahead and shipped something before it was final, probably Version 0.8 or something like that.'' He explained that Microsoft is trying to work more closely with independent software vendors on the upcoming OLE 2.0 specification, beta copies of which were shipped to several dozen vendors two weeks ago.

DID MIC??OSOFT ?? OF ?? Windows 3.1 allows users to drag file names from the File Manager window and ''drop'' them onto other applications. The applications then automatically open or print the dropped documents.

Microsoft documented how a ''client'' application should respond to a file being dropped on it. But, despite repeated requests from ISVs, Microsoft pointedly refused to distribute any information about how the Windows 3.1 File Manager acts as a ''server'' for file names dragged out of its window, preventing developers of competing file managers from releasing upgrades with the release of Windows 3.1 on April 6, 1992.

The information needed for competing vendors to develop ,her own drag-and-drop servers remained undockmented until an article by Jeffrey Richter— the author of Windows 3.1: A Developer's Guide (M&T Publishing. 1991)—appeared m the May-June 1992 issue of the Microsoft Systems Journal. Even then, the information appeared only after attempts by Microsoft officials to suppress the article and after another publication threatened to run it.

''The Microsoft Systems Journal article by Jeffrey Richter was star[led by Microsoft for months because of resistance in the company to publishing this article,'' says Undocumented Windows coauthor Schulman. Richter confirmed this saying. ''It was held up by Windows 3.1 product manager,'' whom he declined to identify.

''There were number of vendors who figured out drag-and-drop.'' Myhrvold says. ''With certain issues, we aren't going to sue Norton [Desktop] or stop them. but we're not going to assist them in doing a shell'' Server drag-and-drop ''wasn't implemented robustly in Windows 3.1, and we wanted to improve it [in later version]. It's important for consistency for the user.''

??Outside developers have found parts of Windows NT that ate undocumented but are

being used in Microsoft utilities that compete with utilities they would like to sell. Although NT is still in beta tearing. several vendors are already selling NT development toolkits to numerous commercial and corporate sites.

Microsoft's Win32 Software Develop ment Kit (required [or developing NT applications) includes a utility calie??

Pview. This tool lets developers look. a: the tasks assigned to one of more processors. The utility uses functions such as NtQuerySystemlnformation.

QueryPerformanceCounter, and NT. QueryInformationThread, according to Schulman. These functions, although contained in?? (which will be included in the shipping version of NT). are all undocumented.

''If NT is to be successful.'' Schulman says, ''won't it need the same rind of active third party-utilities market that DOS and .Windows have? So won't developers need to be able to write their own utilities, such as Pview?''

Microsoft ?? to provide this information to developers. Myhrvold says. ''We're going to document the NT API. Some of it is in the NT DDK [Device Driver Kit].'' which shipped to developera last week. ''We're also looking at producing technical reference, or putting it m the MSDN [Microsoft Developer Network CD ROM]. That will be forthcoming near or just alter NT ships.''

?? of undocumented functions m applications and utilities that compete with independent software vendors something that developers (or the FTC) should complain about? Or is it ?? good business?

For whatever reasons, Microsoft has become by far the world's largest software company. In the last four quarters (ending September 30). it had sales of S3.0 billion add net income of $773 million.

Microsoft's sales represent 7 percent of all sales made by U.S. companies in the =computer software and data proceasing'' category, according to Media General Financial Services, a market analysts firm. But Microsoft's net, income represents 25 percent of all profits made by those same firms— fact that causes resentment among other developers.

Whether its share of the operating systoms market has given Microsoft an unfair advantage in marketing DOS and Windows applications is open to dispute. What is certain is that Microsoft is now selling more than 60 percent of all Windows applications, according to Jesse Berst, editor of the Windows Watcher newsletter m Redmond, Wash.. which tracks software sales.

Because of this dominance, some vendors argue that Microsoft should be broken into separate companies responsible for systems, languages, and applications. These ''Baby Bills,'' like the ''Baby Bell'' telecommunications companies that resulted from the 1984 breakup of AT&T, would presumably improve competition.

Only history will tell d this is whet the FTC seeks. Since the present FTC investigation of Microsoft will wind slowly through the courts— if the agency takes any action at all—it may be years before anyone knows the final outcome. Brian Livingston is a contributing editor at Infoworld and the author of Windows 3.1 Secrets ??DG Books).

Jeanette Borzo, Jim Hammett, Doug Barney, David Cours??y, and Stuart Johnston contributed to this report.

In bus new book. unauth??- ?? Windows 95 (IDG Books. (800) 762–2974 ?? [415] 312–06500. Schulman lists these new requirements

Aside from the tea??res an appl?? cation ar??uably needs to qualif?? as ''Windows 95 compatible''—it must be a 32-but application. It must handle filenames longer than eight characters, and so on— there are several requirements that have nothing to do with Windows 95 companbility Quoting from Microsoft Developer network News, July 1994 issue:

?? It must run on Windows NT 3.5

?? It must have OLE 2.0 contamer and/or object and OLE 2.0 drag-and-drop support

?? It must include a Send or Send Ma?? command on the File menu land support the Common Messaging Call API). Although Microsoft allows some exceptions to the last two rules for applications that don't deal with files (such as games), all three of these new requirements have raised eyebrows with developers.

???

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SOFTWARE

WINDOW MANAGER.BRIAN LIVINGSTON

Will 'Windows compatible'' really mean what it says?

ADEVELOPER WITH WIDE -RANDING

experience in Windows programming will announce a new book on Nov. 15 that will reveal many of the undocumented features Microsoft's Windows 95 shell takes advantage of.

Along the way, Andrew Schulman (coauthor of Undocumented DOS and Undocumented Windows. Addision-Wesley. (800√ 822-6339 or √6√7√ 944–3700) shows who will benefit from the release of Windows 95 and who will be hurt. In particular. Schulman points to those developers who will be handicapped by some of the new requirements that Microsoft Corp, has tacked onto its ''Windows-compatible'' logo, which it licenses to vendors of shrink-wrap software.

???

???

In his forthcoming book. Schu??man w??

''Microsoft is simply raising the cost of developing Windows applications, and not necessarily in ways that will benem end-users.''

As examples, he c??es the requirements to support NT and OLE. ''The NT requirement seems like nothing more than an attempt to leverage Microsoft's control over the upcoming Windows95 market to assist its lackluster Windows NT product. The OLE 2.0 requirement is odd, given that Microsoft itself hasn't used OLE for the Windows 95 shell.''

That new shell is an application called EXPLORER.EXE. In recent betas o Windows 95, the line SHELL+EXPLORER.EXE appears in the SYSTEM.INI file, rather than SHELL= PROGMAN.EXE as in Windows 3.x.

In Unauthorized Windows 95. Schulman reveals that this shell application uses several as-yet-undocumented features of the new operating system. These calls include such intriguing-sounding func?? as Register-ShellHook. FSNotif?? ??, and SHFindFiles. These ?? (and how they work) might be of no signincance, except th?? many developers have expressed interest in selling improved shells to Windows 95 users.

It's easy to switch shells. Simply change the SHELL=line in SYSTEM.INI for in the new Registry database, which will likely be the repository of this kind of information by the time Windows 95 is released??. But developers will need to get or create documentation on these functions in order for their products to emulate Microsoft's own shell.

The NT requirement particularly bothered several developers 1 spoke with. As it turns out. NT differs from Windows enough that supporting both environments can be a fulltime job. Some API tunctions use different parameters, some th?? that work in one environment don't work in the other, and so on. I'd say the ''Windows 95'' logo is going to be meaningless in determinine the real com?? ibility of new programs. I'll have more on this next week.

Brtan Livingston is the author of Windows ?? Secrets and More Windows Secrets and co-author of Windows ?? Books). Send ups to ?? infowori??.com. or tax: (206) 282–1248

FEB 14 1995

Clerk, U.S. District Court

District of Columbia

MICROSOFT CORPORATION PERFORMANCE REVIEW FORM FOR EXEMPT EMPLO.YEES

NAME:

GROUP: Languages Marketing.

EDACTED

POSITION TITLE: Group Protract Marketing Mann.,

REVIEW PERIOD: April 87—Sept 87

Instructions to the Manager:

1. Give the review form to the employee for their evaluation of work performed since the review.

2. Once completed, determine your own evaluation and ratings of the employee's performs Discuss these with the employee.

3. Finally, f√11 out the final overall rating below and jointly establish objectives and pertir performance factors for the next review period.

Instructions to the Employees:

1. In one or two sentences, describe the overall function or purpose of your position.

2. Complete both sections entitled: Major Activity/Objectives and Performance Factors evalua your performance since the last review.

3. Return the review form to your manager for his/her rating, and once completed, dis??ss ratings and pertinent performance factors for you and your position, and future objectives.

RATING DEFINITIONS: Ratings should be given in 0.5 increments. For example, 3.5 is a valid rating, but 3.7 is not.

(5) EXCEPTIONAL PERFORMANCE; Consistently exceeds all position requirement; v consistently exceeds quantity, quality, cost,, and time standards. Consistently meets big standards of excellence.

(4) EXCEEDS PERFORMANCE STANDARDS: Consistently exceeds most position requirements expectations. Work exceeds most standards often; meets high standards of excellence.

(3) MEETS PERFORMANCE STANDARDS: Consistently meets requirements and job standards; require assistance with complex or new assignments. Work regularly meets standards of competent performance.

(2) NEEDS IMPROVEMENT: Does not meet standards of the job consistently; may need additi?? time-in-job, further training of more than normal supervision; may meet some posi?? requirements but possess one or more Performance deficiencies in critical job areas.

(I) UNSATISFACTORY: Falls short of minimum requirements in critical aspect of job.

FINAL.OVERALL NUMERICAL RATING (to be completed by manager):.

This retting should be a composite of the Major Activity/Objective and Performance Factor sections.

Remember that 5 is high and I is low.
FILED ??TED

(Your signature does not?? mean that you agree, but affirms that this review has been liscussed in detail with you.)

MANAGER: EDACT?? Of Columbia DATE:

APPROVING MANAGER: DATE: 15 6 4

MICROSOFT CORPORATION

PERFORMANCE REVIEW FORM FOR EXEMPT EMPLOYEES

REDACTED

NAME:

CROUP: Languages

CON??

POSITION TITLE.: Group Product Manager

REVIEW PERIOD: 11/86—5/87

Instructions to the Manager:

Give the review Form to the cmployee for their evaluation of work performed since the last review.

Once. completed, determine your own evaluation and ratings of the employee's performance

Discuss these with the employee.

Finally, fill out the final overall rating below and jointly establish objectives and 0erriaea performance factors for the next review period.

RATING DEFINITIONS:

Ratings should be given in 0.5 increments. For example, 5.5 is a valid rating, but 3.7 is not.

(??)

EXCEPTIONAL PERFORMANCE: Consistently exceeds all position requirements; wor?? consistently exceeds quantity, quality, cost, and time standards. Consistently meets highe?? standards of excellence.

EXCEEDS PERFORMANCE STANDARDS: Consistently exceeds most position requirements an expectations. Work exceeds moor standards often; meets high standards of excellence.

MEETS PERFORMANGE STANDARDS: Consistently meets requirements and job standards: m: require assistance with complex or new assignments. Work regularly me=is standards of rule competent performance.

NEEDS IMPROVEMENT: Does not meet standards of the job consistently; may need addition time-in-job, Further :raining or more than normal supervision; may meet some positi?? requirements but possess one or more performance deficiencies in critical job areas.

UNSATISFACTORY: Falls short of minimum requirements in critical aspects of job.

FINAL OVERALL NUMERICAL RATING (to be completed by manager):

This rating should be a composite of the Major Activity/Objective and Performance Factor sections.

Remember that 5 is high. and I is low.

REDACTED

EMPLOYEE:

agree, but affirms that this review has been not nee?? mean that you

??

MANAGER REDACTED

APPROVING MANAGER: DATE:

?? ACTIVITY/OBJECTIVE: Compete with Borland y most important activity is to be sure that Microsoft competes effectively with Borland. This includes

??ecting intelligence about Borland activities and products. making sure that our products are competitive.

// building awareness among end users and gateskeepers about how we compare with Borland products.

MPLOYEE EVALUATION:

??all/ I did a very good job in the BASIC market and my work in C has been fair but not outstanding.

Then Borland announced TurboBASIC at the November Comdex. I collected information about his product and moved quickly to formulate a response strategy. My strategy involved a rapid product response to ?? that could hold out position until QB4 (then called QB3) hit the market.

?? QB3 instend of QB2.5 in order to make the release sound more significant. I worked with LenO and TomC ?? develop a QB3 spec that could bent TurboB. In addition to mobilizing development. I flew to Dallas to attend a region manager's meeting where we formulated a retail promotion strategy intended to fill the channels with QB before TurboB shipped. I reviewed he promotion plan with BillG before implementation began. I also flew to L?? to meet with KDP about the QB3 ad. In that meeting we decided that to compete ?? Borland's inside-front-cover advertising, we would need to use a big media unit with heavy paper. I also ??tioned QB against TurboB for the ad. Rayka and I-met-with CorpCom and came up with the idea of QB ??ters. I have also been working with the press to be sure that comparisons are not made against QB2 (see press objective section). My rapid response strategy was correct: we would be in a very poor position today ?? QB3 were not available (the Byte article bears that out). I was able to mobilize development. retail, and ?? media unit and my positioning of QB3 are sound. The results of the spiff promotion have been spotty, ??ew distributors have had success with it.

We are not as far along on the response to TurboC because we are further from product announcement. I developed a rollout plan for QuickC and CS that focused on minimizing Borland's first mover advantage by preannouncing with an aggressive communication campaign. I determined that we should preannounce in ??ty June because that is when editorial should be light and it is when BillG speaks at BCS. At SteveSn's suggestion. I worked with KathrynH to make the BCS announcement a rent extravaganza. I also proposed a new early beta program for QuickC that would help us to get press coverage sooner after shipment. I chaired a meeting with BillG. JonS. and steveB to run through the plan. While we were well prepared to discuss QuickC they were more interested in discussing how we would protect our high end product.

This meeting would have gone better if I had met with Bill first to determine an appropriate agenda. We still need to figure out how to protect the high end product from price cutters. We should be prepared to offer a stripped town high-end conipiler (i.e., no CodeView, and no QuickC) at a lawer price point if TurboC begins to cannibalize the high end.

MANAGER'S EVALUATION AND RATING: 44

did a very good job shaping our product direction in response to the Turbo Basic product announcement. Alternative strategies were formulated, evaluated, and a decision was reached swiftly. role in this was highly analytical; in the future, should strive to play a more active role in driving the decision process.

The marketing response to Turbo Basic was mixed. did a good job working with the press— although, the final results remain to be seen. Also, she User Group program appears to be going well.

Never, other promotional programs were haphazard at best—and our educational thrust is virtually ?? existant. More creativity is needing in developing marketing programs, and better follow-through is required to implement.

played an important role in Turbo C product response, although the contribution was not as significant as Quick Basic. We all missed the boat on the key marketing issue—a preliminary discussion with Jons would have prevented this. Again, needs to be more pro-active in driving

?? ACTIVITY/OBJECTIVE: Public relations is my responsibility to get coverage for our language products, and to be sure that the coverage is fair and curate. My activities include press planning, tours. issueing press releases with followup, and working with ??iewers.

MPLOYEE EVALUATION:

have made some strides with the press in terms of getting them to use our benchmarks. I am working th PcMag to help them develop a set o] benchmarks for testing BASIC and C compilers. They also ??cted Its before printing their QB benchmarks. We identified problems in their tests and worked with em to correct the problems before the article was run.

press trips for FORTRAN got us news coverage in InfoWorld. and PC Week. We will also see feature ticles in Computer Languages. PC Tech. Dr. Dobbs. and probably Byte. For this trip put together a esentation and materials that emphasised the connection between FORTRAN and C. and defined our longer ?? strategy for

optimization. That approach was very well received by the press because C is hot and cause of the long term strategic implications of tile optimization work.

have been working with PC Tech. PcMag. and Computer Languages on QB3. They have held off on their ??parison articles until version three, but they have all said they would not wait for version four.

??

?? to release a QB3 has proven to be correct. also formulated the PR strategy with Waggener for FORTRAN. QB3. QB4. and the C preannouncement.

hese plans have all been approves and I think have some exciting elements.

I think that our relationships with the press have been very good with the notable exception of Byte.

: is my goal over the next six months to turn that relationship around.

IANAGER'S EVALUATION AND RATING: 5-

Agreed. The only thing I would add is to continue to improve your listening skills during visits with

TO APPENDIX TO MEMORANDUM OF AMICI CURIAE IN OPPOSITION TO PROPOSED FINAL JUDGMENT IN CIVIL ACTION NO. 94–1564

SIGNED BY GARY REBACK
94–1564
Multimedia Systems
Development Partner Program
FILED FEB 14 1995
Clerk, U.S. Cio?? Court
District of Columbia
Program Application
Please return signed copy to: Submitted by:
Cornelius Willis

_____

Microsoft Corporation Company
Multimedia Systems Group.
One Microsoft Way
Redmond. WA 98052–6399

_____

Signature

_____

Name

_____

Title (CEO . President or Key Manager with overall responsibility for this project)

Microsoft Confidential

The Multimedia Systems Development Partner program exists to provide developers with necessary and appropriate resources, education, and support to ensure the successful and timely implementation of their projects.

Microsoft views Development Partners as essential parts of ou?? multimedia business plan. This application will help us understand your company's ideas and qualifications. It will also help us to assess your product's development and introduction schedule so that Microsoft may determine your level of interest and commitment.

Qualifying for this development program may later entitle you to participate in a marketing support program. Please fill it out as completely as possible and return it, along with all requested materials, to the address indicated on the cover. Microsoft looks forward to your participation in what we expect to be an extremely successful multimedia marketplace.

Developer

_____

Information Company Name

_____

Address

_____

City State Zip

_____

Telephone FAX Telex

_____

Development Contact Title Phone

_____

Marketing Contact Title Phone.

Please describe your company's important business relationships (distributors, venture capitalists, etc.) on a separate sheet.

_____

Company
Background Type of company:

_____

Publicly held If publicly hem please

_____

Privately held include annual report

_____

Subsidiary

_____

Name of parent (if subsidiary)

_____

Number of employees

_____

Primary business activities:
———— business software
———— consumer information
———— productivity software
———— business information
———— education software
———— CD-ROM publisher
———— entertainment software
———— on-line information provider
———— productivity software
———— other electronic info publisher
———— development tools
———— magazine, newspaper publisher
———— other software publisher
———— broadcast media producer

Product Proposed product areas (check all that apply):
Information
Applications: Toots:
———— adult
education ———— animation editing
———— business productivity
———— authoring/scripting tools
———— business information
———— image processing
———— consumer information
———— music editing
———— entertainment/games
———— programming tools
———— home business
———— search / retrieval engines
———— home management
———— sound processing
———— K-I2 education
———— storyboarding/prototyping
———— music
———— other data preparation
———— on-line services

_____

———— personal creativity
———— personal development
———— other programming tools
———— publishing

_____

———— reference
———— other applications
———— other tools Current Current key software products (in order of market share and importance to your com- Products pany):

_____

Product name Description Supported Platforms

_____

_____

Product name Description Supported Platforms

_____

_____

Product name Description Supported Platforms

_____

Product name Description Supported Platforms

Please include any appropriate product descriptions or brochures with this application.

Developer What is the extent and nature of your group's relevant technical experience, particularly

Qualifications in the areas of multimedia production, Microsoft Windows or other windowing systems programming, or new technology implementation in general?

_____

Microsoft Confidential

??cept Please provide a short conceptual description of your product(s). Description How will you enrich your application so that it is compelling, make: use of this machine, and helps to define multimedia personal computing?

(Please respond to the following questions on experience?

Describe a typical user session with this product. What will a user separate sheets).

List a ''table of contents'' for this product. If it consists of only one thing (such as ''?? game'') then list its components as appropriate.

Is this product bated on an exiting application? If so:

On which product is it based ?

What is the history of this product?

_____

Market Who is the target audience for your product?

Analysis Explain why you think this is an important product for the machine introduction.

What is the proposed price of your product?

What competition do you perceive for this product? How will you differentiate this product from its competition?

_____

Product What is your expected shipping date for retail distribution?

_____

Development When do you project that you will reach these project milestones?

_____

Software Design Complete Date

_____

Alpha Level Code Date

_____

Beta Level Code Date

_____

_____

Final product available for shipment Date

Do you perceive any other critical milestones in your development schedule?

_____

If any of the above milestones are contingent on external events, please indicate below:

_____

How it this project funded ? (Please answer on a separate sheet).

Microsoft

August 1990

Multimedia Windows Pre-Release Program

This paper will give you important information about Microsoft's plans for the Multimedia

Windows Pre- Release Program and information on how to use it most efficiently.

Multimedia Windows Pre-Release Program Objectives

1. Distribute pre-release software and documentation to qualified developers.

2. Relay information and schedules to multimedia developers in a timely, efficient manner.

3. Educate hardware and software developers on the capabilities of Multimedia Windows.

4. Obtain valuable feedback about Multimedia Windows that will continue to enhance and improve it

The success of Multimedia Windows system software and its applications depend upon effective communication between Microsoft and the hardware and software communities. Microsoft is committed to this mutually beneficial relationship.

Requirements for Participation

To participate in the Multimedia Windows Pre-Release Program, your company must meet all of the following requirements:

1. Sign the enclosed Pre-Release Program Non-Disclosure Agreements

Enclosed you will find a non-disclosure agreement for the Multimedia Windows Pre-Release Program. By signing this agreement, you agree to participate in the program under confidential restraints, meaning that you will not discuss any information that you receive from Microsoft about this Windows product, with anyone outside of your company. This requirement will be in place until Multimedia Windows is publicly announced. Enclosed you will also find a master Non-Disclosure Agreement A completed copy of this Agreement must be on file at Microsoft and covets additional confidential information you may receive as a participant in the Multimedia Windows Pre-Release Program.

2. Submit a program application to participate in future support programs and to include your company in the Multimedia Windows Hardware and Software Directory database.

By submitting the program application, you become eligible to participate in future technical seminars or marketing programs that Microsoft may offer to Multimedia Developers. Furthermore, this application allows our staff to build an accurate database of active developers and vendors involved in this program so that we can beater track your interests and your needs. This tracking system will become even more important as the program grows.

When Microsoft announces its plans for Multimedia Windows, we may publish a directory of company names and product summaries derived from this database. Until that time, the list will only be available to developers in the Pre-Release program.

3. Include a check or P.O. for $495 to Microsoft

This fee enrolls you in the Pre-release program and covers the cost of technical support until product release. A majority of the support for the Pre-Release program will be conducted via Microsoft OnLine, our electronic technical support service. Microsoft will use this communication service to inform participants of plans, changes, and updates. We may also provide incremental software release, via OnLine, which you can download at your convenience. Any feedback or problems you encounter with the product must be reported through Microsoft OnLine.

This special OnLine account will allow your development staff to ask questions about Windows 3.0, the Windows 3.0 SDK, Multimedia Windows MDK and DDK, and the Microsoft languages and tools that support multimedia software development under Windows 3.0. It will also provide them access to all Microsoft product information in the OnLine Knowledge Base.

4. Sign the signature block at the end of this letter, and return the entire package.

By signing this letter, you indicate that you have read and understand this letter and ague to abide by the Pre-Release Program objectives and intentions.

What you can Expect from the Multimedia Windows Pre-Release Program

If you meet all of the above requirements, you will become an on-going member of the Multimedia Windows Pre-Release Program. After Microsoft receives the signed agreements, and application, your Microsoft OnLine account will be activated or modified and your company and product summary entered in the Multimedia Windows database.

Microsoft Online Account

When you return your signed OnLine Agreement, you will receive a Microsoft OnLine access ID number that can be used to access Multimedia Windows we-release information. OnLine documentation and software will also be sent to all new subscribers.

If you already have an active OnLine Account, a special Multimedia Windows-specific OnLine account will be set up for you. The Multimedia Windows Pre-Release access number for Microsoft OnLine will be dissolved at the termination of the Pre-Release program. You may continue to use the existing account until your Microsoft OnLine subscription terminates. Renewal of your OnLine account will be at the standard price of $795.00.

If you would like to change the billing name and address for that account please fill out the information below:

_____

Yea, please change billing name/address for Windows Pre-Release OnLine access ID number

_____

Billing contact name

_____

Billing company name

_____

Billing address

_____

City State/Country Postal Code

International Developers:

International developers are not required to obtain a Microsoft OnLine account Instead, please contact your local Microsoft Subsidiary for information on their support programs.

check here if you will be obtaining support from a Microsoft Subsidiary

2. Review/Sign/Copy/Return the enclosed Non-Disclosure Agreement As stated earlier, them agreements allow us to disclose confidential information about our product development plans without compromising marketing plans that we have. If you have any questions about the agreement, please state them in a letter and send to Multimedia Windows Product Marketing address listed below. Since there is no signature block for Microsoft. your copy of each agreement is all that is needed for your records.

If there is a business reason for you to communicate information to another company, please outline your needs/reason and the contact information for that company and return this letter to the Multimedia Windows Product Marketing address given at the end of this letter. You will be notified of the outcome of your request.

3. Complete and return the enclosed Development Program Application

If you are currently working on a Multimedia Windows product but would prefer not to be listed in the distributed directory, your information will be kept confidential until you notify us otherwise. Please mark your preference on the application.

If your company is considered a Corporate Account and are using Multimedia Windows as an end-user product only, it is not necessary to complete this step.