U.S. PATENT AND TRADEMARK OFFICE

HEARING

BEFORE THE

SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY

OF THE

COMMITTEE ON THE JUDICIARY
HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

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FEBRUARY 27, 2008

U.S. PATENT AND TRADEMARK OFFICE

WEDNESDAY, FEBRUARY 27, 2008

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON COURTS, THE INTERNET,
AND INTELLECTUAL PROPERTY,
COMMITTEE ON THE JUDICIARY,
Washington, DC.

The Subcommittee met, pursuant to notice, at 1:34 p.m., in Room 2141, Rayburn House Office Building, the Honorable Howard Berman (Chairman of the Subcommittee) presiding.

Present: Representatives Conyers, Berman, Wexler, Watt, Jackson Lee, Johnson, Coble, Sensenbrenner, Goodlatte, Chabot, and Issa.

Staff present: Shanna Winters, Majority Chief Counsel; Eric Garduno, Majority Counsel; Christal Sheppard, Majority Counsel; Rosalind Jackson, Majority Professional Staff Member; Blaine Merritt, Minority Counsel.

Mr. BERMAN. This hearing of the Subcommittee on Courts, the Internet, and Intellectual Property will come to order. I would like to begin by welcoming everyone to this hearing.

I have to remember now which hearing is it that I am chairing. Right, Oversight Hearing on the U.S. Patent and Trademark Office.

I will recognize myself for an opening statement.

For over 200 years, inventors have relied on U.S. patents to protect their inventions from unauthorized use and copy. Patents play a essential role in spurring innovation. With the exclusive rights granted by patents, investors are rewarded for the inventions they create and are encouraged to further innovate. While the degree of importance that intellectual property plays varies by industry, patents are crucial to many of the industries that the U.S. economy depends on.

That is why I take seriously threats to the patent system. One threat, the issuance of poor quality patents, has been a problem I have tried to address since at least 2002. Poor quality patents undermine the value of patents generally. They lead to a waste of resources, hinder development of new products as companies are forced to either take out licenses on junk patents or spend millions fighting them in court.

Addressing this problem is the primary impetus of the patent reform legislation passed by the House last year and currently under consideration in the Senate. But another problem is the patent application backlog and the resulting increase in patent pendency.

The number of patent applications awaiting initial review by an examiner has increased every year for the last 10 years and totaled over 760,000 applications by the end of 2007.

Today, it takes on average over 25 months for a first office action to be issued, and almost 32 months for an application to complete its course through the USPTO. Average pendency in some of the more important technology areas like biotechnology, chemicals and computer architecture and software are well above 32 months. By the USPTO's own account, if steps are not taken to address patent pendency, total average pendency could increase to roughly 52 months by 2012.

The implications of long patent pendency periods are sobering. The value in a patent is being able to use it to exclude others from making, using or selling an invention.

While patent rights must be perfected through the application and examination process, the term of an issued patent begins the day the patent application is submitted. Thus, long pendency periods cut directly into the time an inventor has to make commercial use of his invention.

If this period becomes too long, inventors may give up relying on the patent system altogether and use trade secrecy as a means to protect their inventions. This will reduce the technical information available to society, since some inventors will no longer provide public disclosure of their inventions through the patent system.

Over the last few years, GAO has issued various reports analyzing practices of the USPTO. The most important recent report makes several points related to patent examiner hiring and retention, two of which I will highlight, and leave the rest to our GAO witness to discuss.

Thanks in large part, the first part to pressure from this Subcommittee, there has been no diversion of USPTO fees since fiscal year 2005. And as a result, the USPTO has been able to plan and make examiner hiring decisions based on their projected fee collections.

Secondly, the GAO report found there is little hope of diminishing the patent application backlog through hiring efforts. This may be due to a number of factors—examiner retention issues, flawed examiner production goals, the lack of capacity to train enough examiners, and because actions to address this problem are too late in coming.

The Subcommittee is committed to make sure the USPTO has the resources it needs to address both patent quality and pendency. For instance, I introduced H.R. 2336 earlier this Congress, which would ensure that the USPTO permanently retains all fees it collects. I believe Mr. Caldwell is a co-sponsor of that legislation.

Our support of the USPTO should not be misconstrued as giving the USPTO carte blanche to pursue any course it chooses and, conversely, to ignore warning signs that impact efforts to reduce the patent backlog. For instance, while I understand that the USPTO has agreed to study whether the current production goals are indeed unreasonable, I have to question why this was not done sooner, given that this very problem had already been identified by the GAO in 2005.

Additionally, I am troubled about the recently promulgated continuation and claims rules, and wonder why a compromise couldn't be reached that patent users could live with and that would still address the pendency problem. I am very familiar with the difference between rhetoric and substance.

I can't count the ways the patent reform legislation that passed the House last year has been unfairly criticized and misconstrued. Nevertheless, there may be some truth to the public criticisms regarding the claims and continuation rules. As such, there would be some middle ground that the USPTO has not fully considered.

And finally, as part of our oversight responsibilities, we must look into all assertions being made about the USPTO. I have recently been made aware that there may be problems with various management decisions made by the USPTO leadership.

For instance, last year the USPTO eliminated an office dedicated solely to intellectual property enforcement. This seems counter-intuitive, given the Subcommittee's actions to strengthen intellectual property enforcement efforts through the—Chairman Conyers' Pro IP Act legislation.

The USPTO has characterized this change as a realignment instead of a reprogram that would require prior congressional notification. Regardless of the semantics, it should be clear that the Subcommittee would like to understand the USPTO's reasons behind any such decision prior to its implementations.

I look forward to what promises to be a vigorous discussion with our witnesses on these and related issues, and I would now like to recognize our distinguished Ranking Member, Howard Coble, for his opening statement.

Mr. COBLE. Thank you, Mr. Chairman, and thank you, as well, for having scheduled this hearing. A healthy U.S. Patent and Trademark Office is essential for our patent system to thrive. Unfortunately, there is no true measure or statistic to evaluate the office or the system as a whole.

On the one hand, we have some report that there may be troubles over the horizon. The time for average patent pendency and the backlog of patent applications are steadily increasing.

And while we are losing experienced examiners, it appears there may be no solution in sight. Also, fairly recent internal reorganizations and rule changes have led to some controversy, which may lead to some additional concern.

On the other hand, the U.S. Patent & Trademark Office is showing successes in many other areas, including projections for more than $2 billion in fee revenue in 2009, record numbers of patents being processed, and other indications that examiners are improving their reviews of applications, including a substantially lower percentage of applications being approved. Some think that the U.S. Patent & Trademark Office are obviously going well.

Address the increasing patent pendency and the growing backlog of applications is a perennial challenge for the office, but the length of time for pendency and the magnitude of the backlog have grown to what some have viewed as alarming proportions.

Recent improvements in examiner performance are enormous accomplishments. They should be recognized, but they alone will not overcome these historic challenges. I am hopeful that today's panel

will help everyone better understand how the pendency and backlog issues can be managed.

Also, Mr. Chairman, I am interested to hear about changes within the patent office and how they have or have not improved efficiencies. If changes were made that triggered a notice to Congress, that notice should have been sent. I hope we can clarify today when notice to Congress is required, that what constitutes notice or what actions trigger a notice so there is no confusion in the future.

In order to work together, we must be kept abreast of these important changes within the office, and we must furthermore maintain an open dialogue, it seems to me.

Finally, I greatly appreciate the effort of Mr. Berman, of you, in having scheduled this hearing. We have spent considerable time and resources in the first session of the 110th Congress developing comprehensive patent reform. No reform, however, will be successful unless our patent system is strong and robust, which largely depends on the ability and the performance of the U.S. Patent & Trademark Office.

Unfortunately, there are no predictions that demands our patent system are going to recede. As a result, the office, as users of the Congress, are going to have to continually and honestly assess the performance of the office to protect and ensure the future of our innovations. This honest assessment is essential for Members of this Subcommittee and for the future of the U.S. Patent & Trademark Office.

I look forward, Mr. Chairman, as do you, to today's panel and learning any new sights on how we may improve or assist the U.S. Patent & Trademark Office in meeting its growing challenges.

And I yield back, Mr. Chairman.

Mr. BERMAN. Well, thank you, Mr. Coble.

And the Chairman of the Committee on Judiciary, Mr. Conyers, is recognized.

Mr. CONYERS. Thank you, Chairman. I am happy to associate myself with the remarks of both you and Howard Coble, and I would ask unanimous consent to put my statement in the record.

The only point that I would like to make is to Mr. Dudas, our distinguished Undersecretary. I was out at the Patent Office earlier this year and there is a question about hiring—as many people as we hire, we have got a lot of people going out the back door.

I was impressed with the quality of the young men and women that are trained out there. They were energetic and committed. Now, these were people going into the system. The question is, what happened somewhere along the way, or what goes on to change that enthusiasm? And I am sure we will get into that.

And so, I am happy to join the distinguished Chairman of the Committee, Mr. Berman, and I look forward to the testimony of the witnesses.

The prepared statement of Mr. Conyers follows:]

PREPARED STATEMENT OF THE HONORABLE JOHN CONYERS, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN, CHAIRMAN, COMMITTEE ON THE JUDICIARY, AND MEMBER, SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY

Thank you, Chairman Berman, for holding this oversight hearing on the USPTO.

The GAO report, and general commentary throughout the patenting community is essentially unanimous that the increasing length of patent pendency is a serious and growing problem that harms our nation's competitive advantage both at home and abroad.

However, there's much less than unanimity when it comes to figuring out the root causes of the increase in the time it takes to obtain a patent and the mechanisms that are necessary to reverse that trend.

Many place the blame squarely on the shoulders of either the USPTO administration or the USPTO employees represented before us today by Department of Commerce Undersecretary Jon Dudas and Robert Budens, President of the patent examiners union, POPA.

However, it is clear to me that the patenting community and advances in the complexity of technology must also shoulder some of the blame/burden.

The USPTO has directly taken, head-on, the issue of patent pendency, patent quality and employee retention through several bold initiatives that we will hear more about today. Some of these efforts have *not* been met with applause—but rather with lawsuits. Others have been instituted and carried out without much fanfare. I speak of the new continuation rules, aggressive new examiner hiring efforts and the USPTO examiner training academy.

Whether or not these initiatives are the optimal way to achieve our collective goals will be examined today; however, we all agree that a patent system that does not take into account the realities of the world around us can not survive, thus sometimes minor or major tweaks are necessary—doing nothing is not an option. We may disagree with the changes but we all see the need for correction.

In the case of this committee, we proposed and passed the Patent Reform Act of 2007, which is essential to the continued vitality of American intellectual property in the increasingly competitive global marketplace.

In the case of the USPTO, Undersecretary Dudas saw a problem with pendency and laid out a solution that the Administration felt would address the issues.

I went to the USPTO this past January to not only to meet and speak with Undersecretary Dudas about his initiatives but also to meet and speak directly with a graduating class of new USPTO examiners. I saw, directly, the sincere and profound investment in training for the new hires.

However, investment in increased training and additional hiring can not cure the problem of pendency and quality unless we also address the problem of attrition.

The September 2007 GAO report stated that despite aggressive hiring efforts for new examiners by the USPTO that the new hires will not be sufficient to reduce the patent application backlog mainly due to the inability to retain those examiners. For nearly every two patent examiners that the USPTO hires and trains, at least one has left the agency. Between 2002 and 2006, the USPTO hired 3,672 examiners and 1,643 left the agency during that same time period. High attrition levels clearly offset the increased examiner hiring.

POPA stated that the reason is the unrealistic production goal schedule—insufficient time to meet production goals—which results not only in examiner attrition but poor quality patents.

The USPTO states that attrition is for reasons personal to the examiner, such as the job is not a good fit or having to move to a new city because of a spouse.

As for the GAO results, they polled people who were still at the agency for reasons why they would consider leaving. Although 67% indicated that it was the production goal schedule as POPA also stated, GAO is polling the wrong people. They asked people who chose to stay. Not those who left.

We have to ensure that the patent laws stay relevant with the changing times and that the USPTO has the resources and regulations in place that assist in that process. I look forward to hearing the panels commentary today on how to maintain the US as one of the, if not the, best Patent Office in the World.

Mr. BERMAN. I thank the Chairman.

Okay. Without objection, I recognize the gentleman from Florida, Mr. Wexler, for opening comments.

Mr. WEXLER. Thank you, Mr. Chairman.

I just want to read a list of senior title positions. Commissioner for Patents. Commissioner for Trademarks. Deputy Commissioner for Patents. Deputy Commissioner for Patent Operations. Administrator for External Affairs. Chief of Staff for the Undersecretary of Commerce. Chief Financial Officer. Deputy Financial Officer. Direc-

tor of Patent Quality. Chief Information Officer. Deputy Information Officer. Director of Enforcement.

All of these positions were filled, as I understand it, by career professionals. Collectively, they represent literally hundreds of years of experience, Federal experience in scientific, legal and technical fields. And if I have the right information, they have all been removed by Mr. Dudas or his predecessor, most by the current occupant.

The numbers are disturbing, and I hope that the hearing will tell us why this is happening.

And thank you, Mr. Chairman, for holding the hearing.

Mr. BERMAN. Thank the gentleman.

And we will now go to the witnesses.

John Dudas is Undersecretary of Commerce for Intellectual Property and Director of the United States Patent & Trademark Office, a post he has held since 2004. Prior to that, Mr. Dudas served as acting undersecretary and director and deputy undersecretary and deputy director.

Before joining the Bush administration, Mr. Dudas served for 6 years as counsel here to the U.S. House Judiciary Committee's Subcommittee on Courts and Intellectual Property, and staff director and deputy general counsel to the House Judiciary Committee. Mr. Dudas holds a law degree from the University of Chicago.

Robin Nazzaro is a director with the Natural Resources and Environment team of the United States Government Accountability Office. She is currently responsible for GAO's work on Federal land management issues—so it is obvious why you are here. No.

Recently, she oversaw GAO's work on federally funded R&D, which includes responsibility for the USPTO and other Government programs. Ms. Nazzaro received a bachelor's degree from the University of Wisconsin and a certificate in senior management and government from the John F. Kennedy School of Government at Harvard University.

Robert Budens is president of the Patent Office Professional Association, and has served on this executive committee since 1998. He also currently serves on the Patent Public Advisory Committee.

Mr. Budens has been with the USPTO since 1990 and has been a primary patent examiner since 1994. He holds advanced degrees in microbiology and immunology from Brigham Young University and the University of Texas Southwestern Medical Center, respectively.

Alan Kasper is first vice president of the American Intellectual Property Law Association. He is also the director of Sughrue Mions International Department, and a member of the firm's management committee. Mr. Kasper's practice includes domestic and international patent law.

Prior to joining Sughrue Mions, Mr. Kasper was an attorney for the Communications Satellite Corporation, and was a patent examiner in the U.S. Patent & Trademark Office. He received his law degree from the Georgetown University Law Center.

Gentlemen and lady, your written statements will be made part of the record in their entirety. I would ask you to summarize your testimony in 5 minutes or less. To help you stay within that time, there is a timing light at your table. When 1 minute remains, the

light will switch from green to yellow, and then red when the 5 minutes are up.

Mr. Dudas, would you lead the panel with your testimony?

TESTIMONY OF THE HONORABLE JON DUDAS, UNDERSECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY, AND DIRECTOR OF THE U.S. PATENT AND TRADEMARK OFFICE, U.S. DEPARTMENT OF COMMERCE, WASHINGTON, DC

Mr. DUDAS. Thanks very much, Chairman Berman. Thank you, Ranking Member Coble, Congressman Wexler, and Congressman Issa. It has been over 2 years since I have had the opportunity to update this Subcommittee officially at an oversight hearing, and I appreciate this opportunity to do so today.

Mr. Chairman, I am pleased to report that both fiscal year 2006 and fiscal year 2007 were record-breaking years for the USPTO, due in part to the women and men at the United States Patent & Trademark Office. For 2 years in a row we have met or exceeded our highest production goals ever with a 21 percent increase in production in the last 2 years.

We have the highest hiring in the history of the office, both in terms of percentage and in terms of raw numbers. Over 1,200 examiners hired in Patents each of the last 2 years.

We have the highest number of examiners working from home. In the last 2 years, we went from zero working almost full-time from home to over 1,000, and we are adding 500 a year.

We now have the highest usage of electronic filing. We used to measure in terms of 2 and 3 percent. We are up to 70 percent in electronic filing, and the highest percentage of electronic processing in the history of the office.

For each of these accomplishments in 2006, we met or exceeded those records in 2007. And for those achievements, it is clear we must thank the 8,500 hard-working women and men of the United States Patent & Trademark Office. They are high achievers. We are a performance-based organization. They are performance-focused, and they are always up for the challenge.

On behalf of our employees, I also want to thank this Subcommittee, and the Chairman and Ranking Member in particular, all of your colleagues. We are pleased especially that the Administration and Congress have worked together to ensure that the USPTO has had access on a yearly basis to all anticipated fee collections. The President's budget request continues full funding for the fifth consecutive year this year.

Full access to fees gives us the resources we need to continue to improve upon our record-breaking successes, but there certainly are challenges ahead.

Mr. Chairman, my written statements describes the wide range of initiatives that we have underway and updates our activity since our last oversight hearing. Quality is the driving force in everything we do, from our daily activities to our long-term strategic planning.

All of us in the room and all stakeholders want a quality examination process that results in quality patents and quality trademarks. That quality starts with the highest quality people, and I

am proud that our 8,500 employees do this on a daily basis with true dedication to their jobs.

We recognize that, to recruit and retain the highest quality people, we must provide an employment package with benefits and a working environment that beats—not just meets, but beats what our competitors are offering, and we do have competitors within Government and the private sector who are constantly looking to hire the people with the same skill sets that we are looking for, and also hiring people that have the experience after having been a patent examiner.

Quite frankly, I believe the offerings that we have are more than competitive, and we seek to improve them. Others find our environment to be good, as well.

We have been honored for 2 years in a row, that Business Week Magazine chose the United States Patent & Trademark Office as one of the best places in the United States to launch a career. We have been chosen by Business Week magazine as one of the best places to round out your career, and one of the best places to have an internship. Washington Families magazine called the USPTO one of the best places to work in the Washington area if you have a family.

Our flex time, our tele-work and Hotelling programs continue to be a model for Federal agencies. Eight-five percent of eligible trademark examining attorneys work from home.

As I mentioned, we now have over 1,000 patent examiners working from home, and we are adding 500 per year. Our vision is to create a workplace where an examiner has every opportunity and every flexibility to succeed as they want to succeed, and they can do that, we hope, from anywhere in the country. They can choose where they go, is our vision.

But we have some legislative hurdles. We want examiners to be able to work from home in Detroit, Austin, Florida, Los Angeles, Greensboro, Roanoke, for that matter, Mr. Goodlatte. Good to see you.

Mr. Chairman, we recognize the importance of making every reasonable effort to retain our examiners. It takes a number of years to effectively train and guide our examiners to full signature authority.

We don't want to lose them to our competitors when they have developed marketable expertise. We want them to come to the USPTO and want to stay there. And I will go in much more detail about the specific statistics and what we are doing.

But I can tell you, the Bureau of Labor Statistics does numbers. Attrition rate throughout the Federal Government is 11.2 percent. The attrition rate across the board at the USPTO is 8.5 percent, 32 percent lower than throughout the rest of Federal Government.

Our average attrition rate for patent examiners with 0 to 3 years of experience is quite high, and that is where we really need to focus. But our examiners with experience beyond 3 years, between 3 to 30 years, that drops to below 40 percent. Our focus on examiner retention and recruitment in those first few years has borne fruit in the first years that we have done that.

So BLS, Bureau of Labor Statistics, reports up to 45 percent attrition for engineers and computer scientists throughout the pri-

vate sector. Over the last 10 years, first-year attrition at the USPTO has been about 20 percent. With targeted retention and recruitment efforts with the new training academy and other things we have put in place, we have lowered that 25 percent to 15 percent for first years, and in targeted areas we have lowered it to 10 percent.

So by targeting retention efforts, we think we have really found something. We don't have enough numbers yet to give years and years of data, but we have had much success on that.

So I look forward to talking about all the issues that you have raised. I believe we have come a long way and enjoyed many successes since our last oversight hearing. There is lots of room for improvement. There are challenges that lie ahead, and we fully intend to do all we can, with your continued support, to build on these successes.

Thank you.

[The prepared statement of Mr. Dudas follows:]

PREPARED STATEMENT OF THE HONORABLE JON W. DUDAS

STATEMENT OF

JON W. DUDAS

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY
AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE

SUBCOMMITTEE ON COURTS, THE INTERNET AND INTELLECTUAL PROPERTY
COMMITTEE ON THE JUDICIARY
U.S. House of Representatives

"USPTO Oversight Hearing"

FEBRUARY 27, 2008

Introduction

Chairman Berman, Ranking Member Coble, and Members of the Subcommittee:

Thank you for this opportunity to appear before you to discuss the United States Patent and Trademark Office's (USPTO) operations, programs and initiatives.

I first want to take this opportunity to thank you Mr. Chairman and your colleagues on both sides of the aisle for your continued support for the USPTO and its 8,500 employees. We are especially pleased that the Administration and the Congress have worked to ensure that the USPTO has access to all anticipated fee collections. The President's budget for FY 2009 continues this full-access to fee collections for the fifth consecutive year. We expect to receive $2,075 million in fee revenue in 2009, which is almost an 8 percent increase in resources over what we expect to collect in 2008.

Full access to fees has provided, and will provide, the resources to continue our record hiring of patent examiners and to streamline our processes to achieve maximum operational efficiency. We plan to hire an additional 1,200 patent examiners each year and will continue to expand our award-winning telework programs and otherwise work to make the USPTO an "employer of choice." Further, we will continue to improve electronic processing and communications with applicants, encouraging them to do business with the USPTO via the Web. Also, we will expand our efforts to protect American intellectual property domestically and abroad by providing IP training for

foreign officials and through ongoing work with international IP offices to cooperate on a wide range of issues.

Mr. Chairman, as we look to the future, we will make every effort to improve on our successful record in fiscal year 2007. Our patent examiners completed over 362,000 patent applications in 2007, the largest number ever, while maintaining for the second year in a row an examination compliance rate[1] of 96.5 percent, the highest in a quarter of a century. The allowance rate for patents is currently 44%. This is in contrast to allowance rates in excess of 70% just eight years ago.

Also, over the past few years, the percentage of Board of Patent Appeals decisions in which the examiner is affirmed or affirmed in part has increased from 51% to 69%. Finally, since the pre-appeal brief program was established in midyear 2005, the percentage of applications reviewed under the program in which the examiners action is deemed correct has increased from 45% to 56%.

On the trademark side, we also processed a record number of applications in 2007. USPTO trademark examining attorneys completed work on nearly 324,000 classes. Nearly 96 percent of first actions and more than 97 percent of final actions met statutory and compliance rates for quality of decision making and writing, the highest levels ever achieved. The trademark organization has seen significant production and productivity gains in the past two years.

All in all, fiscal year 2007 was another banner year for the USPTO. We met 90 percent of the performance goals established under the Government Performance and Results Act of 1993.

Mr. Chairman, we fully intend to build on our successes. Our primary strategic goals over the next several years are to optimize patent and trademark quality and timeliness and improve intellectual property protection and enforcement domestically and abroad. I would like to discuss our ongoing, planned and envisioned initiatives intended to achieve our goals.

Patent Initiatives - Human Capital

The primary factor influencing patent quality is the expertise of our examining corps. Attracting, hiring, training, and retaining the high performing examiners who are critical to meeting our goals is a multi-faceted effort that includes competition for some of the most talented and recruited individuals in tomorrow's work force. We have and will do everything we reasonably can to make sure we offer examiners and all our employees the kind of workplace, benefits and opportunities that will keep them on board for years to come.

[1] The patent allowance compliance rate is the percentage of applications allowed by examiners with no errors after being reviewed.

With respect to addressing our patent backlog challenges, we should note that the recent Government Accountability Office report, "Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog," draws a conclusion consistent with what the USPTO has been saying for nearly 5 years -- hiring alone simply is not the answer to the growth of filings and complexity in the patent system. Accordingly, our initiatives go beyond hiring to include a wide range of efforts to promote quality and efficient processing and make the USPTO an "employer of choice."

1. Hiring Patent Examiners

With full access to our fee collections, the USPTO hired 1,215 patent examiners in FY 2007. We plan to hire 1,200 patent examining professionals each year through 2013.

2. Recruiting

The USPTO's recruitment efforts are strong and nationwide in scope. Planning efforts have culminated in targeted TV, print, radio and Internet banner advertising, and developing a brand image, "Examine the Possibilities." Additionally, we have increased career and job fair participation and on an annual basis we participate in over 150 events throughout the country. We also offer recruitment incentives (up to $9,900 per year for four years for hard-to-fill computer and electrical engineering positions) for all examiners.

We continue to explore partnerships with universities to offer intellectual property courses to science and engineering students, develop an internship program and train students in intellectual property to create a ready pool of potential examiner candidates.

3. Making USPTO an "Employer of Choice"

Continuing to attract and retain the finest public servants is a growing challenge. Our employees are at the heart and soul of our intellectual property system, and we need to do everything we possibly can to ensure they have an environment of trust, respect and opportunity.

The USPTO has developed and implemented a variety of workplace-friendly, family-friendly initiatives that have earned the USPTO recognition by *Business Week* magazine as one of the best places in America to launch a career and to round out one's career. The USPTO has also been lauded by *Washington Families* magazine as one of the best places in the Washington area to work if you have a family. We are proud to offer a wide range of benefits from an on-site daycare center, to a modern fitness center, to reimbursement of law school tuition for examiners. We will expand and improve our workplace offerings and attributes to promote the USPTO's image as an "employer of choice."

4. USPTO Telework -- the "Gold Standard"

As we hire over 1,200 patent examiners a year, much of our human capital focus is on telework programs which help recruitment and retention efforts, improve work/life balance, minimize commuting time, maximize examiner productivity and allow us to more efficiently manage our space requirements.

Over 1,000 examiners have joined our recently implemented Patent Hoteling Program (PHP). The PHP was developed using the very successful Trademarks telework program model and is a voluntary program that provides patent examiners the ability to work from home with complete on-line access to USPTO resources. We plan to add 500 more examiners to the hoteling program each year for the next several years. The goal of the hoteling program is to change the boundaries of the old workplace patterns allowing for decreased commute time, a more efficient use of office space, and even a more balanced lifestyle for our employees. This all translates into increased employee productivity and satisfaction, as well as higher employee retention. It should be noted that 83% of our hotelers reported an increase in morale and 87% strongly or somewhat agreed that they would be willing to work more years at the USPTO because of the hoteling program.

On a more long-term basis, we hope to create a workplace where an examiner can be successful from anywhere. In this regard, we are currently engaged in consultations with Administration officials and members of Congress to address relevant issues concerning duty station requirements and travel regulations. Resolution of these issues would permit current hoteling employees to request to live in geographical locations far removed from our headquarters, thus enhancing our ability to retain high quality professionals.

5. Pay and Retention

All patent examiners received a 7% special pay rate increase in November 2006. With the January 2008 across-the-board increase for other Federal employees, in February we submitted a request to the Office of Personnel Management for an increase of 2% to the special pay table for patent examiners. The special pay coupled with the recruitment incentives has assisted the USPTO in reaching our hiring goals.

The USPTO expects to increase productivity in Patents by offering examiners more opportunities to determine when and how they do their work, and achieve higher bonuses. The USPTO is piloting a voluntary flat goal program for patent examiners that builds upon the successful system in Trademarks and moves production away from an hourly-based system. Highlights of the program include awards of up to $5,000 per quarter; flexibility in how work is done; and a predetermined amount of work based on grade and docket. Under the year-long pilot (April 2007 - April 2008), examiners may earn larger, quarterly bonuses for every application examined above a particular target goal. Early indications are that participants prefer the per-application bonus as opposed to the present productivity award structure and enjoy the flexibility of choosing when and how to do their work. The USPTO will evaluate the results of the pilot and incorporate that information into future planning.

In 2006, USPTO management submitted proposals to the Patent Office Professional Association union representatives for a new collective bargaining agreement that would replace a previous agreement negotiated in 1986. Proposals include enhanced patent examining monetary awards as well as a stand-alone quality award. Negotiations on those proposals continue.

6. Patent Examiner Attrition

The USPTO agrees with the recent GAO report which concludes, in part, that patent examiner attrition is an important matter deserving further analysis and attention. It is clear that patent examiners are critical to our system of protecting intellectual property and driving American innovation. We have achieved notable successes in examiner retention efforts and face various challenges in that context that have not yet been fully explored and evaluated.

In reviewing patent examiner attrition, and otherwise continuing to promote appropriate initiatives to maximize the efficiency and productivity of examination, we must recognize a number of relevant facts:

1. The USPTO's attrition rate is lower (8.5%) than the average attrition rate for Federal workers (11.2%).
2. The average attrition rate for USPTO patent examiners with 0-3 years experience is 15.5%. The average attrition rate for USPTO patent examiners with 3-30 years experience is 3.95%.
3. The attrition rate of patent examiners with 0-3 years experience, though measurably higher than the rest of the patent corps, appears to be well below the attrition rate experienced by similarly situated entities hiring more than 1,000 engineers in a year.
4. Examiners with the highest production requirements have the lowest attrition rates, and the examiners with the lowest production requirements have the highest attrition rates. In fact, 70% of all work in FY 2007 was done by examiners with 3 or more years of experience who exceeded their production goals by an average of 8% and had an average attrition rate of 3.95%.
5. 60% percent of all patent examiners exceeded their production requirements by at least 10% in FY 2006.

2007 proved to be a year where our targeted strategies focused on first-year attrition were dramatically successful. First year attrition is the highest attrition year for nearly all businesses and has historically averaged 20% at the USPTO. In 2007, we reduced that to 15%, and in some areas targeted for retention bonuses, we cut it in half. We have less than two years of data, but our combination of improved recruiting, training and retention efforts -- focused in the high risk areas -- has led to strong positive results.

7. Training Patent Examiners

In fiscal year 2006, USPTO established a new university-style training program to graduate new-hire examiners with the ability to work with reduced oversight thereby reducing the art unit training burden faced by Supervisory Patent Examiners (SPEs). The training program consists of classes of approximately 130 students, which are broken down further into small "labs" of approximately 16 examiners who will work in a similar area of technology. The training program is conducted over a period of 8 months in a location outside of the Technology Centers.

The program courses are taught through a combination of large lectures and small group sessions within the individual labs. The curriculum is kept current by a committee, with representation from every Technology Center, that writes and reviews the substance of the curriculum.

Lectures are followed by practical application and testing. The results of ongoing testing, administered electronically, indicate to examiners how well they grasp a particular topic and provide the trainer with information as to whether segments of the topic need additional review. Examiners write Office actions that are reviewed and evaluated by the trainer who provides appropriate feedback. A proficiency test is administered at the end of the 8-month program. The intent of the program is to deliver, to the examining corps, new hires who are capable of writing complete Office actions for supervisory review.

Mr. Chairman, we were honored to have Chairman Conyers address a graduating class of examiners last month. I would like to take this opportunity to extend an invitation to you and ranking member Coble to do so as well in the near future. I know our new examiners will appreciate hearing about intellectual property matters from the folks who actually write the IP laws.

8. Examiner Certification and Recertification

The USPTO has implemented a thorough certification process for any patent examiner seeking to be promoted from the GS-12 level to the GS-13 level. This process includes a review of the work product of the examiner and a certification exam modeled upon the patent bar exam that patent attorneys and agents must pass.

Examiners are provided with legal education on fundamental concepts involving patent laws and procedures to assist them in the preparation of taking the certification exam. Patent law and evidence courses, coaching lectures and on-line Study Tool for Examination Preparation (STEP) are offered to the examiners as training preparation tools.

The promotion to GS-13 represents a level of independence in which the supervisor is no longer responsible for day-to-day intensive review of the examiner's work product. In order for the examiner to achieve this level of independence, we are ensuring that they have the skills required to perform their job requirements with a high level of quality.

We are pleased to note that the percentage of examiners passing the certification test has increased from 44.4% in fiscal year 2004 to 65.9% in fiscal year 2007.

An in-depth review of the work of primary examiners is conducted after three years to ensure that primary examiners maintain the knowledge, skills and abilities necessary to perform high quality examinations. This review is conducted in part by the Technology Center and in part by the Office of Patent Quality Assurance (OPQA). Over the past three years, approximately 95% of primary examiners have passed recertification.

9. Patent Reviews

Our Office of Patent Quality Assurance (OPQA) has implemented targeted reviews of examination processes or functions that are perceived to potentially be problematic trends. These reviews provide a means to validate the accuracy and magnitude of the most significant examination process complaints, to establish a baseline of current performance in the targeted area as well as a basis to establish performance targets for improvement plans.

The reviews are conducted on a sample designed to provide statistically valid data and yield an assessment of the current level of performance and the supporting review data with respect to the identified examination process or function. Based on input on potential areas for consideration obtained through customer satisfaction survey data and other input from applicants and practitioners, the areas of final rejection practice, Request for Continued Examination (RCE) practice, search quality and restriction practice were identified for review during FY 07. Fiscal year review findings are summarized at the Corps and TC levels and OPQA consults with the Technology Centers to develop and/or implement improvement plans, as appropriate.

In October 2006, OPQA instituted an in-depth analysis of the search quality in applications selected from specific Art Units within each Technology Center in order to positively identify root-cause problems related to search quality and to identify and share best practices. Art Units subject to review were selected by the Technology Centers on the basis of perceived need, taking into account the findings of quality assurance programs in place within the Technology Centers and the OPQA.

Based upon the review findings, training tailored to the specific needs and technical subject matter of the individual Art Units is developed and delivered to the unit in an interactive format. Training is a collaborative effort between OPQA, Technology Center managers and search experts from the Scientific and Technical Information Center and covers topics including search strategy, claim interpretation, search tools and effective search techniques.

10. Expanded Technical Training Program

The USPTO has expanded the range of eligible non-duty training courses available for examiners to enhance their technical skills and abilities. A similar "After Work

Education" (AWE) program is currently being implemented for technical support personnel.

While the USPTO has provided paid non-duty training in the past to patent examiners to enable them to take technical classes, often leading to an advanced degree, it was determined that the previous program was too restrictive. In response to an explicit need expressed by the examiners, amendments were made to broaden the program to provide examiners with one year of experience at the USPTO the ability to take classes in arts outside their immediate docket. The classes, however, must still be related to a recognized technology that is examined at the USPTO.

This program will assist in developing and maintaining a highly skilled workforce by enhancing the employees' knowledge, skills and abilities through formal education. Currently, the patent examiner can receive up to $5,000 per year, and the agency has proposed to raise that opportunity to $10,000 per year.

Patent Initiatives - Administrative and Regulatory

The USPTO believes that improvements in patent quality are dependent, to a significant degree, on providing examiners access to more and better-focused information relevant to their decision making. Accordingly, the USPTO has promulgated and proposed, and will develop and propose, regulations and administrative changes governing submission and examination of patent applications that will enable our examiners to make more efficient and informed patentability determinations.

1. Accelerated Examination

The USPTO has established procedures setting forth requirements for patent applicants who want, within 12 months, a final decision by the examiner on whether their application for a patent will be granted or denied. To be eligible for "accelerated examination," applicants who file under this procedure are required to provide specific information so that review of the application can be completed rapidly and accurately.

Applicants have a duty to disclose to the USPTO material prior art of which they are aware. Under the USPTO's accelerated examination procedure, applicants are required to conduct a search of the prior art, to submit all prior art that is closest to their invention, and explain what the prior art teaches and how their invention is different.

In addition to providing and explaining any prior art references, applicants must explicitly state how their invention is useful and must show how the written description supports the claimed invention. The procedure also limits the number of claims allowed in each application and shortens the time periods for responding to most USPTO communications.

The accelerated examination procedure is designed to give applicants quality patents in less time. In exchange for a more rapid examination, patent examiners receive more focused and detailed information about the invention and the closest prior art from the applicants. This increased disclosure upfront by applicants helps examiners more efficiently make the correct decision about whether a claimed invention deserves a patent within the 12-month timeframe.

The accelerated examination program has been in effect since August 2006, and the first patent issued under the accelerated examination program (in just 6 months) on March 13, 2007, to Brother Corporation for a printer ink gauge. The patent application was filed on September 29, 2006.

1,096 petitions for accelerated examination have been filed to date with 344 granted and 271 pending. Of the 344 granted petitions, 114 have been allowed and 73 will have issued as patents by the end of this month. Our 12-month to completed prosecution (final rejection, allowance or abandonment) goal has been met for all applications.

2. Peer Review Pilot

On June 7, 2007, the USPTO released details of a pilot project that could help expedite and improve the examination process in computer technologies. The Peer Review Pilot gives technical experts in computer technology, for the first time, the opportunity to submit annotated technical references relevant to the claims of a published patent application before an examiner reviews it.

When patent examiners have the best information in front of them, they are more likely to make the correct decision. Examiners, however, have a limited amount of time to find and properly consider the most relevant information. This is particularly true in the software-related technologies where code is not easily accessible and is often not dated or well documented.

The pilot is a joint initiative with the Community Patent Review Project (CPRP), organized by the New York Law School 's Institute for Information and Policy. The pilot began on June 15, 2007, and runs for one year.

Technical experts in the computer arts registering with the CPRP website review and submit information for up to 250 published patent applications. To ensure a broad cross section of computer technology is reviewed, no more than 15 applications are allowed from any one person or organization.

Existing law allows USPTO to accept prior art from the public, but it doesn't allow the public to submit any commentary related to the art without the approval of the applicant. Thus, consent is obtained from all applicants who volunteer their applications for this pilot.

To expedite review of applications used in the pilot, they are assigned to an examiner as soon as a submission is received from the CPRP. This will shorten the time it normally takes in the computer arts from filing an application to a final decision. Only one

submission from the CPRP of up to 10 annotated references are accepted for each application in the pilot.

To date, 57 applications have been volunteered to participate in this pilot from over 15 different corporations and independent inventors. Over 170 pieces of prior art have been submitted to the 45 applications that have published so far in the pilot.

This pilot is just one facet of USPTO's broader efforts to find new ways to get the best information in front of examiners before they make a final decision on a patent application.

3. Markush Claims

On August 10, 2007, the USPTO proposed new rules in the *Federal Register* that will improve an examiner's ability to focus the examination process for individual claims listing multiple independent and distinct inventions in the alternative. Such "multi-invention alternative" claims are especially prevalent in the pharmaceutical, chemical, and biotechnology fields. The rules would permit the examiner to focus examination to a single invention. The rules would also encourage applicants to identify, with more specificity, the claimed invention to be examined, thus promoting examination quality.

4. Information Disclosure Statements

On July 10, 2006, the USPTO published proposed rule changes to information disclosure statement (IDS) requirements and other related matters to improve the quality and efficiency of the examination process. The proposed changes will enable the examiner to focus on the relevant portions of submitted information at the very beginning of the examination process, give higher quality first actions, and minimize wasted steps.

Patent applicants and their attorneys or agents currently have an obligation to inform USPTO's patent examiners of all information known to be material to patentability of the invention claimed by the applicant. Applicants list information for the examiner to consider in a communication called an Information Disclosure Statement (IDS).

The USPTO has observed that applicants sometimes provide information in a way that hinders, rather than helps, timely and accurate examination. For example, some applicants send a very large number of documents to the examiner, without identifying why they have been submitted, thus tending to obscure the most relevant information. Additionally, some applicants send very long documents without pointing out what part of the document makes it relevant to the claimed invention. Sometimes applicants delay sending key information to the examiner. These practices make it extremely difficult for the patent examiner to find and properly consider the most relevant information in the limited time available for examination of an application.

The USPTO's proposed rule change is designed to encourage early submission of relevant information, and to discourage submission of information that is unimportant or does not add something new for the examiner to consider. With the proposed changes,

patent examiners would not have to review documents that do not directly relate to the claimed invention, or that duplicate other information already submitted.

Under the proposal, applicants would still be able to send in as many documents as they choose. However, there would be more stringent requirements for those choosing to submit large numbers of documents or very long documents.

5. Open Source as Prior Art

The USPTO is consulting with the Open Source community regarding the potential development of a tagging process and interface to enable examiners access to open source software repositories as a source of prior art.

This initiative would classify and develop a lexicon for open source repositories, or databases, so that examiners could readily search them for relevant prior art. Currently, these repositories represent a body of prior art that examiners cannot access due to the inability to apply conventional text searching techniques. In other words, in this art, different inventors use a wide variety of terms to mean the same thing, making text searching very difficult.

6. Electronic Filing and Processing

The USPTO continues to promote electronic filing and processing of patent applications as a means of reducing paper-based inefficiencies. The USPTO implemented the Electronic Filing System-Web (EFS-Web), a user-friendly, secure, Internet-based patent application and document submission program in March 2006. Prior to FY 2006, less than 2% of patent applications were filed electronically. After working with the public and introducing the much-improved EFS-Web system, 49.3% of patent applications were filed electronically in FY 2007. In FY08, approximately 70% of patent applications are being filed electronically.

Improvements in EFS-Web have increased the quality of submissions received by the Office, and created significant cost savings for applicants as well as the Office. The trend toward improved processing and examination efficiency will continue as EFS-Web is being integrated with the evolving Patent File Wrapper (PFW) system to allow for a fully automated, text-driven patent application processing life-cycle. Our outreach efforts to our stakeholders are focused on further promoting electronic filing and interaction with patent applicants.

Operating in today's wired world requires that the USPTO have full electronic processing that is safe, secure and continually available to employees, applicants and stakeholders. EFS-Web has been a successful step in achieving that goal.

7. Central Reexamination Unit (CRU)

Reexamination cases, formerly distributed to the Technology Centers and assigned to examiners according to technology, are now assigned to a Central Reexamination Unit (CRU). The CRU consists of 52 highly skilled primary examiners who have a full understanding of reexamination practice and are generalists in their field of technology and relevant case law, and concentrate solely on reexamination.

The CRU is comprised of three art units including mechanical, electrical and chemical technology. The units are supervised by Supervisory Patent Examiners (SPEs) and each action is conferenced by a panel of three including the lead examiner, one SPE/RQAS/TQAS and one other CRU examiner. The goal of the CRU is to close prosecution on all ex-parte reexaminations within two years of filing.

8. Pre-Appeal Conferences

In July 2005, the USPTO announced that patent applicants can request a pre-appeal brief conference and learn its results before incurring the costs of drafting and filing an appeal brief. This change is expected to save patent applicants at least $30 million annually.

Previously, when an applicant wished to appeal a patent examiner's rejection of his/her patent application to the Board of Patent Appeals and Interferences (BPAI), the applicant was required to file a notice of appeal and an appeal brief before proceeding to the BPAI. Depending on the complexity of the invention, appeal briefs cost between $5,000 and $20,000 to prepare.

Before the appeal goes to the BPAI docket, however, the agency holds a pre-appeal brief conference with the examiner handling the application and two other experienced examiners. The purpose of the conference is to determine if the application is ready for appeal. Under the new procedures, an appeal brief isn't filed until the outcome of the conference is known. If the case is not ready for appeal, applicants will no longer incur the costs associated with needlessly preparing and filing the appeal brief.

9. Pre-First Office Action Interview and First Action Interview

Pre-First Office Action Interview

This initiative involves conducting a pre-first Office action interview with the applicant or his/her designated legal representative to discuss potential prior art rejections and possibly resolve many or all issues with respect to patentability. MPEP 713.02 provides for interviews prior to the first official action which will form the basis of reminders and encouragement to examiners regarding this provision. The MPEP makes clear that these interviews are at the discretion of the examiner who has yet to search the invention and a showing by the applicant may be required to justify the interview. In addition, the Office is currently in the process of setting up teleconferencing facilities to pilot such interviews when face-to-face meetings are not feasible and/or convenient.

Interviews occurring before the first Office action are believed to provide the opportunity for a more focused examination at the earliest stages of prosecution. Pendency of

applications that are part of this initiative will be tracked with the expectation that closure will be reached sooner due to the increased communication and discussion of issues taking place earlier in the process. We strongly encourage applicants to take advantage of this opportunity.

First-Action Interview

This initiative is a pilot program in which the applicant is entitled to a first action interview, upon request, prior to the first Office action on the merits. Under this pilot, the examiner will conduct a prior art search and provide applicant with a condensed pre-interview Office action. Within 30 days of its receipt, the applicant must schedule an interview and submit proposed amendments and/or arguments. At the interview, the rejections and proposed amendments will be discussed. If agreement is not reached, the applicant will receive a cursory first action interview Office action coupled with an interview summary that will act as the first Office action on the merits under 35 USC 132.

Interviews early in an application's prosecution allow for a speedy resolution of any unresolved issues. This, coupled with reduced applicant periods for response under the pilot, should reduce total pendency for the applications examined under this initiative.

Currently, the Official Gazette Notice and POPA agreement are undergoing final vetting. It is expected that the pilot will be implemented in March or April of 2008.

10. Work Sharing

The USPTO continues to work with the world's major intellectual property offices to study, review and implement work-sharing efforts that promote examination efficiencies in each participating office. The USPTO launched a trial cooperation program with the Japan Patent Office (JPO) in FY 2006 to leverage fast-track patent examination procedures already available in both offices to obtain corresponding patents faster and more efficiently. It also permits each office to benefit from work previously done by the other office.

This program, the Patent Prosecution Highway (PPH), is a significant first step in cooperative efforts to support U.S. and Japanese industries in their global patent prosecution activities and represents the first concrete implementation of a work-sharing arrangement between the USPTO and the JPO.

The USPTO is expanding on this work-sharing program with other intellectual property offices, initially with the United Kingdom, Korea and Canada. The USPTO will continue its efforts in expanding this program and will develop a coordinated approach among the offices in order to streamline practices and procedures.

11. Outreach

The USPTO with the help of its Patent Public Advisory Committee (PPAC) is reaching out to the intellectual property community to seek their input on improvements to the patent system in all areas including, but not limited to, examination, prosecution, enforcement and levels of patenting. Through the PPAC, we anticipate an open dialogue with patent stakeholders and the public as to what the Office needs to do to best protect and encourage innovation in America. We are open to all possibilities from minor improvements to a dramatic overhaul of patent protection, if justified. We are looking at a wide variety of alternative examination procedures including those that can be implemented under existing authorities as well as those requiring statutory changes.

The USPTO is also partnering with a local university's graduate school of business to participate in an international competition among graduate business students to create a business plan to address the USPTO's patent backlog and pendency challenges.

Patent Initiatives - Legislative

The USPTO is pleased that proposed patent modernization legislation includes quality-related provisions that will help ensure that patent examination is focused on the most relevant information available. Having such information available to patent examiners at the early stages of the examination process will lead to quality and efficiency improvements. The legislative proposals are consistent with the wide range of USPTO administrative initiatives directed toward those goals.

1. Applicant Quality Submissions (AQS)

A critical element of ensuring that patent examinations are of the highest quality and completed as efficiently as possible is the content of the initial application. The patent applicant has the most knowledge, the most opportunity, and the most to gain by providing the USPTO with the best possible information about his or her invention.

The Senate bill (S. 1145), as reported, directs the USPTO to issue regulations requiring applicants to submit search reports and analysis and other information relevant to patentability. The regulations would govern the timing and content of these submissions. Further, the bill provides that "micro-entities" as defined in the pending legislation are exempt from the requirements of this section.

The USPTO fully endorses the proposed AQS legislative language in the Senate bill, which is consistent with language originally recommended by the Office.

Policymakers would also need to consider how the current doctrine of inequitable conduct may discourage applicants from fully and fairly sharing relevant information with the USPTO. The USPTO is working with Congress on language in the patent modernization legislation that would encourage applicants to share more information with the Office.

2. Public Quality Submissions

Consistent with the USPTO's efforts to improve examiners' access to relevant information, pending patent modernization legislation would establish a procedure to permit submission by any person in writing of prior art within six months after publication of an application for patent. It would provide a limited opportunity for the public to have prior art documents considered by an examiner in the examination of an application. Any submission would necessarily include a "concise description of the asserted relevance of each submitted document."

Current USPTO rules permit documents to be submitted within 2 months after publication but without any explanation of relevance.

The USPTO supports this proposal with some technical adjustment and the addition of related rulemaking authority by the USPTO Director.

3. Post-Grant Review

Consistent with USPTO recommendations, pending patent modernization legislation includes provisions to establish new post-grant review procedures at the USPTO. The provisions are intended to improve upon existing administrative reexamination alternatives and provide a quicker, lower cost alternative to expensive litigation in reviewing patent validity questions. Such procedures would complement rather than displace ongoing quality-focused initiatives at USPTO.

The USPTO has suggested to Congress that the legislation, as currently drafted, be revised to more closely align with the post-grant review proposal drafted by the USPTO.

The USPTO proposal and both pending bills establish a post-grant review procedure under which any person may request the USPTO to cancel as unpatentable any claim of a patent within 12 months after issue or reissue. While the House and Senate bills vary as to a second window of opportunity for challenging a patent, the USPTO supports establishment of a second window that would open for a period of six months after a petitioner receives notice from a patent holder alleging infringement and shows substantial economic impact.

Trademark Initiatives

The Trademark organization met all of its production and pendency goals for FY 2007. Trademark first action pendency was 2.9 months and final action pendency, excluding suspended and inter partes proceedings, was 13.4 months.

1. Telework

The Trademark organization's telework programs continue to be a model for the Federal government. 85% of eligible examining attorneys work from home and, in fact, 85% of

all eligible trademark employees participate in a work-at-home program. The attrition rate for trademark examining attorneys was 2.5% in FY 2007.

2. Office of Trademark Quality Review and Training (OTQRT)

In FY 2003, the Trademark Quality Office (TQO) was recast as the Office of Trademark Quality Review and Training (OTQRT) with expanded authorities and responsibilities. While the TQO was responsible for measuring the quality of work product and maintenance of relevant data, the OTQRT is now responsible for the analysis of the quality data, identification of quality concerns and development of training initiatives designed to address those concerns. The Office continues to work with management to improve quality rather than merely perform measurements.

OTQRT review applications within strict time periods that ensure that corrective action can and does take place -- the current process is not only an in-process review, but allows for an in-process correction where appropriate.

Training initiatives that reflect the quality data and analysis are implemented in two main areas -- in continuing legal and procedural education and through new employee (primarily new examining attorney) training.

3. Outreach

The Office continues to invite members of the outside Trademark bar to provide industry specific lectures on trademark topics. Further, the Office has partnered with the International Trademark Association to jointly develop and present annual training seminars on particular industries. Recent seminars have focused on the fashion and retail, food and beverage, and motor vehicle industries.

The Office also arranges for speakers on a variety of current trademark issues and works with the International Trademark Association on a legal lecture series for examining attorneys. For example, recent topics have included anti-counterfeiting, ethics, and perspectives on examination from the point-of-view of private trademark counsel. Also, the Office meets with user groups on an ongoing basis to obtain feedback on examination quality.

4. Examining Attorney Training Time

Examining Attorneys are permitted to use up to 40 hours per year to attend training that directly enhances their ability to perform their duties as Examining Attorneys.

Protection of Intellectual Property

With increased demand for countries to implement effective systems for IP rights enforcement to achieve their World Trade Organization (WTO) and Trade Related Aspects of Intellectual Property Rights (TRIPs) obligations, and comply with existing

and new bilateral/multilateral trade agreement commitments, the USPTO continues to focus on providing technical training and capacity-building programs for IP rights protection and enforcement, judicial and prosecutorial education, public education and awareness efforts, and capacity-building to support the needs of developing countries. While the USPTO has long provided IP rights assistance and training, the USPTO has developed a flexible team approach to meet the challenges of IP rights protection and enforcement in today's global environment. This effort is accomplished by fulfilling existing obligations to assist nations in implementing accessible and effective IP rights protection and enforcement systems; partnering to provide useful programs and training; and working to increase the accessibility, efficiency, and effectiveness of civil, administrative, and criminal enforcement mechanisms in global trade, foreign markets, and electronic commerce.

1. Posting of IP Experts Overseas

In partnership with the Department of Commerce's U.S. and Foreign Commercial Service and the Department of State, the USPTO has posted IP experts in selected, high profile countries where U.S. IP challenges are greatest. The USPTO has posted experts in the countries of Brazil, India, Thailand, China (three experts), Egypt and Russia. The experts advocate U.S. IP policy and interests, conduct training on IP rights matters, assist U.S. businesses and otherwise support the Embassy or Consulate action plan on IP rights.

2. Global Intellectual Property Academy (GIPA)

The USPTO established GIPA, which consolidates and greatly expands USPTO's curriculum of training and capacity building programs on IP rights protection and enforcement. Through GIPA, USPTO brings foreign government officials including judges, prosecutors, police, Customs officers, patent, trademark and copyright officials, and policy makers to the United States to learn, discuss and strategize about global IP rights protection and enforcement. GIPA programs cover the gamut of IP rights enforcement issues facing the global economy, and are offered by USPTO acting in close cooperation with other U.S. Federal government agencies.

With the establishment of the Academy, the USPTO also implemented a Foreign Examiners-in-Residence (FEIR) training program – the first of its kind in international cooperation and training at the USPTO. Selected examiners from the patent offices in China, India, Brazil, Egypt, Mexico, and the Philippines participated in an 8-month pilot training program. The pilot is being evaluated to determine whether to continue the FEIR program.

3. Training and Capacity Building

In the near future (FY 2009 and beyond), the USPTO plans to strengthen our efforts to improve domestic and international IP protection. Project activities under this initiative will include the development and implementation of a series of enforcement programs including a world-wide program, regional programs, programs designed for single country participation and topic specific programs; increase the level of partnering and

resource matching with other government agencies, intergovernmental organizations, international organizations, and foreign international IP offices. An increase in bilateral activities between the USPTO and other foreign governments including consultations on the implementation and effectiveness of enforcement provisions is anticipated.

4. Free Trade Agreements (FTAs)

The negotiation of FTAs with trading partners is an essential mechanism for strengthening protection of U.S. interests abroad. The USPTO actively works with the USTR to develop standardized text for the IP section of FTAs, as well as advises the USTR during negotiation and implementation efforts. Additionally, technical assistance for FTA implementation would be provided. In FY 2007, the USPTO led the negotiations for the IP Chapter of the U.S.-Korea FTA, which is arguably the strongest IP chapter in any FTA and the most commercially significant FTA agreement in over 15 years. The USPTO also participated in negotiations on the IP chapter of the U.S.-Malaysia FTA, and negotiations and implementation of the U.S.-Central American FTA with the Dominican Republic. The USPTO will continue to support USTR in FTA negotiations, as scheduled.

5. IP Public Awareness Program

The USPTO holds conferences for small- and medium-sized businesses where participants learn about the importance of IP rights and how to protect and enforce these rights. In FY 2007, the USPTO formed a partnership with the U.S. Chamber of Commerce enabling the USPTO to share duties of agenda-building, funding, and outreach. Events were held in Raleigh, Detroit, Burlington (Vermont), San Antonio, Portland (Oregon), Seattle, Denver, and Los Angeles. The USPTO also organized two China specific events that took place in Philadelphia and Kansas City (Missouri). Large companies presented "lessons learned" and "best practices" to small-business attendees and small-businesses discussed the importance of their IP protection. More than 1,300 small- and medium-sized businesses attended. As a new outreach and educational tool, the USPTO distributed more than 1,500 CDs on IP protection. The USPTO will continue to hold small-business outreach seminars. Also in FY 2007, the USPTO began a partnership with the Ad Council to reach young Americans through a national ad campaign called *Inspiring Invention*, which seeks to make inventing and developing new ideas part of children's lives. Radio and television commercials are now playing throughout the country with the message, "Anything's possible. Keep thinking."

6. STOP!

The USPTO is fully engaged in the Bush Administration's Strategy Targeting Organized Piracy (STOP!) in the fight against piracy and counterfeiting around the world. In addition to training and outreach efforts, USPTO IP attorneys continue to staff the STOP! Hotline, which lets callers receive information on IP rights and enforcement from our attorneys with regional and subject matter expertise.

Conclusion

Intellectual property rights are a critical aspect of how nations protect and promote innovation and global competitiveness. The United States represents the gold standard for intellectual property protection, and the USPTO is the most productive and most respected intellectual property office in the world. However, because intellectual property protection is so fundamental to our Nation's economic growth, being the best is not enough. We must approach perfection. Despite the challenges, we at the USPTO strive to get it perfect, and we look forward to working with the Subcommittee to ensure that we do.

Thank you.

ATTACHMENT

USPTO UPDATE

BEFORE THE

SUBCOMMITTEE ON COURTS, THE INTERNET AND INTELLECTUAL PROPERTY
COMMITTEE ON THE JUDICIARY
U.S. House of Representatives

"USPTO Oversight Hearing"

FEBRUARY 27, 2008

The following is an update of USPTO activities since the last oversight hearing before this subcommittee in September 2005.

PATENTS

- Patent's production has increased by 21.5%
- Lowest error rates in Patents in a quarter century
- Highest quality increases in every quality measure
- Highest affirmance rate at the Board - 69%
- Lowest allowance rate in USPTO history, dropping from 70% in 2000 to 44% in the first quarter of 2008
- Hired more than 2,400 highly qualified patent examiners
- Implemented an Accelerated Examination procedure whereby any patent examination will be completed within 12 months
- Increased electronic filing in Patents from 2% to 70% currently
- Implemented nearly full-time teleworking for patent examiners—went from zero to more than a thousand patent examiners working nearly full-time from home.
  - o 83% of participants reported an increase in morale
  - o 87% of participants reported they were more likely to work more years at the USPTO
  - o 10% average increase in production of participants
- Implemented a program providing laptops for all patent examiners
  - o 86% of participants reported that job satisfaction improved
  - o 70% of participants said productivity increased
- Implemented a "flat goal program" to provide greater pay for higher production
  - o 83%% of participants reported their job satisfaction improved
  - o 5% average increase in production of participants
- Reduced attrition levels in the critical first-year area in 2007 by 25% (5 points) and by 50% (10 points) in recruitment bonus targeted areas, compared to the historical average of 20%
- Increased pay of patent examiners through a special pay rate and implemented recruitment and retention bonus programs

TRADEMARKS

- 41.3% increase in production
- Lowest historical error rates in Trademarks
- Increased teleworking for eligible trademark examiners by 23% to 85%
- Implemented work at home for 85% of all Trademark employees
- Implemented AWE educational opportunity program

INTERNATIONAL

- Conducted over 120 training programs for intellectual property officials
- Held first ever (May 2007) meeting of the heads of the five largest IP Offices to discuss cooperative efforts to improve patent quality and efficiency
- Completed the Global Intellectual Property Academy facility to deliver targeted programs and training for foreign IP and enforcement officials
- Implemented first of its kind Foreign Examiners-in-Residence training program
- Participated in negotiations on IP chapters of the U.S.-Korea, U.S.-Malaysia and U.S.-Central American/Dominican Republic FTAs

Mr. BERMAN. Thank you.
And Ms. Nazzaro?

TESTIMONY OF ROBIN M. NAZZARO, DIRECTOR OF NATURAL RESOURCES AND ENVIRONMENT, U.S. GOVERNMENT ACCOUNTABILITY OFFICE, WASHINGTON, DC

Ms. NAZZARO. Thank you, Mr. Chairman and Members of the Committee. I am pleased to be here today to discuss the U.S. Patent & Trademark Office.

As the Chairman noted, my current portfolio does not include USPTO, but I have had over 10 years experience where I did have responsibility for Federal research and development programs, including intellectual property and the oversight of USPTO. I am here today pitch-hitting for one of my colleagues who is undergoing cancer treatment.

My testimony today will be based on a report that we issued last September entitled, "U.S. Patent & Trademark Office: Hiring Efforts Are Not Sufficient To Reduce The Patent Application Backlog."

Specifically, I will discuss (1) USPTO's process for making its annual hiring estimates and the relationship of these estimates to the patent application backlog; (2) the extent to which patent examiner hiring has been offset by attrition; and (3) the factors that may contribute to this attrition, and the extent to which USPTO's retention efforts align with examiners' reasons for staying with the agency.

First, as a result of its increased workload relative to its existing workforce, USPTO determined that it would need to hire additional patent examiners each year. However, the agency identified its projected annual hiring estimates primarily on the basis of available funding levels and its institutional capacity to train and supervise examiners and not on existing backlog or the expected patent application workload. Although this process is generally consistent with the Office of Personnel Management's workforce planning strategies, the process does not consider how many examiners are needed to reduce the existing patent application backlog or address the inflow of new applications. Consequently, the patent application backlog has continued to increase, and it is unlikely that the agency will be able to reduce the backlog simply to its hiring efforts.

Second, in addition to the patent examiner attrition, which has continued to significantly offset PTO's hiring process from 2002 through 2006, one patent examiner left the agency for every two patent examiners hired. Of those who left, 70 percent had been at the agency for less than 5 years. This represents a significant loss to the agency, because these new examiners are primarily responsible for the actions to remove applications from the backlog. According to USPTO management, patent examiners leave the agency primarily for personal reasons, such as the job not being a good fit or the need to relocate in the event of a spouse's job. We also surveyed a random sample, though, of over 1,400 patent examiners, in which we received an 80 percent response rate. In contrast, 67 percent of the patent examiners we surveyed identified the agency's production goals as one of the primary reasons examiners may choose to leave USPTO. These goals are based on the number of applications patent examiners must complete during a 2-week pe-

riod. However, the assumptions underlying these goals were established over 30 years ago and have not been adjusted to reflect changes in the complexity of patent applications. Moreover, 70 percent reported working unpaid overtime during the past year in order to meet these production goals.

On the other hand, a number of different retention incentives offered from 2002 through 2006, such as a special pay rate, performance bonuses and a flexible workplace were the primary reasons patent examiners identified for staying with the agency. According to USPTO management, their most effective retention efforts were those related to compensation and an enhanced work environment. GAO's survey of patent examiners indicates that most patent examiners generally approve of the retention efforts and ranked the agency's salary, which can be more than 25 percent above Federal salaries for comparable positions, and the flexible work schedule among the primary reasons for staying with the agency.

In conclusion, despite its efforts to hire more patent examiners and implement retention incentives, USPTO has had limited success in retaining new patent examiners. Because production goals appear to be undermining its efforts to hire and retain a highly qualified workforce, we believe the agency will continue to be limited in its ability to meet the increasing demand for U.S. patents and reduce the growth of the patent application backlog, and ultimately may be unable to fulfill its mission of ensuring U.S. competitiveness. Thus, we recommended that USPTO undertake a comprehensive evaluation of how it establishes these goals and revise its goals as appropriate. USPTO agreed to implement this recommendation once it determines the effect of recent initiatives designed to increase the productivity of the agency through a more efficient and focused patent examination process. We are interested in timeframes and strategies that the agency has in place to try to implement this recommendation.

Mr. Chairman, this concludes my prepared statement. I would be happy to respond to any questions that you or Members of the Subcommittee may have at this time.

[The prepared statement of Ms. Nazzaro follows:]

PREPARED STATEMENT OF ROBIN M. NAZZARO

United States Government Accountability Office

GAO

Testimony

Before the Subcommittee on Courts, the Internet, and Intellectual Property, Committee on the Judiciary, House of Representatives

For Release on Delivery
Expected at 1:30 p.m. EST
Wednesday, February 27, 2008

U.S. PATENT AND TRADEMARK OFFICE

Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog

Statement of Robin M. Nazzaro, Director
Natural Resources and Environment

GAO-08-527T

GAO
Accountability-Integrity-Reliability

Highlights

Highlights of GAO-08-527T, testimony before the Subcommittee on Courts, the Internet, and Intellectual Property, Committee on the Judiciary, House of Representatives

Why GAO Did This Study

The U.S. Patent and Trademark Office (USPTO) helps protect U.S. competitiveness by granting patents for new ideas and innovations. Increases in the volume and complexity of patent applications have extended the time for processing them. Concerns continue about the agency's efforts to attract and retain qualified patent examiners who can meet the demand for patents and help reduce the growing backlog of unexamined patent applications.

In 2007, GAO reported on (1) USPTO's process for making its annual hiring estimates and the relationship of these estimates to the patent application backlog; (2) the extent to which patent examiner hiring has been offset by attrition, and the factors that may contribute to this attrition; and (3) the extent to which USPTO's retention efforts align with examiners' reasons for staying with the agency. GAO recommended that USPTO comprehensively evaluate the assumptions it uses to establish its production goals. USPTO agreed to implement this recommendation once it determines the effect of recent initiatives designed to increase the productivity of the agency through a more efficient and focused patent examination process.

This testimony is based on GAO's 2007 report, which was based in part on a survey of 1,420 patent examiners. See, GAO, *U.S. Patent and Trademark Office: Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog*, GAO-07-1102.

To view the full product, including the scope and methodology, click on GAO-08-527T. For more information, contact Robin M. Nazzaro at (202) 512-3841 or nazzaror@gao.gov.

February 27, 2008

U.S. PATENT AND TRADEMARK OFFICE

Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog

What GAO Found

USPTO primarily determined its annual hiring estimates on the basis of available funding levels and institutional capacity to train and supervise new patent examiners, and not on the basis of the number of patent examiners needed to reduce the existing backlog of patent applications or review new patent applications. USPTO's process for identifying its annual hiring estimates is generally consistent with accepted workforce planning strategies. However, because this approach does not consider how many examiners are needed to reduce the existing backlog or address the inflow of new applications, it is unlikely that the agency will be able to reduce the growing backlog simply through its hiring efforts.

Although USPTO is hiring as many new patent examiners as its budget and institutional capacity will support, attrition is significantly offsetting the agency's hiring efforts, and agency management and patent examiners disagree about the causes of attrition. Specifically, from 2002 through 2006, one patent examiner left USPTO for nearly every two hired—70 percent of those who left had been at the agency for less than 5 years. This represents a significant loss to the agency because new patent examiners are primarily responsible for the actions that remove applications from the backlog. According to USPTO management, patent examiners primarily leave the agency because of personal reasons, such as finding that the job is not a good fit. In contrast, 67 percent of patent examiners identified the agency's production goals among the primary reasons they would consider leaving the agency. These goals are based on the number of applications patent examiners must complete during a 2-week period. However, the assumptions underlying these goals were established over 30 years ago and have not since been adjusted to reflect changes in the complexity of patent applications. Moreover, 70 percent of patent examiners reported working unpaid overtime during the past year in order to meet their production goals. The large percentage of examiners working overtime to meet production goals and who would choose to leave the agency because of these goals may indicate that these goals do not accurately reflect the time needed to review applications and are undermining USPTO's hiring efforts.

The retention incentives and flexibilities USPTO has provided over the last 5 years generally align with the primary reasons patent examiners identified for staying with the agency. Between 2002 and 2006, USPTO used a variety of retention flexibilities, such as a special pay rate, performance bonuses, and a flexible work place to encourage patent examiners to stay with the agency. According to USPTO management, their most effective retention efforts were those related to compensation and an enhanced work environment. GAO's survey of patent examiners indicates that most patent examiners generally approved of USPTO's retention efforts, and ranked the agency's salary and other pay incentives as well as the flexible work schedule among the primary reasons for staying with the agency.

Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today to discuss GAO's recent report on the U.S. Patent and Trademark Office (USPTO).[1] Protecting intellectual property rights and encouraging technological progress are important for ensuring the current and future competitiveness of the United States. As you know, USPTO helps protect the nation's competitiveness by issuing patents that protect new ideas and investments in innovations, ranging from new treatments for diseases to new wireless technology applications.[2] However, recent increases in both the complexity and volume of patent applications have lengthened the time it takes the agency to process them and raised concerns among intellectual property organizations, patent holders, and others about the quality of the patents that are issued. Over the last 15 years, the number of patent applications that have not yet been reviewed, called the backlog, has continued to grow—increasing since fiscal year 2002 by nearly 73 percent to about 730,000 applications.

USPTO relies on a workforce of nearly 5,000 patent examiners to review and make decisions on patent applications. The number of patent applications that can be reviewed in any given year is determined by, among other things, the number of examiners hired, as well as the overall size and experience of the patent examination workforce. Patent examiners are assigned a biweekly "production goal," which represents the number of specific actions and decisions that patent examiners must make about patent applications they review in a 2-week period.[3] USPTO assesses patent examiners' performance on their ability to meet their goals. However, as we noted in 2005 and again in 2007, the assumptions underlying the agency's production goals have not been updated since 1976.

[1]GAO, *U.S. Patent and Trademark Office: Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog*, GAO-07-1102 (Washington, D.C.: Sept. 4, 2007).

[2]USPTO, an agency within the Department of Commerce, consists of two organizations, one for patents and one for trademarks. This statement focuses on the patent organization, which accounts for approximately 76 percent of the agency's resources.

[3]USPTO tracks two key milestones in the patent application process to evaluate a patent examiner's performance. One milestone is the patent examiner's initial action on the merits of the case. Most patent applications are removed from the backlog when this initial action is made. The other milestone occurs when the application is allowed, abandoned, or sent to the Board of Patent Appeals and Interferences.

Since 2000, USPTO has implemented a variety of human capital flexibilities, such as recruitment bonuses and law school tuition reimbursement, to help attract and retain enough patent examiners to meet the growing demand for patents. Nevertheless, the rate of attrition for patent examiners has continued to increase, especially among patent examiners who have been with the agency for less than 5 years.

My testimony today summarizes findings from GAO's 2007 report, specifically (1) USPTO's process for identifying its annual hiring estimates and the relationship of these hiring estimates to the patent application backlog; (2) the extent to which patent examiner hiring has been offset by attrition at USPTO, and the factors that may contribute to patent examiners' decisions to leave the agency; and (3) the extent to which the retention incentives and flexibilities USPTO has implemented align with patent examiners' reasons for staying with the agency. This report was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

In summary, we found the following:

- In each of the last 5 years, USPTO identified its projected annual hiring estimates primarily on the basis of how many new patent examiners it has the budget and supervisory and training capacity to support, and not on the existing backlog or the expected patent application workload. Although USPTO's process for identifying its annual hiring estimates is generally consistent with accepted workforce planning strategies, this process does not consider how many examiners are needed to reduce the existing patent application backlog or address the inflow of new applications. As such, it is unlikely that the agency will be able to reduce the growing backlog simply through its hiring efforts.

- Attrition is significantly offsetting USPTO's hiring progress, and agency management and patent examiners disagree about the causes for this attrition. From 2002 through 2006, one patent examiner left USPTO for nearly every two the agency hired. Of those who left, 70 percent had been at the agency for less than 5 years. This represents a significant loss to the agency because new patent examiners are primarily responsible for the actions that remove applications from the backlog. According to USPTO management, patent examiners leave the agency primarily for personal

reasons, such as the job not being a good fit or family reasons. In contrast, 67 percent of patent examiners we surveyed as part of our 2007 report identified the agency's production goals as one of the primary reasons examiners may choose to leave USPTO. Moreover, 70 percent of patent examiners reported working unpaid overtime during the past year in order to meet their production goals. Such a large percentage of patent examiners, who are working extra time to meet their production goals and choosing to leave the agency because of these goals, may be an indication that the production goals do not accurately reflect the time patent examiners need to review applications and are undermining USPTO's hiring efforts.

- The retention incentives and flexibilities USPTO has provided over the last 5 years generally align with the primary reasons patent examiners identified for staying with the agency. According to USPTO management, the most effective retention efforts were those related to compensation and an enhanced work environment. Specifically, between 2002 and 2006, USPTO used a variety of retention flexibilities, such as a special pay rate, performance bonuses, flexible work place, and a telework program to encourage patent examiners to stay with the agency. Most patent examiners who participated in our survey indicated that they generally approved of USPTO's retention efforts, and ranked the agency's salary and other pay incentives, as well as the flexible work schedule, among the primary reasons for staying with the agency.

Background

To obtain a patent, inventors—or more usually their attorneys or agents—submit an application to USPTO that fully discloses and clearly describes one or more distinct innovative features of the proposed invention and pay a filing fee to begin the examination process. USPTO evaluates the application for completeness, classifies it by the type of patent and the technology involved,[1] and assigns it for review to one of its operational units, called technology centers, that specializes in specific areas of science and engineering. Supervisors in each technology center then assign the application to a patent examiner for further review to determine

[1]Patents typically fall into one of three categories: (1) utility—for useful inventions, such as processes, machines, articles of manufacture, or composition of matter; (2) design—for changes in configuration, shape, or surface ornamentation that do not involve changes in function; or (3) plant—for asexually reproducible plants. A fourth category, "reissue patents," refers to patents USPTO grants as replacements for any patent that was in some way defective; these patents constituted less than one-half of 1 percent of patents issued in fiscal year 2003.

if a patent is warranted. In making this determination, patent examiners must meet two specific milestones in the patent examination process: first actions and disposals.

- *First action*. At this milestone, patent examiners notify applicants about the patentability of their invention. After determining if the invention is new and useful, or a new and useful improvement on an existing process or machine, patentability is determined through a thorough investigation of information related to the subject matter of the patent application and already available before the date the application was submitted, called prior art. Prior art includes, but is not limited to, scientific publications and U.S. and international patents.

- *Disposal*. Patent examiners dispose of a patent application by determining, among other things, if a patent will be granted—called allowance—or not.

Patent examiners receive credit, called counts, for each first action and disposal, and are assigned production goals on the basis of the number of production units—comprised of two counts—they are expected to achieve in a 2-week period. The counts in a production unit may be any combination of first actions and disposals.

The production goals that are used today to measure patent examiner performance are based on the same assumptions that USPTO established in the 1970s. At that time, production goals were determined based on the belief that it should take a patent examiner a certain amount of time to review a patent application and achieve two counts based on their experience (as determined by their position in the agency) and the type of patent they are reviewing. As a result, these goals vary depending upon the patent examiner's position based on the federal government's general schedule pay scale (GS) and the technology center in which the patent examiner works. For example, a GS-12 patent examiner working on data processing applications is expected to achieve two counts in 31.6 hours, whereas a GS-12 patent examiner working on plastic molding applications is expected to do so in 20.1 hours. GS-7 patent examiners working on those types of applications, however, are expected to achieve two counts in 45.1 and 28.7 hours, respectively. Patent examiner achievements are recorded biweekly, and, at the end of each fiscal year, those patent applications that have not been reviewed for first action are counted as part of USPTO's inventory of unexamined applications, otherwise known as the patent application backlog.

USPTO's Annual Hiring Estimates Are Determined by Funding and Institutional Capacity and Are Unlikely to Reduce the Patent Application Backlog

In each of the last 5 years, USPTO has identified its annual hiring estimates primarily on the basis of available funding levels and its institutional capacity to train and supervise new patent examiners, and not on the basis of the number of patent examiners needed to reduce the existing backlog or review new patent applications. Although this process is consistent with workforce planning strategies established by the Office of Personnel Management (OPM) and has enabled the agency to better match its hiring estimates to its institutional capacity, USPTO's ability to reduce the patent application backlog simply through its hiring efforts is unlikely.

Specifically, USPTO begins the process of identifying projected hiring estimates as part of creating its budget submission for the Office of Management and Budget (OMB) 18 months before the start of the hiring year in order to meet OMB's submission timeline. After considering expected funding levels and available patent examiner workforce data,[5] USPTO considers its institutional capacity to supervise and train patent examiners. For example, in identifying its fiscal year 2002 hiring estimate, USPTO determined that funding availability would limit the number of patent examiners the agency could hire, and established its estimate on the basis of the number of patent examiners the agency had hired in the most recent year. However, in fiscal years 2003 through 2006, USPTO determined that funding would not be a limiting factor, and the agency's hiring estimates were based primarily on its institutional capacity to supervise and train patent examiners.

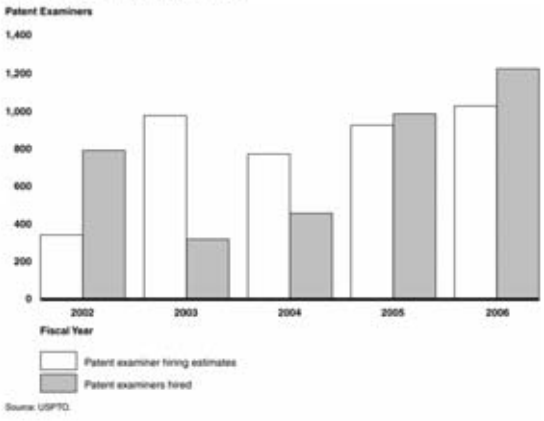
USPTO considers a number of factors in determining its institutional capacity to supervise and train new patent examiners. For example, it determines its supervisory capacity by considering the number of additional patent examiners who can be placed in a technology center. This number is limited by the number of supervisors available in each center who can sign patent application approvals and rejections and provide on-the-job-training for new patent examiners. Although new patent examiners can review the prior art relating to patent applications, only supervisors can authorize a new patent examiner's decision to approve or reject a patent application. In an effort to avoid delays and

[5]USPTO stated that it uses a robust forecasting and modeling process to determine the optimal hiring, staffing, and production levels. This model was evaluated by the National Academy of Public Administration and determined to be appropriate. While we acknowledge that USPTO uses this model to identify optimal hiring levels, we found that the determination of projected estimates was made on the basis of funding levels and the capacity to support additional staff.

inefficiencies in initial and final decisions on patent applications, the agency tries to ensure that the supervisor to patent examiner ratio is about 1 supervisor for every 12 patent examiners. Similarly, USPTO's training capacity is determined by the number of patent examiners the agency believes it can train in a year. Training capacity was based on 2- or 3-week courses offered throughout the year and were led by supervisory patent examiners. The courses could accommodate about 16 patent examiners each, and in fiscal year 2004, according to USPTO, the agency offered about 28 training sessions.

Because USPTO's projected hiring estimates are established at least 18 months in advance of the hiring year, the agency continually refines the estimates to reflect changes that might occur during this period. For example, in 2002, when it created its budget submission to OMB, USPTO projected it would hire 750 patent examiners for fiscal year 2004. However, due to budget constraints, the agency actually hired 443 patent examiners in fiscal year 2004. Figure 1 shows USPTO's projected and actual hiring numbers for fiscal years 2002 through 2006.

Figure 1: USPTO Patent Examiner Projected Hiring Estimates and Actual Number Hired, Fiscal Years 2002 through 2006



Source: USPTO.

The differences between projected hiring estimates and the number hired occurred primarily because of funding availability. In fiscal years 2003 and 2004, according to USPTO, the agency's appropriations were significantly less than the agency's budget requests. As a result, the agency could not financially support the number of new patent examiners it had initially planned to hire. In fiscal years 2005 and 2006, however, USPTO hired more patent examiners than originally planned because the agency's appropriation for those years was greater than anticipated.

The way in which USPTO identifies annual patent examiner hiring estimates is generally consistent with workforce planning strategies endorsed by OPM. For example, OPM recommends that agencies regularly track workforce trends to ensure updated models for meeting organizational needs; base decisions on sources of information such as past workforce data; and include in its workforce planning process a workforce analysis system that identifies current and future losses due to attrition. We found that USPTO generally followed these processes.

Recognizing the need to increase its institutional capacity to hire more patent examiners, USPTO has taken steps to increase its training and supervisory capacity. To increase its training capacity, USPTO implemented an 8-month training program in fiscal year 2006 called the Patent Training Academy. According to USPTO, the academy provides the agency with a constant annual training capacity for 1,200 new patent examiners for each of the next 5 years. Moreover, USPTO officials believe that the academy may indirectly improve the agency's supervisory capacity because new patent examiners should be better prepared to start work in a technology center and therefore will need less supervision and on-the-job training. USPTO plans to monitor new patent examiners after they have graduated from the academy to determine if the agency can use this approach to increase its institutional capacity and, therefore, its future annual hiring estimates.

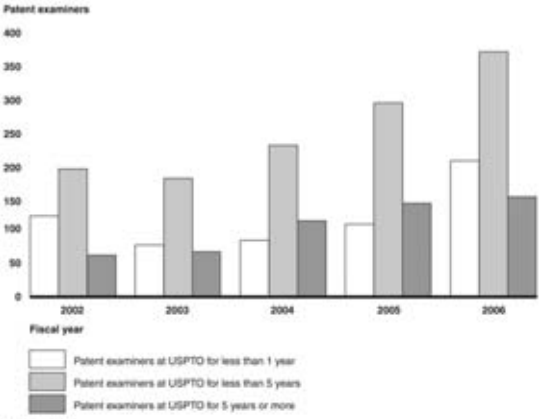
Even with its increased hiring estimates of 1,200 patent examiners each year for the next 5 years, USPTO's patent application backlog is expected to increase to over 1.3 million at the end of fiscal year 2011. The agency has also estimated that if it were able to hire 2,000 patent examiners per year in fiscal year 2007 and each of the next 5 years, the backlog would continue to increase by about 260,000 applications, to 953,643 at the end of fiscal year 2011. Despite its recent increases in hiring, the agency has acknowledged that it cannot hire its way out of the backlog and is now focused on slowing the growth of the backlog instead of reducing it.

Attrition Has Significantly Offset Hiring over the Last 5 Years, and Agency Management and Patent Examiners Disagree about the Reasons for Attrition

Although USPTO is hiring as many new patent examiners as it has the annual funding and institutional capacity to support, attrition has continued to increase among patent examiners—one patent examiner has been lost for nearly every two hired over the last 5 years. For example, from the beginning of fiscal year 2002 through fiscal year 2006, USPTO hired 3,672 patent examiners. However, the patent examination workforce only increased by 1,644 because 1,643 patent examiners left the agency and 385 patent examiners were either transferred or promoted out of the position of patent examiner. As shown in figure 2, approximately 70 percent of the patent examiners who left the agency had been at USPTO for less than 5 years, and nearly 33 percent had been at the agency for less than 1 year.[8]

[8]These percentages include patent examiners who transferred or were promoted out of the patent examination workforce, but remained at USPTO, and represent approximately 19 percent of patent examiner attrition from fiscal year 2002 through 2006.

Figure 2: Patent Examiner Attrition by Years of Experience, Fiscal Years 2002 through 2006



Source: USPTO.

Note: In each fiscal year, the number of patent examiners at USPTO for less than 5 years is inclusive of those at USPTO for less than 1 year.

The attrition of patent examiners who were at the agency for less than 5 years is a significant loss for USPTO for a variety of reasons. First, attrition of these staff affects USPTO's ability to reduce the patent application backlog because these less experienced patent examiners are primarily responsible for making the initial decisions on patent applications—the triggering event that removes applications from the backlog. Second, when these staff leave USPTO, the agency loses up to 5 years of training investment in them because patent examiners require 4 to 6 years of on-the-job experience before they become fully proficient in conducting patent application reviews. Third, the more experienced examiners who have the ability to examine more applications in less time have to instead devote more of their time to supervising and training the less experienced staff, thereby further reducing the agency's overall productivity. Finally, these workforce losses reduce the pool of potential

supervisory patent examiners for the future and therefore impair USPTO's ability to increase its supervisory capacity and, ultimately, its hiring goals.

We found that USPTO management and patent examiners disagree significantly on the reasons for the agency's attrition. According to USPTO management, personal reasons are the primary reasons that cause patent examiners to leave the agency.[7] Some of these reasons include the following:

- The nature of the work at USPTO does not fit with the preferred working styles of some patent examiners, such as those with engineering degrees who are looking for more "hands-on" experiences.
- Many patent examiners enter the workforce directly out of college and are looking to add USPTO to their resumes and move on to another job, rather than building a career at the agency, otherwise known as the "millennial problem."
- Patent examiners may choose to leave the area, as opposed to choosing to leave the agency, because their spouse transfers to a position outside of the Washington, D.C., area; the cost of living is too high; or the competition is too high for entry into the Washington, D.C., area graduate and post graduate programs for those patent examiners who would like to pursue higher education.

According to USPTO management, the agency has a number of ongoing efforts to help address these issues. For example, the agency is developing a recruitment tool to better assess applicant compatibility with the agency's work environment; targeting midcareer professionals during the recruitment process; and considering the creation of offices located outside the Washington, D.C., area to provide lower cost-of-living alternatives for employees.

While Patent Office Professional Association officials—the union that represents patent examiners—agreed that in some cases personal reasons may contribute to patent examiners leaving the agency, they believe that the unrealistic production goals that the agency sets for patent examiners

[7]The term "primary reasons" refers to the top three reasons patent examiners leave the agency provided by USPTO management, as well as the top three or more statistically significant reasons provided by patent examiners in our survey.

is primarily responsible for attrition.[8] Specifically, according to union officials unrealistic production goals have created a "sweat shop culture" within the agency that requires patent examiners to do more in less time and has therefore been a significant contributor to patent examiners' decisions to leave USPTO. To call attention to this concern, in April 2007 the union joined the Staff Union of the European Patent Office and other international patent examiner organizations in a letter declaring that the pressures on patent examiners around the world have reached such a level that in the absence of serious measures, intellectual property worldwide would be at risk. The letter recommended, among other things, an increase in the time patent examiners have to review patent applications.

Patent examiners who participated in our survey generally agreed with union officials. Specifically, approximately 67 percent of patent examiners, regardless of their tenure with the agency, said that the agency's production goals were among the primary reasons they would consider leaving USPTO. Moreover, we estimated that 62 percent of patent examiners are very dissatisfied or generally dissatisfied with the time USPTO allots to achieve their production goals; and 50 percent of patent examiners are very dissatisfied or generally dissatisfied with how the agency calculates production goals. In addition, a number of respondents noted that the production goals are outdated, have not changed in 30 years, and some technologies for which they evaluate applications had not even been discovered at the time the agency's production goals were set. Fifty-nine percent of patent examiners believed that the production system should be reevaluated, including altering the production goals to allow more time for patent examiners to conduct their reviews.

We and others have reported in the past that the assumptions underlying the agency's production goals were established over 30 years ago and have not since been adjusted to reflect changes in science and technology. Moreover, USPTO uses these production goals to establish its overall performance goals for patent examiners, such as the number of first actions to be completed in a given year.[9] However, from 2002 through

[8]Union officials also identified a recent decision by USPTO management to track when patent examiners enter and leave the building as another reason patent examiners would choose to leave the agency. Union officials declined to rank the reasons they believe patent examiners leave USPTO, preferring instead that we rely on patent examiner survey results.

[9]USPTO predicts first actions by multiplying the number of patent examiners in the workforce by production goals.

2006, the agency missed its projections in 4 of the 5 years. Furthermore, according to our survey, patent examiners are discontented with the actions they have to take in order to meet their production goals. Specifically, 70 percent of patent examiners who participated in our survey reported working unpaid overtime to meet their production goals during the last year, some reporting working over 30 extra hours in a 2-week period. In addition, we estimated that 42 percent of patent examiners had to work while they were on paid annual leave in order to meet their production goals. The percentage of patent examiners working while on paid leave was significantly higher for those with longer tenure at the agency. We estimated that 18 percent of patent examiners who had been at USPTO from 2 to 12 months worked to meet their production goals while on paid leave, compared with 50 percent of patent examiners with over 5 years' experience. As one respondent to our survey explained, "Vacation time means catch up time." Another respondent summed up the situation as follows: "I know that the production goals are set to keep us motivated in order to help get over the backlog but if a majority of examiners cannot meet those goals without relying on unpaid overtime or annual leave then something is wrong with the system." According to our survey results, 59 percent of patent examiners identified the amount of unpaid overtime that they have to put into meeting their production goals as a primary reason they would choose to leave USPTO, and 37 percent identified the amount of time they must work during paid leave in order to meet their goals as a primary reason to leave the agency.

Even though the agency has not been able to meet its productivity goals for the last 4 years, this extensive amount of unpaid overtime patent examiners have to work in order to meet their production goals does not appear to be a concern for the agency. When we asked USPTO management about the agency's policy for unpaid overtime to meet production goals, the Deputy Commissioner for Patent Operations told us, "As with many professionals who occasionally remain at work longer to make up for time during the day spent chatting or because they were less productive than intended, examiners may stay at the office (or remote location) longer than their scheduled tour of duty to work."

Retention Incentives and Flexibilities Provided over the Last 5 Years Generally Align with the Primary Reasons Patent Examiners Identified for Staying at USPTO

From 2002 to 2006, USPTO offered a number of different retention incentives and flexibilities, as table 1 shows.

Table 1: Retention Incentives and Flexibilities Provided by USPTO by Category, and Other Retention Efforts, Fiscal Years 2002 through 2006

Category	Retention incentive, flexibility, or other
Compensation	• Performance bonuses
	• Flexible spending accounts that allow patent examiners to set aside funds for expenses related to health care and care for dependents
	• Law school tuition reimbursement program[a]
	• Noncompetitive promotion to the full performance level
	• Recruitment bonuses up to $9,900
	• Special pay rate[b]
	• Transit subsidy program
Enhanced work environment	• Casual dress policy
	• Flexible work schedules, including the ability to schedule hours off during the day
	• Improved management communication techniques (e.g., town hall meetings, online chats with the Commissioner)
	• No-cost health screenings at an on-site health unit staffed with a registered nurse and part-time physician
	• On-site child care and fitness centers
	• Creation of a committee to organize recreational and social activities, such as a basketball tournament and Halloween party
	• Work at home opportunities
Other retention efforts	• Additional training for managers, such as workshops on intergenerational issues and technical training for patent examiners
	• Formation of a Patents Retention Council to focus on patent examiner retention issues at USPTO
	• A survey given to potential applicants during the recruiting process to better assess applicant compatibility with the USPTO work environment

Source: GAO analysis of USPTO information.

[a]USPTO provided the law school tuition program for two years between fiscal years 2002 and 2006.

[b]The special pay rate was approved in 2006 and went into effect in January 2007.

According to USPTO management officials, the three most effective retention incentives and flexibilities that they have offered are the special pay rates, the bonus structure, and opportunities to work from remote locations. More specifically:

- *Special pay rate.* In November 2006, USPTO received approval for an across-the-board special pay rate for patent examiners that can be more than 25 percent above federal salaries for comparable positions. For example, in 2007, a patent examiner at USPTO earning $47,610 would earn $37,640 in a similar position at another federal agency in the Washington, D.C., area.

- *Bonus structure.* The agency awards bonuses to patent examiners who exceed their production goals by at least 10 percent. For example, according to USPTO, in fiscal year 2006, 60 percent of eligible patent examiners who exceeded production goals by 10 percent or more received a bonus. As table 2 shows, USPTO awarded 4,645 bonuses to patent examiners that totaled over $10.6 million in fiscal year 2006.[10]

- *Opportunities to work from remote locations.* In fiscal year 2006, approximately 20 percent of patent examiners participated in the agency's telework program, which allows patent examiners to conduct some or all of their work away from their official duty station 1 or more days a week. In addition, when USPTO began a "hoteling" program in fiscal year 2006, approximately 10 percent of patent examiners participated in the program, which allows some patent examiners to work from an alternative location.[11]

Table 2: Number of Bonuses and Bonus Amounts USPTO Awarded, and Number of Patent Examiners Participating in the Telework Program in Fiscal Years 2002 through 2006

	2002	2003	2004	2005	2006
Number of bonuses	4,877	4,839	5,015	4,567	4,645
Bonus amount (dollars in millions)	$10.3	$10.9	$11.5	$10.9	$10.6
Patent examiners in telework program	Not applicable[a]	800	345	1,014	999

Source: USPTO.

[a]USPTO did not offer a telework program until fiscal year 2002.

[10]USPTO may award up to three types of bonuses to one patent examiner in a fiscal year, one of which may be awarded twice per fiscal year.

[11]Patent examiners who qualify for hoteling are assigned USPTO computer hardware and are not assigned permanent office space but share space when it is necessary for them to come into the USPTO offices.

According to the results of our survey, patent examiners generally agreed that compensation-related retention incentives and efforts to enhance the work environment were among the most important reasons they would choose to stay at USPTO, as table 3 shows.

Table 3: Patent Examiners' Views on Compensation-Related and Enhanced Work Environment Incentives and Flexibilities in Decreasing Order of Importance

USPTO incentives and flexibilities offered to patent examiners	Estimated percentage of patent examiners who identified these incentives and flexibilities as reasons to stay with the agency
Current total pay (excluding benefits)	58
The availability of the flexible work schedule program	49
The availability of a hoteling program	38
Current federal benefits	30
The availability of a teleworking program	17
The recent implementation of a special pay rate increase	16
Opportunities for career advancement	15
The ability to be promoted to the next GS level	14
The availability of the law school tuition program	10
The availability of monetary awards	5
The casual dress policy	4
Access to an on-site fitness center	4
The availability of a transit subsidy program	2
The availability of on-site child care	1
The availability of flexible spending accounts (i.e., the program that allows you to pay for eligible out-of-pocket health care and dependent care expenses with pre-tax dollars)	1
The availability of an on-site health unit	0
Activities offered by the Work-Life Committee	0

Source: GAO survey.

Note: To determine the estimated percentages in this table, we included the total number of times patent examiners identified a particular retention incentive and flexibility as one of the three most important reasons they would choose to stay at USPTO.

Despite USPTO's efforts to hire more patent examiners annually and implement retention incentives and flexibilities over the last 5 years, the agency has had limited success in retaining new patent examiners.

Because the agency's production goals appear to be undermining USPTO's efforts to hire and retain a qualified workforce, we recommended in 2007 that the agency comprehensively evaluate the assumptions it uses to establish patent examiner production goals and revise those assumptions as appropriate.

The Department of Commerce agreed with our findings, conclusions, and recommendation and agreed that the agency's hiring efforts are not sufficient to reduce the patent application backlog. It stated that USPTO is implementing initiatives to increase the productivity of the agency that will result in a more efficient and focused patent examination process. Once USPTO determines the effect of these initiatives on patent examiner productivity, it will reevaluate the assumptions used to establish patent examiner productions goals.

Mr. Chairman, this concludes my prepared statement. I would be happy to respond to any questions that you or Members of the Subcommittee may have at this time.

Contacts and Acknowledgments

For further information, please contact Robin M. Nazzaro at (202) 512-3841 or nazzaror@gao.gov. Other contributors to this statement include Vondalee R. Hunt, Assistant Director; Omari Norman; Jamie Roberts; Carol Herrnstadt Shulman, and Lisa Vojta.

Mr. BERMAN. Thank you very much.
Mr. Budens?

TESTIMONY OF ROBERT D. BUDENS, PRESIDENT, PATENT OFFICE PROFESSIONAL ASSOCIATION (POPA), ARLINGTON, VA

Mr. BUDENS. Mr. Chairman, Ranking Member Coble, Members of the Subcommittee, POPA represents more than 5,800 patent professionals at the USPTO, including more than 5,500 patent examiners.

Mr. BERMAN. Is your mic on?

Mr. BUDENS. Oh, sorry. You want me to start over?

Mr. BERMAN. Fifty eight hundred.

Mr. BUDENS. Fifty eight hundred patent professionals at the USPTO, including more than 5,500 patent examiners. POPA's members take great pride in the work they do, and are committed to maintaining the quality and integrity of America's patent system.

The USPTO has received much criticism in recent years for failing to allow high quality patents in a timely manner. Many proposed solutions represent radical changes that go far beyond what is necessary to fix the patent system.

As with any product, it is better to build quality in right up front than to try and repair problems after the product has left the factory. Patent examiners need the time and the tools to do their job right the first time. Years of inadequate funding and restrictions on hiring left the USPTO severely understaffed.

Fortunately, since 2005, the agency has been permitted to keep its fees, and appropriators have lifted restrictions on hiring, actually requiring more hiring, not less. The agency now brings on 1,200 new examiners each year. It is doing a good job hiring people. It is just not keeping them.

Statistics we have seen show that about 30 to 44 percent of each year's new examiners leave the agency within 3 years. To compensate for overall annual examiner attrition, the agency must hire almost two examiners for each one it retains.

Frankly, we don't recognize the attrition statistics cited in the agency response to the GAO report. The one thing management could do to increase retention it has consistently refused to do for more than 30 years—provide examiners with the time to do the job right. More than any other factor, the reason examiners leave the USPTO is the unrelenting stress caused by the agency's outdated production system.

Patent examination is a labor-intensive job, mentally and physically. Automation can accelerate processes, such as searching large databases, but it cannot make the examiner read and understand the results of those searches any faster.

After years of trying to do the job faster and cheaper, the USPTO now finds itself facing the same criticism that any manufacturer faces when it cuts corners—perception by end users that the product lacks the quality it needs to do the job it was supposed to do.

The USPTO's production goals have remained essentially unchanged since they were put in place in 1976. Since then, the patent applications have more technologically complex, have larger specifications, and higher numbers of claims.

Studies by Professor Dennis Crouch show that the size of issued patent specifications increased by 85 percent since 1987. The data also shows significant increases in the number of independent claims and total claims. Trying to do a high quality job in 2008 in the amount of time examiners were given in 1976 has left examiners angry, stressed out and demoralized.

A POPA survey revealed that one-third of examiners worked unpaid overtime just to keep their jobs. Another third of examiners work unpaid overtime to earn performance awards. The GAO found similar results in its September 2007 report. This excessive use of unpaid overtime establishes a need for the USPTO to provide more time.

What employees need—we need fee retention. POPA encourages this Subcommittee to continue working with the Appropriations Committee and the Administration to ensure that the USPTO has access to all its fees. But POPA believes that this access, however, must not be obtained at the expense of the oversight responsibilities of the Judiciary and Appropriations Committees.

We need to put an end to outsourcing searches. The USPTO has wasted considerable resources in prior attempts to outsource patent searches, and now with the applicant quality submission.

Outsourcing searches will not result in better quality patents, and will likely create conflicts of interest for applicants. The Subcommittee should put an end to this waste by passing legislation that clearly establishes patent searching and examination as inherently governmental functions.

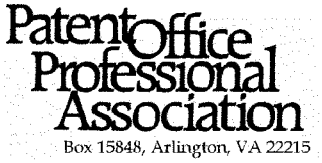
We need more time. POPA asks that the Subcommittee provide more time for examiners by putting a fence around the patent filing fees and directly allocating these fees to providing time for examiners to examine patent applications.

Finally, we need tools. The USPTO needs to reverse its policy of neglecting the U.S. classification system and restoring its funding. We need automated tools that allow examiners to classify and add foreign and non-patent references to USPTO databases. There are very few former classifiers left in the agency. Before their institutional memory is lost forever, they need to be put back to work training new classifiers and examiners.

Thank you very much for this opportunity to present our views.

[The prepared statement of Mr. Budens follows:]

PREPARED STATEMENT OF ROBERT D. BUDENS



STATEMENT OF

ROBERT D. BUDENS

PRESIDENT

PATENT OFFICE PROFESSIONAL ASSOCIATION

Submitted to the

SUBCOMMITTEE ON COURTS, THE INTERNET
AND INTELLECTUAL PROPERTY
COMMITTEE ON THE JUDICIARY
U.S. HOUSE OF REPRESENTATIVES

On The Subject Of

"Oversight Hearing On The U.S. Patent and Trademark Office"

February 27, 2008

Professional Representation for Patent Professionals

Mr. Chairman, Ranking Member Coble, Members of the Subcommittee,

Thank you very much for this opportunity to present the views of the Patent Office Professional Association (POPA) on the operations of the U.S. Patent and Trademark Office (USPTO).

POPA represents more than 5,800 patent professionals at the USPTO. The vast majority of these are the agency's patent examiners – the engineers, scientists and attorneys who determine the patentability of the hundreds of thousands of patent applications received in the USPTO each year. POPA's members are diligent, highly skilled, hard working professionals. They take great pride in the work they do and are committed to maintaining the quality and integrity of America's patent system.

The U.S. patent system is a powerful engine driving innovation in America. It has helped produce the most powerful and robust economy in history. The vital role of patents to the U.S. and global economies is clearly evidenced by the rapidly expanding efforts of inventors and companies to protect intellectual property throughout the world.

The USPTO has been the target of much criticism in recent years for failing to allow high-quality patents and doing so in a timely manner. This criticism has resulted in increased scrutiny of the day-to-day operations of the USPTO as well as review of the laws governing the patent system. A number of studies, both government and private, as well as at least one book have been published that attempt to identify problems facing the USPTO today while proposing a variety of solutions for those problems. Regardless of the source, virtually all studies agree that the USPTO needs to: hire and retain a highly skilled workforce; improve the quality and timeliness of issued patents; and keep and use all of its fees for its own operations.

POPA agrees that these are important issues facing the USPTO, but it does not necessarily agree with many of the solutions proposed by the authors of these studies.

POPA notes with appreciation that Congress and the Administration have worked together in permitting the USPTO to retain and use all of its fees since Fiscal Year 2005. This is a vital step towards fixing the perceived problems of the agency and POPA urges the Legislative and Executive branches to continue this cooperation in the future.

Many other proposed solutions, including the Patent Reform Act of 2007, are directed towards fixing problems with patent quality after a patent has issued. Many of these proposed changes represent radical changes to the U.S. patent system. POPA believes that they go far beyond what is truly necessary to improve performance at the USPTO.

In his cover letter accompanying the Patent Public Advisory Committee (PPAC) Annual Report to Congress and the President, PPAC Chairman Kevin Rivette stated:

> The Committee believes that the United States patent system and the United States Patent and Trademark Office ("USPTO") face significant challenges that urgently need to be addressed today. *The issues of patent quality and pendency override all other issues.*[1] [Emphasis added].

POPA agrees with the assessment of Chairman Rivette and the PPAC on the critical nature of patent quality and pendency. These issues, however, are internal problems of the USPTO. POPA believes that quality and pendency must be solved in the USPTO before a patent is issued – not after. As with any product, it is better to build quality in right up front than to try and repair problems after the product is manufactured. Patent examiners understand this fundamental truth, but they need the time and the tools to do the job right the first time.

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[1] Attachment 1. Letter from PPAC Chair Kevin Rivette to The President accompanying PPAC FY07 Annual Report, November 30, 2007. A complete copy of the PPAC Annual Report can be obtained at: www.uspto.gov/web/offices/com/advisory/reports/ppac_2007annualrpt.pdf.

DOING THE JOB RIGHT TAKES PEOPLE

If the U.S. patent system is to continue driving innovation and economic competitiveness in America and the world, the USPTO must issue high-quality patents that meet all the statutory requirements for patentability and it must do so in a timely manner. To accomplish this, the agency must hire highly skilled patent examiners and, most importantly, it must keep them. In its 2007 Annual Report, the PPAC stated:

> Attracting and retaining the most qualified workforce possible is ultimately the key to a successful examination system. The most sophisticated search tools, and the clearest applications and standards are unavailing if the USPTO does not hire, train and retain talented, dedicated employees.[2]

Hiring and keeping good people has been a problem for the USPTO for many years. The Dept. of Commerce Inspector General (IG) issued a report in 2002 finding that the USPTO needed improvements in its hiring practices.[3] The IG identified several obstacles facing the USPTO: a shortage of potential examiners with appropriate technical training, private sector job competition, compensation packages less than private sector compensation, and competition from other Federal agencies.

A brief history of the agency's hiring and retention problems can be found in "*Innovation and Its Discontents*" by Adam B. Jaffe and Josh Lerner.[4] The authors noted that the increasing importance of intellectual property in a global economy made the problem of hiring and retention even more acute.

While patent application filings increased continuously, years of inadequate funding and restrictions on hiring (FTE ceilings) left the USPTO severely understaffed. Fortunately, since

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[2] PPAC Annual Report, November 30, 2007, page 6.
[3] "Patent Examiner Hiring Process Should Be Improved." U.S. Dept. of Commerce Office of Inspector General Final Inspection Report No. BTD-14432-2-0001, March 2002.
[4] Jaffe, A. B. & Lerner, J., *Innovation and Its Discontents*, Princeton University Press, 2004, pp. 133-138.

2005, the agency has been permitted to keep its fees and appropriators have lifted restrictions on hiring – actually requiring hiring minimums, rather than hiring maximums.

Over the last several years, the agency has dramatically increased its hiring efforts, bringing on approximately 1,000 to 1,200 new examiners in each of the last three years. Although this level of hiring has strained the agency's training resources, it demonstrates that the agency does not have a significant hiring problem. It is finding people to hire. The agency's problem is keeping the people it hires.

While the agency is working hard at hiring 1,200 new examiners per year, approximately 30 to 44 percent of those new examiners leave the agency within three years. To compensate for overall annual examiner attrition, the agency must hire almost two examiners for each one it retains. For example, in Fiscal Year 2005, the agency hired 978 examiners but had 425 examiner attritions. In FY 2006, the agency hired 1,218 examiners but lost 510. In FY 2007, it hired 1,215 but lost 543.

POPA has compiled a history of attrition from 1990 to 2005 using USPTO published statistics.[5] A review of this data shows that, while the majority of examiner attrition comes in the first three years of employment, a significant number of mid-career (3-15 years) examiners also leave the agency. Many of these examiners are experienced primary examiners who train junior examiners and perform at higher production levels. Because of this mid-career attrition, POPA does not believe the agency is expanding the pool of experienced examiners at a sufficient rate to meet its needs.

[5] Attachment 2. "Attrition of Patent Examiners (including SPEs)," compiled by POPA from USPTO sources such as Annual Reports and public meetings of the Patent Public Advisory Committee.

Not until one looks out past 15 years of service in the agency does the attrition rate significantly drop off. This makes perfect sense when one realizes that these employees generally have significant investment in retirement plans and have truly made a career at the USPTO.

The USPTO's problems with retention have recently been investigated by the General Accountability Office (GAO).[6] In its September 2007 report to Congressman Tom Davis, Ranking Member of the House Committee on Oversight and Government Reform, the GAO found that:

> From 2002 through 2006, patent examiner attrition has continued to significantly offset USPTO's hiring progress. Although USPTO is hiring as many new patent examiners as it has the annual capacity to supervise and train, for nearly every two patent examiners it has hired over the last 5 years at least one has left the agency. Specifically, USPTO hired 3,672 patent examiners between 2002 and 2006, and 1,643 patent examiners left the agency during this time. More importantly, of those who left, 70 percent had been at USPTO for less than 5 years. (Report at page 5).

The results of the GAO investigation correlate well with the attrition data independently compiled by POPA and highlights the need to improve retention of examiners, especially those with fewer than fifteen years in the agency.

In response to the GAO report, USPTO Director Jon Dudas sent a letter to Congressman Tom Davis, Ranking Member of the Committee on Oversight and Government Reform and the requestor of the GAO investigation.[7] In his letter, Mr. Dudas attempts to minimize the issue of attrition at the USPTO by comparing USPTO attrition to other government and private sector entities and by "analyzing and addressing patent-examiner attrition with several innovative

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[6] "Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog," U.S. Government Accountability Office Report No. GAO-07-1102, September 2007.
[7] Attachment 3. Letter from Undersecretary of Commerce and USPTO Director Jon Dudas to the Honorable Tom Davis, Ranking Member, Committee on Oversight and Government Reform, December 4, 2007.

techniques since it began hiring in FY2005." (See page 4). POPA does not know what "innovative techniques" Mr. Dudas is referring too, but the attrition statistics in his letter do not appear to correlate with previously published USPTO data. For example, the agency has tracked attrition of those hired in a particular fiscal year by length of service. The data that we have seen shows that the attrition of examiners from the same hiring group having less than three years of experience is in the range of approximately 30 to 44 percent of those hired. Mr. Dudas' letter only attributes an average attrition rate of 15.5 percent to examiners with 0-3 years experience.

Furthermore, attempting to minimize the agency's attrition problems by comparing the USPTO to other government agencies or private sector companies is misleading – the fact that other agencies or companies have attrition problems does not make the need for the USPTO to retain its examiners any less urgent. What is most important is that, from our experience, the USPTO could have a lower attrition rate if it treated employees differently.

Mr. Dudas also sets forth a number of initiatives the USPTO claims to be doing to retain examiners. Again, this information is misleading. POPA is unaware of any examiner receiving a "retention bonus." The agency is paying recruitment bonuses to new hires, but has not offered any retention bonuses to its senior examiners who are every bit as essential to the agency. While the agency did obtain an increase in examiners' special pay rate, that increase has already been eroded by locality pay increases in 2007 and 2008 for which special pay rates are not eligible. Part-time employment is not available to all employees. There are ceilings on the number of participants in our negotiated part-time programs. Award programs for patent examiners have not been changed in many years. Most insulting of all to examiners is the inclusion of the onerous "flat goal" pilot – a pilot POPA believes is illegal and so abhorrent to almost all

examiners that the agency could barely muster 180 or so volunteers for a 300-person pilot program.

A serious matter likely to negatively effect attrition in 2008 is examiners' concerns with the decidedly anti-employee attitude of USPTO management in negotiations on a new collective bargaining agreement. These negotiations have been ongoing for the better part of a year with little progress on major topics. It is clear from the agency's proposals and discussions that USPTO management intends to dramatically curtail important employee rights with respect to grievances and performance appraisals as well as rolling back benefits that employees have enjoyed for many years. The agency has even refused to commit to treating all examiners fairly and equitably, or provide senior examiners with their own offices – things the agency has been doing for many years. This is no way to run an agency that needs every examiner it can get.

When it comes to retention of examiners, the agency's anti-employee actions speak much louder than their words. And examiners are very intelligent people. They understand what management is really trying to do in these negotiations.

Finally, the one thing management could do to increase retention, it has consistently refused to do for more than thirty years – provide examiners with the time to do the job right. More than any other factor, the most common reason examiners leave the USPTO is the unrelenting stress caused by the agency's outdated production system.

DOING THE JOB RIGHT TAKES TIME

Patent examination is a labor-intensive job, both mentally and physically. Automation can accelerate certain processes such as searching large databases of information, but it cannot make the examiner read and understand the results of those searches any faster. To do the job

right requires a serious investment, not only in resources such as automated search tools, but in real time for examiners to use those tools, examine applications and determine the patentability of inventions.

For many years now, management at the USPTO has sought ways to do the job faster and cheaper. They have spent well over a billion dollars on automated search tools – often resulting in tools that have not lived up to expectations.[8] They have reduced costs, not by developing better and more efficient processes, but by no longer funding important examination tools such as developing and maintaining the U.S. classification system and the agency's paper search files. And, for more than thirty years the agency has refused to adjust examiners' production goals to compensate for the increasing complexity of technologies, larger and more complex patent applications, and an ever-expanding body of both patent and non-patent literature (prior art).

Examiners manufacture patents. But, as with any manufacturing process, doing it faster and cheaper usually results in making a lower-quality product. Patent examining is not immune to this fundamental axiom. After years of trying to do the job faster and cheaper, the USPTO now finds itself facing the same criticism that any manufacturer faces when they cut corners – a perception by end-users that the product lacks the quality it needs to do the job it was supposed to do.

Examiners, as POPA has often stated, manufacture patents in the high-stress environment of a "legal sweatshop." They do an arcane job under difficult and antiquated circumstances.

The USPTO monitors examiner performance using a rigorous goal-oriented production and workflow system that measures examiners' work output (production) in 6-minute

[8] "Key Processes for Managing Patent Automation Strategy Need Strengthening," U.S. Government Accountability Office Report No. GAO-05-336, June 2005.

increments. Currently, a GS-12 examiner has, on average, about 20.4 hours, spread over one to two years, to complete the examination of a utility-type patent application. The agency has long recognized that technologies differ in complexity and that some examiners are more experienced than others. Primary examiners, those at GS grades 14 and 15 with authority to act independently, are expected to be much more productive than junior examiners requiring various levels of supervision. Under current production goals, some primary examiners in low complexity technologies have as little as 11.2 hours per application. Primary examiners in even the most complex technologies are only allowed a maximum of 22.1 hours.[9] Examiners working on design-type applications or plant applications have even less time than those working on utility-type applications. On average, these examiners have only about five to seven hours per application.

The USPTO's production goals have remained essentially unchanged since they were put in place in 1976. Since that time, however, the work of examiners has changed considerably. Examiners now routinely examine technologies such as biotechnology, nanotechnology, bioinformatics, and business methods that were either not patentable or simply did not exist when these goals were put in place. Cell phones, Blackberries™ and personal computers had not been invented.

Since 1976, patent applications have become more complex. Applications today often have larger specifications and higher numbers of claims than applications filed in 1976. Applicant-submitted information disclosure statements are sometimes so large that they require storage in boxes. The increased complexity of patent applications has been clearly demonstrated

[9] "U.S. Patent and Trademark Office: Transforming to Meet the Challenges of the 21st Century." Report of the National Academy of Public Administration for the United States Patent and Trademark Office, August 2005, Appendix D, Table D-2.

recently in studies by Dennis Crouch, Law Professor at the University of Missouri and the author of the widely-read patent law blog "Patently-O."[10] Professor Crouch's data shows that the size of issued patent specifications (as determined by word count) has increased linearly with time since 1987. His data also shows that the number of both independent claims and total claims has grown significantly from 1975 to 2005. Professor Crouch notes that:

> It is important to recognize that the above results are directed to issued claims. In most cases, patent applications originally include even more claims that are then cancelled during the examination process.

This data confirms POPA's position that the amount of work examiners must do during examination has increased significantly since the agency put in place its performance goals in 1976. The increased complexity of patent applications has also been recognized by both the USPTO and Congress as evidenced by significant increases in fees for large specifications and excess claims.

Every bit as problematic as increasingly complex patent applications, is the massive increase of information that examiners must search to identify relevant prior art. It took the USPTO two hundred years to issue Patent No. 5,000,000 on March 19, 1991. In the seventeen years since, the agency has issued over 2.3 million more. The USPTO issues several thousand patents every week. Foreign patent literature is growing at a similar rate. But the growth of patent literature is dwarfed by the rapidly expanding amount of non-patent literature – scientific and technical journals, trade magazines, catalogs, Internet web pages, etc. – that examiners search to determine patentability of an invention.

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[10] Attachment 4. "The Rising Size and Complexity of the Patent Document." Dennis Crouch. February 20, 2008; Data on increased specifications originally published on "Patently-O" blog, December 20, 2007; Data on increased numbers of claims originally published on "Patently-O" blog, December 23, 2007

Trying to do high quality examination of patent applications in 2008 in the amount of time examiners were given in 1976 has left examiners angry, stressed-out and demoralized. This has been made clear in examiner surveys carried out by both POPA and the GAO.

In response to the agency's proposal for a flat goal performance appraisal pilot, POPA undertook a survey of examiners in May 2006 to ascertain their views and concerns on the proposed flat goal performance plan.[11] POPA's data revealed that one third of examiners work unpaid overtime just to keep their jobs! Another third of examiners work unpaid overtime to earn performance awards. This excessive use of unpaid overtime establishes the need for the USPTO to provide more time to examiners so they can do the job right the first time.

POPA's survey results were independently confirmed by the GAO in its September 2007 report. In a large-scale random survey of examiners, the GAO found that two thirds of examiners identified the USPTO's production goals as a primary reason for leaving the agency. The GAO also found that 70 percent of examiners worked substantial unpaid overtime to meet their production goals. The study found that 42 percent of examiners worked while on annual leave in order to make their goals. They also found that "the percentage of patent examiners who worked unpaid overtime increased with the length of tenure they had with the agency."[12]

Consistent with the agency's inaction of the last thirty years, the GAO found that "This extensive amount of unpaid overtime does not appear to be a concern to USPTO management, even though the agency has not been able to meet its productivity goals for the last 4 years."[13]

In his December 4, 2007 letter to Congressman Davis in response to the GAO report, Director Dudas claimed that higher production requirements do not translate to higher attrition

[11] Attachment 5. "Results of POPA Survey On Flat Goal Pilot Program," May 2006.
[12] GAO Report No. GAO-07-1102, September 2007, pages 18-19.
[13] *Ibid.*, at page 19.

and that nearly all examiners exceed production requirements. POPA believes Mr. Dudas' conclusions are misleading.[14]

In his analysis, Mr. Dudas has divided the examining corps into only two groups – those in the Office under three years (<3 years) and those in the Office three or more years (≥3 years). This statistical analysis skews the results of the ≥3 year group. It attempts to hide the higher attrition rates in the ≥3 to <15 year group (as shown in POPA's Attachment 2) by diluting the statistic with the production of the more stable >15 year group. Those in the >15 year group represent the USPTO's most experienced examiners, the vast majority of them being primary examiners. One would naturally expect them to be more productive and, indeed, the agency's production system takes that experience into account in setting examiner goals.

USPTO data provided to POPA in negotiations indicates that only 55 percent of examiners received any kind of monetary award in FY 2006 (the most recent data available). Thus, 45% of examiners received no bonus at all for their work. In the same period, more than 80% of USPTO's patent managers received from $7,500 to $15,000 cash awards, a fact not lost on examiners as they work their unpaid overtime.

Mr. Dudas' conclusions completely ignore the fundamental underlying truth of the "sweatshop" mentality at the USPTO – just to keep their jobs or to earn productivity awards, fully two-thirds of the workforce must work unpaid overtime. Many of them work while on annual leave to make their production requirements.

Examiners are professionals. They want to do a high-quality job and gain recognition as outstanding employees. Like any employee, they appreciate monetary awards for their work. But there are only so many hours in a day.

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[14] Attachment 3. Dudas Letter to Cong. T. Davis, December 4, 2007, at page 3.

USPTO management has shown by its actions that it wants examiners to take shortcuts. It has demonstrated for years its willingness to accept lower quality patents in exchange for higher production. It has failed to maintain the U.S. classification system. It has destroyed decades of paper patent search files, many of them containing annotations from experienced examiners to aid in identifying relevant art. It stopped classifying foreign patent documents and non-patent literature using the U.S. classification system. This wealth of information, often provided, annotated and/or translated by senior examiners, has been lost to today's examiners and to the American public. It has perennially refused to adjust examiner production goals.

Examiners have done what USPTO management wanted them to do – take shortcuts in the examination process wherever possible. But even with shortcuts, two-thirds of them must work substantial amounts of unpaid overtime to meet their goals.

There is no more slack in the system. If the USPTO truly desires to retain highly skilled examiners and have them do the job right, the time has come for the agency to quit making excuses and follow the GAO's recommendation to "…undertake a comprehensive evaluation of the assumptions that the agency uses to establish its production goals."

It is important for Congress and the USPTO to note that providing examiners with the additional time to do the job right the first time does not necessarily require an increase in pendency. Providing examiners with additional time per application will result in greater retention. Greater retention means more experienced examiners moving more cases. In addition, doing the job right the first time increases the certainty that old or obvious ideas will be rejected. As this certainty becomes apparent, patent applicants will be less likely to expend the money and resources to file patent applications of little or questionable economic value. Indeed, letting examiners do the job right the first time may actually reduce application pendency over time.

Providing examiners with the time to do the job right should also benefit all Americans by reducing the costs of patent litigation – costs usually passed on to the consumer. In a study for the National Research Council of the National Academy of Sciences, John L. King calculated that providing examiners with a one-hour increase in time would cost the agency about $11.3 million. King calculated, however, that a one-hour increase in examiner time would reduce patent litigation expenses by over $17 million.[15]

Retaining highly skilled examiners, increasing the quality of patent examination, reducing patent application pendency and stimulating the American economy by reducing the costs of patent litigation thereby freeing up resources for other purposes, are clearly worthy goals of the intellectual property community. It should be equally as clear that providing examiners the time needed to do the job right the first time is the most cost-effective means to accomplish these goals.

DOING THE JOB RIGHT TAKES TOOLS

The ongoing debate on patent reform has helped to focus criticism of the USPTO on the perceived failure of patent examiners to find the most relevant prior art references. Examiners, however, only have a very limited amount of time for searching the prior art and identifying the most relevant references. To do the job right the first time, the USPTO must provide examiners with search tools that will help them find the most relevant prior art in the shortest possible time.

Historically, however, the agency has chosen to destroy some of the very search tools that many examiners found most useful. USPTO management made a conscious determination to

[15] King, John L., "Patent Examination Procedures and Patent Quality," *Patents in the Knowledge-based Economy*, National Research Council of the National Academies, National Academies Press, 2003, pages 54-73 at pages 68-70.

save office space in its new Alexandria headquarters by eliminating the agency's voluminous paper search files. These files contained copies of U.S. patents sorted according to the U.S. classification system. The paper files also contained foreign and non-patent literature classified and placed in the files over the years by examiners in the various technologies. Many references contained additional information such as examiner notes and/or color drawings placed there by experienced examiners to assist other examiners working in that technology. Prior to the development of automated search tools, the paper search files represented the best and most comprehensive search tool for locating relevant prior art. They contained a remarkable wealth of information found nowhere else in the world.

Using the paper search files, examiners could draw on the experience of those examiners who had gone before. In years past, examiners were given non-examining time to identify relevant prior art and place it in the appropriate classified search file(s). Examiners would often add notes and other helpful information to these references to aid themselves and others searching in a particular technology. This continuous process resulted in a comprehensive database of prior art only available to those at the USPTO. In addition, the very act of placing new references in the classified files helped examiners to keep current on developments within their respective technologies. When new examiners searched the paper search files, they were receiving the benefit of the knowledge and experience of those examiners who had preceded them in the technology. This helped new examiners develop familiarity with the prior art and helped all examiners in quickly and efficiently finding the relevant prior art for each patent application.

Regrettably, as far back as the mid-1980s, the USPTO began transferring classification duties from examiners to technicians. Before long, management ordered that foreign patents and

non-patent literature no longer be included in reclassification projects. Eventually, this vital source of prior art became all but useless for searching. By the mid-1990s, as planning for a new headquarters facility began in earnest, management ended virtually all support for the U.S. Classification System and maintenance of the paper search files.

Today, the paper search files have all but disappeared at the USPTO. The agency disposed of all the copies of issued U.S. patents as it prepared to move to its Alexandria, Virginia headquarters. Although the remaining foreign and non-patent literature paper search files were moved to Alexandria, no new references are being classified and placed in those files and they no longer represent a viable search tool for examiners.

The end result of the agency's failure to maintain the U.S. Classification System and the paper search files is that examiners can no longer benefit from the wisdom and experience of prior examiners. Today, each search in a patent application is performed essentially from scratch. The agency's emphasis on text searching has resulted in a new generation of patent examiners inexperienced in the use of the U.S. Classification System.

Yet, even while it has put all its search eggs in the automation basket, the agency continues to fail in providing automated search tools that are adequate substitutes for older methods such as the paper search files. The agency has not provided any useful means for examiners to electronically annotate patent documents analogous to the paper search files. Today, examiners have no meaningful way to share their experience with other examiners except by word-of-mouth. Another major perennial frustration for examiners is the agency's continued unwillingness to expend the resources to get all issued patents into a single text-searchable database. With the advent of the Automated Patent System in the mid-1980s, the USPTO began entering all new issued patents in both text and image searchable form into its issued patent

database. Unfortunately, while all issued patents were entered in image format, the text-searchable database only goes back to about 1970. Patents issued prior to 1970 have not been entered in the database in a readily text searchable form. The agency did submit these older patents to optical character recognition but did not correct errors and did not index this database in the same manner as the Automated Patent System database. Thus, this database, referred to by examiners as the "dirty OCR file" because of its numerous errors, cannot be readily and reliably searched simultaneously with the Automated Patent System database. Examiners working in older technologies have to perform two searches of the issued patents to determine patentability of an applicant's claimed invention. This is one more uncompensated drain on examiners' time.

Now, after neglecting the U.S. classification system and eliminating one of the most useful and unique search tools in the world – the paper search files – the agency wants to finish the job of effectively outsourcing the search to patent applicants by obtaining statutory authority to require all or nearly all patent applicants to perform a mandatory search and submit an Applicant Quality Submission (AQS) in their patent applications. Publicly, the agency maintains that patent applicants should share the burden of quality examination with the USPTO by placing the most relevant prior art in front of the examiner prior to examination. If the AQS would actually accomplish this goal and were quality examination the agency's real reason for wanting the AQS, then this would be an admirable undertaking. But such is not the case.

The USPTO has had regulations in place for many years that places a duty of candor on patent applicants. Each individual patent applicant has a "duty to disclose to the Office all

information known to that individual to be material to patentability…"[16] This rule, were it properly enforced, should be sufficient to place the best prior art known to the applicant in front of the examiner. The USPTO does not need another law to make applicants submit prior art, it needs to enforce its currently existing rules.

There is no reason to believe that the AQS will put the best art in front of examiners. Should applicant perform his/her own search, it is highly likely that the applicant would electronically search the same patent and non-patent literature databases currently searched by examiners, i.e., the U.S. and foreign patent databases and such commercial non-patent literature databases as Dialog™ or STN™. It is reasonable to presume that the applicant may well use some of the very same keyword search terms as an examiner. Thus, the applicant's search is not likely to identify relevant prior art that the examiner would not uncover. Only in those rare circumstances where the applicant is personally aware of some relevant prior art not readily available in commonly searched databases, is it likely that the applicant would place the most relevant prior art in front of the examiner. In those situations, existing regulations require the applicant to disclose that prior art.

The examiner, however, will likely uncover relevant prior art not identified by applicants. Why? Because examiners give patent claims their broadest reasonable interpretation – an interpretation not always readily apparent to patent applicants. Applicants are usually much more focused on what they truly believe is the critical essence of their invention. Examiners, on the other hand, will look at claims more broadly and often reject claims over prior art the applicant would never have foreseen.

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[16] 37 C.F.R. § 1.56.

Conversely, should applicant contract out the AQS search to a commercial search entity, it is equally likely that the commercial searcher will search the same databases searched regularly by examiners. Therefore, it is unlikely that this search will uncover relevant prior art that the examiner would not find during his/her search.

In neither circumstance, is it likely that obscure prior art will be identified and placed before the examiner. Neither of these scenarios should be expected to find such obscure art as the prior art relied upon in the well-known RIM v. NTP Blackberry case. Only millions of dollars and cadres of litigators is likely to uncover that type of prior art.

The only clear effect of the AQS is to dramatically increase the cost of applying for a patent. For some small inventors, this cost may become prohibitive. Why then would the USPTO be lobbying so hard for the AQS?

The real reason the agency wants AQS is to effectively outsource the patent search to applicants so that it can "gain efficiency" by reclaiming that search time from examiners thereby requiring them to examine more cases. The real truth about AQS is that it is not an USPTO initiative to improve quality – it is an initiative to reduce pendency.

Since first publishing its "21st Century Strategic Plan" in 2002, the agency has attempted to outsource the patent search and remove that duty from examiners. Until now, this outsourcing effort has been thwarted by the actions of this Subcommittee in requiring a properly implemented pilot program prior to authorizing the agency to outsource searches. Now the agency is attempting to circumvent those requirements by obtaining statutory authority for the AQS.

POPA believes that the patent search is an integral part of the examination process and represents an inherently governmental function that should not be outsourced to the private

sector. As the patent search forms the very basis of determining property rights in the United States, the search should be performed by U.S. Government employees free of any conflicts of interest – USPTO patent examiners.

POPA extends its gratitude and commends Subcommittee Chairman Berman, Ranking Member Coble and the Members of the Subcommittee for amending the language of H.R. 1908, the Patent Reform Act of 2007, to insure that the AQS cannot be used as a substitute for an examiner prior art search. No such language exists in the Senate version, S. 1145.

Because the AQS will dramatically increase the cost of protecting innovation in America and because its potential benefits are speculative at best, POPA suggests at this time that the requirement for the AQS be deleted from the proposed patent reform legislation. POPA believes that resources would be better utilized in enforcing compliance with existing USPTO rules regarding applicant prior art disclosure.

WHAT EMPLOYEES NEED TO DO THE JOB RIGHT

There are several things the Subcommittee can do that POPA believes will have significant effects on improving examination quality and reducing pendency of pending patent applications.

Fee Retention

POPA encourages the Subcommittee to continue working together with their colleagues on the Appropriations Committee and with the Administration to insure that the USPTO continues to have access to all of its fees. POPA believes that this access, however, must not be obtained at the expense of the oversight responsibilities of both the Judiciary and Appropriations

Committees. We believe that this oversight responsibility is critical in providing guidance too – and in some cases redirecting – the USPTO in the appropriate uses of its resources.

Put An End To Outsourcing Searches

The USPTO has wasted considerable and much-needed resources in its attempts to outsource patent searches in 2004-2005 and now in 2007-2008 with the Applicant Quality Submission. Outsourcing searches will not result in better quality patents and will likely create conflicts of interest for applicants. The Subcommittee should put an end to this waste by passing legislation that clearly establishes patent searching and examination as inherently governmental functions.

Improve Quality and Retention By Providing Time For Examination

For over thirty years, USPTO management has refused to adjust examiner production goals in the face of ever-increasing workloads. POPA believes that it is now time for Congress to step in and correct this long-felt need. The Subcommittee can do much to improve the quality of examination and increase retention of examiners by providing for a direct allocation of time for examination.

The USPTO has two major revenue streams. At the front end of the examination process, the agency collects patent filing fees for Filing, Search, Examination, and Excess Claims and Specifications. These filing fees represent approximately 30 percent of the agency's total patent fees, leaving the remaining 70 percent of total patent fees to cover the overhead expenses of the agency. Those fees, in the form of Issue Fees and Maintenance Fees, are collected after allowance of a patent.

POPA asks that the Subcommittee put a fence around the patent filing fees and directly allocate these fees to provide time for examiners to examine patent applications.

Fencing off USPTO fees for particular purposes is not without precedent – such a fence currently exists around USPTO fees collected for trademark applications.[17]

Provide Appropriate Search Tools

While many of USPTO management's decisions regarding paper and automated search files are now irreversible, POPA hopes that the Subcommittee will work to insure that the agency develop better and faster search tools providing the functionality examiners need to improve searching and examination quality.

Examiners need automated search tools that will allow them to annotate references for their's and other's future reference. Institutional memory is rapidly disappearing as senior examiners retire or otherwise leave the agency. Putting in place tools that allow reference annotation and providing examiners with the time to do so, will allow today's examiners to share their wisdom and experience with the examiners of tomorrow.

The USPTO needs to reverse its previous policy of neglect, restore full funding to the U.S. classification system and develop automated tools to allow examiners to classify and add foreign and non-patent references to USPTO databases. There are very few former classifiers left in the agency. Before their institutional memory is also lost forever, they need to be put back to work training new classifiers and examiners and updating the U.S. classification system so that examiners and the public can more rapidly find relevant prior art. The Subcommittee can help to improve examination quality by making sure that the agency resumes support of classification.

[17] 35 U.S.C. 42(c).

Finally, the agency should listen to examiners and apply resources to improving existing examiner tools, e.g., cleaning up the "dirty OCR file" and adding the data to the agency's existing text and image searchable patent database.

Mr. Chairman, Members of the Subcommittee, on behalf of all the patent professionals of POPA, I thank you for this opportunity to share with you their concerns. I look forward to working with you to provide the time and resources that will keep America's patent system strong and allow us to do the job right the first time.

ATTACHMENT 1

PATENT PUBLIC ADVISORY COMMITTEE OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

November 30, 2007

The President
The White House
Washington, DC 10500-0001

Dear Mr. President:

As Chairman of the Patent Public Advisory Committee (PPAC), I am pleased to enclose the Committee's FY2007 Annual Report.

The Committee believes that the United States patent system and the United States Patent and Trademark Office ("USPTO") face significant challenges that urgently need to be addressed today. The issues of patent quality and pendency override all other issues. In this report we have deviated from the traditional PPAC annual report format and attempted to provide you with a concise explanation of these issues, of the consequences of inaction and with concrete recommendations to address these issues. Our firm conviction is that these issues are surmountable.

The Committee is committed, along with the Under Secretary of Commerce for Intellectual Property and the Director of the USPTO, to ensure that the United States' patent system continues to be the wellspring of America's economic competitiveness and that America herself continues to be the innovation leader for the entire world.

Sincerely,

Kevin G. Rivette
Chair

Enclosure: 2007 Annual Report

cc: Enclosure: PPAC FY 2007 Annual Report

cc: The Honorable Patrick J. Leahy, Chairman, Senate Judiciary Committee
The Honorable John Conyers, Jr., Chairman, House Judiciary Committee
The Honorable Arlen Specter, Ranking Member, Senate Judiciary Committee
The Honorable Lamar S. Smith, Ranking Member, House Judiciary Committee
The Honorable Carlos M. Gutierrez, Secretary of Commerce
Jon W. Dudas, Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office
Margaret J. A. Peterlin, Deputy Under Secretary of Commerce for Intellectual Property and Deputy Director of the United States Patent and Trademark Office
John J. Doll, Commissioner for Patents

ATTACHMENT 2

Attrition of Patent Examiners (including SPEs)

	FY Hires	>1	≥1 and <2	≥2 and <3	≥3 and <4	≥4 and <5	≥5 and <6	≥6 and <10	≥10 and <15	≥15	Total Affrits	BoY Staff	EoRP Staff	Staff Increase	Average Staff	Attrits as % of Avg Staff
FY 90	503	79	33	20	18	12	11	22	3	49	247	1550	1811	117%	1681	14.7%
FY 91	227	63	40	28	4	16	5	14	1	39	210	1811	1835	101%	1823	11.5%
FY 92	227	27	32	31	8	14	11	10	4	29	166	1835	1898	103%	1867	8.9%
FY 93	210	29	6	19	15	12	7	8	4	31	131	1898	1979	104%	1939	6.8%
FY 94	216	20	16	9	15	15	13	12	5	56	161	1979	2036	103%	2008	8.0%
FY 95	283	29	30	16	11	17	16	14	5	24	162	2036	2162	106%	2099	7.7%
FY 96	443	39	42	11	4	15	12	27	9	31	190	2162	2366	109%	2264	8.4%
FY 97	209	53	51	25	11	22	12	37	3	25	239	2366	2329	98%	2348	10.2%
FY 98	728	91	40	30	9	19	13	27	6	24	259	2329	2785	120%	2557	10.1%
FY 99	799	191	40	16	26	18	10	30	17	27	375	2785	3205	115%	2995	12.5%
FY 00	375	157	114	37	10	28	9	42	16	24	437	3205	3143	98%	3174	13.8%
FY 01	414	84	58	41	14	4	12	18	15	17	263	3143	3296	105%	3220	8.2%
FY 02	769	119	15	23	16	16	7	12	19	23	250	3296	3803	115%	3550	7.0%
FY 03	308	76	48	16	10	25	12	7	18	29	241	3803	3850	101%	3827	6.3%
FY 04	443	83	38	53	28	22	25	21	16	50	336	3850	3959	103%	3905	8.6%
FY 05 est	959	101	45	35	56	30	23	37	17	59	425	3959	4493	113%	4226	10.1%
Total Hire	7113									**Grand Total Attrits**	4092					

	FY Hires	Attrits <3 years	Percentage of Total Attrits	Attrits ≥3 and <15	Percentage of Total Attrits	Attrits >15 years	Percentage of Total Attrits		Total Attrits	BoY Staff	EoRP Staff	Staff Increase
FY 90	503	132	53%	66	27%	49	20%		247	1550	1811	117%
FY 91	227	131	62%	40	19%	39	19%		210	1811	1835	101%
FY 92	227	90	54%	47	28%	29	17%		166	1835	1898	103%
FY 93	210	54	41%	46	35%	31	24%		131	1898	1979	104%
FY 94	216	45	28%	60	37%	56	35%		161	1979	2036	103%
FY 95	283	75	46%	63	39%	24	15%		162	2036	2162	106%
FY 96	443	92	48%	67	35%	31	16%		190	2162	2366	109%
FY 97	209	129	54%	85	36%	25	10%		239	2366	2329	98%
FY 98	728	161	62%	74	29%	24	9%		259	2329	2785	120%
FY 99	799	247	66%	101	27%	27	7%		375	2785	3205	115%
FY 00	375	308	70%	105	24%	24	5%		437	3205	3143	98%
FY 01	414	183	70%	63	24%	17	6%		263	3143	3296	105%
FY 02	769	157	63%	70	28%	23	9%		250	3296	3803	115%
FY 03	308	140	58%	72	30%	29	12%		241	3803	3850	101%
FY 04	443	174	52%	112	33%	50	15%		336	3850	3959	103%
FY 05 est	959	181	45%	163	38%	59	14%		425	3959	4493	113%
Total Hire	7113	average	55%	average	31%	average	15%	**Grand Total Attrits**	4062			

Attrition of Patent Examiners (including SPEs)

	FY Hires	Attrits <4 years	Percentage of Total Attrits	Attrits ≥4 and <15	Percentage of Total Attrits	Attrits >15 years	Percentage of Total Attrits		Total Affrits	BoY Staff	EoRP Staff	Staff Increase
FY 90	503	150	61%	48	19%	49	20%		247	1550	1811	117%
FY 91	227	135	64%	36	17%	39	19%		210	1811	1835	101%
FY 92	227	98	59%	39	23%	29	17%		166	1835	1898	103%
FY 93	210	69	53%	31	24%	31	24%		131	1898	1979	104%
FY 94	216	60	37%	45	28%	56	35%		161	1979	2036	103%
FY 95	283	86	53%	52	32%	24	15%		162	2036	2162	106%
FY 96	443	96	51%	63	33%	31	16%		190	2162	2366	109%
FY 97	209	140	59%	74	31%	25	10%		239	2366	2329	98%
FY 98	728	170	66%	65	25%	24	9%		259	2329	2785	120%
FY 99	799	273	73%	75	20%	27	7%		375	2785	3205	115%
FY 00	375	318	73%	95	22%	24	5%		437	3205	3143	98%
FY 01	414	197	75%	49	19%	17	6%		263	3143	3296	105%
FY 02	769	173	69%	54	22%	23	9%		250	3296	3603	115%
FY 03	308	150	62%	62	26%	29	12%		241	3603	3850	101%
FY 04	443	202	60%	84	25%	50	15%		336	3850	3959	103%
FY 05 est	959	237	59%	107	25%	59	14%		425	3959	4493	113%
Total Hire	7113	average	61%	average	24%	average	15%	**Grand Total Attrits**	4062			

ATTACHMENT 3

UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

DEC - 4 2007

The Honorable Tom Davis
Ranking Member, Committee on Oversight
and Government Reform
House of Representatives
Washington, D.C. 20515

Dear Representative Davis:

In accordance with 31 U.S.C. 720, the Department of Commerce, through the United States Patent and Trademark Office (USPTO), provides this action plan in response to the Government Accountability Office (GAO) report *Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog*. The GAO recommends that the USPTO undertake a comprehensive evaluation of the assumptions used to establish production goals.

GAO's Principal Findings

The GAO report draws attention to issues that are of paramount importance to the USPTO. In particular, the report highlights the fact that the problems associated with the long time to decision in patent applications cannot be solved by hiring alone. It also recognizes, as does the USPTO, that attrition of patent examiners can impair the effectiveness of the USPTO's hiring efforts.

USPTO Initial Response – "Flat Goal Pilot Program"

As noted above, the GAO recommends that the USPTO undertake a comprehensive evaluation of the assumptions used to establish production goals (for examination of patent applications. Even before the GAO published its report, the USPTO appreciated the questions and concerns raised by GAO staff during their review process. In direct response to points raised by GAO staff during their study period – which are also reflected in the GAO's final report – in April 2007 the USPTO initiated a "Flat Goal Pilot Program." The Flat Goal Pilot Program tests a new concept in how production is measured. Under the year-long pilot (April 2007-April 2008), examiners may earn larger, quarterly bonuses for every application examined above a particular target goal. Early indications are that participants prefer quarterly, as opposed to annual, bonuses. They also appear to prefer the per-application bonus as opposed to the present productivity award structure and enjoy the flexibility of choosing when and how to do their work.

After April 2008, when the USPTO has sufficient data from this year-long pilot, a full evaluation will be possible. The USPTO will then determine how the results relate to the underlying assumptions that form the basis of the pilot and incorporate that information into future planning.

Additional USPTO Action/Response

A somewhat more detailed examination of examiner attrition levels, which the brief GAO analysis did not undertake, yields a somewhat different diagnosis of the latter issue. In noting this, we emphasize our complete agreement with GAO that a strategy of hiring alone is not sufficient to reduce the patent application backlog. To reduce the backlog, we must continue to promote appropriate ways to increasing the efficiency and productivity of examination. We also agree that patent examiner attrition is an important matter deserving further analysis and attention. Patent examiners are critical to our system of protecting intellectual property and driving innovation in the United States. The USPTO has achieved notable successes in examiner retention efforts and faces challenges that the GAO study did not address. We will address some of these successes and challenges below.

Facts About Patent Examiner Attrition

The USPTO has kept attrition statistics for several decades and highly detailed statistics for the past ten fiscal years (since FY 1998). The following are five facts that have proven instructive to us in addressing attrition.

(1) **Attrition is lower at the USPTO than throughout the Federal workforce.** The USPTO's attrition rate is *lower* than the average attrition rate for Federal workers (8.5% vs. 11.2%).[1]

(2) **Beyond the first three years of service, the USPTO has nominal attrition.** The average attrition rate for USPTO patent examiners with 0-3 years experience is 15.5%. The average attrition rate for USPTO patent examiners with 3-30 years experience is 3.95%.

(3) **Attrition in the early years is substantially lower at the USPTO than at similarly situated entities.** The attrition rate of examiners with 0-3 years experience, though measurably higher than the rest of the patent corps, appears to be well below the attrition rate experienced by similarly situated entities hiring more than 1,000 engineers in a year.[2]

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1 See http://data.bls.gov/cgi-bin/dsrv

2 Business Week, "*50 Best Places to Launch a Career*," September 18, 2006.

["***Given the country's demographics, some accommodation is inevitable. Entry-level hiring is expected to surge in 2007 by more than 17%, the fourth consecutive double-digit increase, according to the National Association of Colleges & Employers (NACE). And this could be only the beginning. By 2010, as the exodus of baby boomers from the workforce accelerates, census data suggest, two employees will be leaving for every new hire entering, and new college grads will be a precious commodity.***

***If recruiting is employers' first hurdle, retention is by far the highest. Those employers who provided the data reported that more than one-third of their new hires bolted within three years. And replacing them isn't cheap. Training costs averaged nearly $10,000 a head, which can add up quickly when you're hiring more than 1,000 college grads each year, as more than one-third of the ranked

(4) **Higher production requirements do not translate to higher attrition.** Examiners with the highest production requirements have the lowest attrition rates, and the examiners with the lowest production requirements have the highest attrition rates. In fact, 70 percent of all work in FY 2007 was done by examiners with 3 or more years of experience who *exceeded* their production goals by an average of 8 percent and had an average attrition rate of 3.95 percent.

(5) **Nearly all examiners exceed production requirements. An important majority exceed it substantially.** More than 60% of all patent examiners *exceeded their production requirements by at least ten percent* in FY 2006.

These facts direct us to focus our attrition analysis on the areas where it is most problematic and to look for solutions that provide all examiners more opportunity and flexibility.

The Patent Examination Landscape

We agree with the GAO's title conclusion that hiring is not sufficient to reduce the patent application backlog. In fact, the USPTO has for years reported to other policymakers and key constituencies that hiring is necessary but not sufficient as a strategy to address the backlog. With record-breaking numbers of applications *every* year and the USPTO already hiring the equivalent of whole-number percentages of American engineering graduates, hiring alone is a poor long-term policy. The right solution includes a synergistic combination of hiring and increased efficiency in the system, possibly by leveraging work already being done by patent applicants, the public and other patent offices throughout the world. The USPTO has implemented several pilot and permanent programs, proposed rules and promoted statutory changes to effect these goals of increasing quality, reducing redundancy and increasing efficiency in the system.

The USPTO also believes sincerely in the knowledge, skills, abilities, integrity and work ethic of its employees. Any solution to address improving the patent system, particularly addressing the patent application backlog, must begin and end with an evaluation of its effect on patent examiners. This is another area where the USPTO has been particularly focused in the last several years. The USPTO's approach has been to increase opportunity and flexibility for examiners rather than to lower standards. The results of giving examiners more opportunities and increased flexibilities speak for themselves – higher morale and satisfaction, and higher productivity and efficiency.

For example, in the last two years, 1,000 patent examiners have started working almost full-time from home. According to a recent survey of these employees, 83% said their morale

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employers do.*** The main reason young employees are heading for the exits, oddly enough, is the very thing boomers thrived on: the perpetual work day.***"]

See also, Business Week, "*Best Places to Launch a Career*," September 13, 2007 ["***Boeing Co. (BA) (No. 14) is starting to move in that direction. The aerospace giant has one of the lowest retention rates in its industry (59%), and one way it hopes to improve upon this is by teaching managers how to deliver criticism—harsh, if necessary—along with praise.***"]

improved. Independent analysis demonstrates that – for these same 1,000 patent examiners, productivity increased by approximately 10%. Other examples of increasing morale and efficiency by increasing opportunity and flexibility are reviewed below.

Additional GAO Findings

Together with the GAO, we fully appreciate that the work of patent examination – and particularly the patent production requirements - is a nuanced, multi-faceted undertaking, not susceptible to easy "quick fixes." We must find a way forward that aligns perceptions with realities and results in an even higher morale, higher performing organization.

The GAO report indicates that many patent examiners work unpaid overtime to meet production goals, that many examiners leave because of those high production goals, and that the USPTO's hiring rate will not reduce the patent application backlog. The GAO report further suggests that by lowering production goals, fewer examiners would leave the USPTO, giving the USPTO more employees to combat the patent application backlog. We believe a thorough analysis of the data does not support each of those propositions. In fact, the data shows that lowering standards will increase the backlog. The data also suggests that the solution lies in finding the right combination of increased opportunities and flexibilities for examiners. While we fully agree with the conclusion to further study production goals, we came to that conclusion for different reasons than the GAO – and provide the following information in support of our conclusion.

USPTO's Attrition Analysis

The USPTO has been analyzing and addressing patent-examiner attrition with several innovative techniques since it began increasing hiring in FY2005. First, we have – by careful data capture – identified an attrition trend line.

Attrition is greatest in the first 12 months from the date of hire. Since 1998, first-year attrition has fluctuated from a high of 28.3% in FY 2000 to a low of 15.1% in FY 2003. In FY 2007, first-year attrition for patent examiners was about 15.6%. That is nearly five points, or twenty-two percent, *less* than the average first-year attrition rate of about 20%.

Second-year attrition again varies, with an average attrition rate over the past nine fiscal years of around 13.5%. Third-year attrition over the same period averages around 9.7%. After the third year, attrition rates decline, hovering around 3.95% for examiners who have been at the USPTO for 3 - 30+ years.

What Does This Information Mean?

Perhaps surprisingly, first-through-third year patent examiner attrition at the USPTO is much lower than private-sector attrition in relevant sections such as engineering, computers, and general technology.[3] To provide some perspective, for the most recent fiscal year (FY2007), overall examiner attrition was 8.5%. This attrition rate compares favorably to overall Federal

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[3] See http://data.bls.gov/cgi-bin/dsrv

employee attrition which, in calendar year 2006, was 11.2%.[4] Turnover in the private sector, particularly for engineers and computer scientists (technical areas of hiring focus for the USPTO), can be even higher, tracked by the Bureau of Labor Statistics at 45.5% percent for calendar year 2006, and reflecting the tendency of engineers and computer scientists to change jobs frequently.

While our historic 20% attrition rate for first-year employees is significantly less than that seen in the relevant private sector, the USPTO does not have the same tools available to the private sector which permit spreading costs of attrition over other business lines. In other words, we refuse to view higher attrition as "cost of doing business." Further, we have been chosen by *Business Week* magazine as one of the best places in America to launch a career, and we aim to be an employer of choice who really looks at employees as family members with whom we want a long-term relationship. Camaraderie is a morale factor that should not be ignored, and turnover does not contribute to camaraderie.

Our newest examiners represent the future, and a long career of service to America. We want to retain them. Similarly, our most senior examiners represent decades of experience, and handle the most complex patent applications with facility. While we do not wish to keep them from a well-deserved retirement, every year we can encourage them to stay with the USPTO is an extra year that the public benefits from their expertise. For these reasons – higher than desired front-end attrition and general retirement attrition – we must continue to focus our retention efforts on the newest and the most senior examiners.

What We are Doing

We are concerned with attrition and our efforts reflect that concern. The USPTO has remained committed to a strong work life quality program, including:

- Flexible work schedules (available to all USPTO employees);
- Expansive teleworking programs;
- Reimbursement for advanced technical education and law school;
- Recruitment bonuses (primarily available to patent examiners);[5]
- Retention bonuses (primarily available for patent examiners);
- Special pay increase of 10% for all patent examiners;
- Part-time employment available to all employees;

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[4] Bureau of Labor Statistics (BLS) statistic for calendar year 2006, identifying the total percentage of Federal employees leaving the workforce for reasons other than retirement or performance – in other words, employees who quit.

[5] To receive a recruitment bonus, the examiner must make a four-year commitment to stay with the USPTO. The four-year commitment is based on our attrition analysis which, as mentioned earlier, demonstrates a strong historical trend toward greatly reduced attrition after three years with the USPTO. The recruitment bonus is paid in four installments – 25% up front, and progressive payouts every six months. To maintain eligibility, examiners must maintain at least "Fully Successful" performance. If they choose to leave before fulfilling their time commitment, they must return a prorated portion (e.g., if they leave after six months of service, they would owe 50% of their upfront incentive) of the recruitment bonus.

- "Flat Goal" pilot;[6]
- Lap top computers available for work away from the office;
- Increased productivity award programs for patent examiners;
- Increased training opportunities tailored to examiners' needs;
- Focused training for new examiners; and
- Movement toward a nationwide workforce.

Although our patent-examiner recruitment bonus program is only 16 months old (started July 2006), we are already seeing positive results. Among examiners who received recruitment bonuses, the first-year attrition rate was 10 %, which compares favorably to the more general first-year attrition rate of 15 % for examiners hired during this same period who did not receive the bonus. Both are well below the 10-year average of 20%. Of course, one year's worth of data is not sufficient to indicate a trend, so we are continuing to assess the impact of recruitment bonuses – and the other above-mentioned incentives – on retention. But the early favorable results give us hope that recruitment bonuses will be a sufficient incentive to encourage patent examiners to stay with the USPTO at least three years – until a time when, given historical attrition trends, attrition drops dramatically, employees become more comfortable and stay with the USPTO for much longer periods.

Previous Recommendations Have Proven Valuable

We are targeting recruitment bonuses for maximum impact on attrition. In addition to targeting recruitment bonuses for new hires in hard-to-fill examiner positions, we also are relying on exit interviews for insight as to why people are attracted to the USPTO and why they leave. The USPTO has a formal exit interview process in place to collect quantitative as well as qualitative data on reasons for leaving the Agency. We have discovered that a variety of reasons exist for leaving the USPTO, ranging from having pursued two job offers before joining USPTO and leaving shortly thereafter to take the initial, higher-paying or more geographically desirable job, to a simple incompatibility with the task of examining patent applications.

The USPTO has also worked with the Office of Personnel Management (OPM) to establish compatibility criteria and survey applicants before they are hired, to better identify candidates suited for the job of patent examination. Currently, every potential patent examiner who receives a job offer takes our compatibility assessment. Our plan is to make that compatibility survey tool available to all interested parties, which might help potential applicants self-select so only those who believe the USPTO is the place for them take the next step and submit an application.

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[6] Instituted on April 1, 2007, this one-year pilot is intended to test a new conceptual approach to production. A variation is already successfully in place in the Trademark Operations, for GS-13 and 14 examining attorneys. The Patent flat-goal pilot is voluntary and currently includes participants. In contrast to the current yearly production goals, with yearly award payouts, under the flat-goal pilot, goals are set quarterly, with quarterly award payouts.

We are reporting the flat goal (when the pilot is evaluated) under Final Inspection Report No. IPE-15722.

Impact of the Production System on Attrition

Because attrition is highest in the first three years after hiring, and quite low thereafter, we need to review carefully the premise that a production-based system of examination is – in itself – responsible for overall attrition.

We appreciate that examiner reports of working excessive overtime suggested to GAO that patent examiners' production goals are too high. We have too much collective experience to dispute the fact that some employees feel that expectations are too high, and that any given work period is too short a time in which to complete a task. We are, however, struck by the fact in Fiscal Year 2006, the most recent year for which we have complete data, more than 60% of patent examiners received a performance award for exceeding 110% of their production goal. Further, over two thirds of junior patent examiners (examiners at the GS-7 – GS-11 levels) received a timely promotion based on demonstrated performance that included production in excess of 107%. In other words, a majority of patent examiners are not struggling to maintain "fully successful" levels of performance. They are over-achieving, if you will, choosing to do more than is required of them – and, appropriately, receiving bonus money for their efforts.

There is other data suggesting that production goals are at proper levels. For example, a September 2004 Office of the Inspector General (IG) report indicated that the seven technology centers they reviewed surpassed the 100-percent production level for the five-year assessment period. In other words, on average the employees in those technology centers spent less time than their expectancy production goals to process applications.

It is clear that some patent examiners leave the USPTO because of their dissatisfaction with production goals. This does not mean production goals are too high for most examiners, for the USPTO, or for patent applicants who depend upon timely review of their applications. This is particularly true for examiners who have been at the USPTO for more than three years, where 70% of production occurs and attrition averages less than four percent.

Examining patent applications is rigorous work. The USPTO is a performance-based agency, which is not attractive to everyone. The attrition data and performance award statistics we have gathered do not compel the conclusion of a nexus between attrition and production requirements. Better initial training, having the right working environment, accessibility to senior employees who can provide guidance, and more community activities are themes for improvement that we have heard from employees in exit interviews, at town hall meetings, and at brown-bag lunches. Most patent examiners appreciate that applicants need a timely assessment of their applications – and many patent examiners are willing to work above and beyond minimum requirements to ensure that applicants are served well. At the USPTO, we are very proud of the patent examiners and, indeed, all of our employees.

Next Steps

We agree with GAO's conclusion that hiring alone will not solve the backlog of unexamined patent applications. We also agree that the assumptions underlying patent-examiner production goals merit reevaluation, particularly in light of various quality initiatives. The

USPTO will consider all of these factors as we continue to work with GAO in evaluating the underlying assumptions used to establish examiner production goals.

As we hope the information provided above makes clear, we are analyzing our attrition data carefully to determine if there is a nexus between attrition and the production system. If attrition proves to be unrelated to the production environment, we may find that initiatives designed to reduce redundancy, leverage existing work, and make applications more focused are the most meaningful ways to reduce the patent application backlog.

The USPTO's plan is to evaluate the full impact on examiner retention of the many work-life initiatives in progress. If our work-life efforts continue to lower attrition as they have in just one year, we believe we will have identified the right mix of production standards that improve our service to the public and offer employees more opportunity and satisfaction.

The USPTO will initiate the following actions as first steps in addressing the recommendation in the final report:

- Partner with the GAO to gain comprehensive, valid, and meaningful attrition data from the private sector;
- Provide GAO with regular updates on attrition/retention results and analysis;
- Pilot additional alternative(s) that are seen as having potential benefits; and
- Provide GAO with data from/analysis of the data from the "Flat Goal Pilot Program."

On behalf of the USPTO, I wish to express my thanks for the GAO's thorough review of this important issue.

Sincerely,

JON W. DUDAS
Under Secretary and Director

ATTACHMENT 4

The Rising Size and Complexity of the Patent Document

Dennis Crouch
Associate Professor of Law
University of Missouri School of Law
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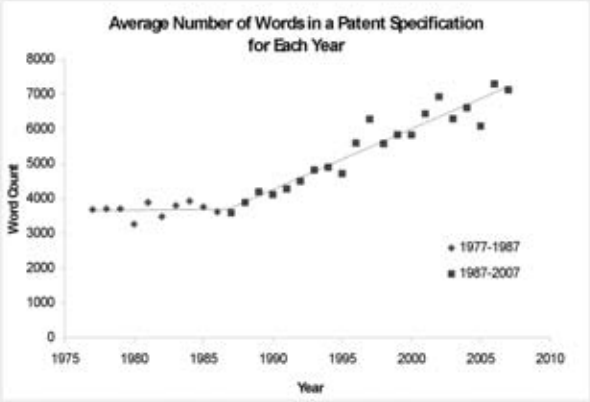
February 20, 2008



The above word count chart shows the results of a study of 10,000 U.S. patents issued between January 1977 and December 2007. Using a software algorithm, I counted the number of words in the description portion of each patent. This excludes claims, title, abstract, references, and other identifying information. To amplify the results, I added two trend-lines. The first trend-line runs from 1977 to 1987 and has essentially no slope — indicating that the length of patents remained steady over those years. The second trend-line runs from 1987 – 2007 and has a clearly positive trend-line indicating that the number of words is increasing over time. Because of the large sample size, I am very confident (99.9% CI) that the average patent length has been steadily increasing.

For further information, *See* Dennis Crouch, *Does Size Matter? Counting Words in Patent Specifications*, PATENTLY-O (Dec. 20, 2007) online at:

http://www.patentlyo.com/patent/2007/12/does-size-matte.html.

The above claim count chart shows the result of a study of 28,000 U.S. patents issued between January 1977 and December 2005. Each patent has at least one "independent claim" and may include additional "dependent claims." Using a software algorithm, I counted the number of total claims and also independent claims for each patent. Because of the large sample size, I am very confident (99.9% CI) that the average number of both total claims and independent claims are increasing over time. The chart shows this result for total claims. The chart's scale may mask the similar trend showing that independent claims have increased by almost 50% over the 28 year time period.

It is important to recognize that the above results are directed to issued claims. In most cases, patent applications originally include even more claims that are then cancelled during the examination process.

For further information, See Dennis Crouch, Rising Claim Counts, Patently-O (Dec. 23, 2007) at:

http://www.patentlyo.com/patent/2007/12/rising-claim-co.html.

ATTACHMENT 5

RESULTS OF POPA SURVEY ON FLAT GOAL PILOT PROGRAM

May 2006

1. Are you currently a non-probationary employee?[1]
   Yes: 70% No: 30%

2. Are you currently on the Increased Flexitime Program?
   Yes: 65% No: 35%

3. Do you work voluntary overtime to make production?
   Yes: 65% No: 35%

4. Do you work voluntary overtime to make awards?
   Yes: 36% No: 64%

5. Do you believe the Flat Goal Program will increase the number of counts that you need to do each biweek?
   Yes: 74% No: 26%

6. If you train junior examiners, what correlates most closely to the time you spend per biweek?[2]
   0-3 hrs: 43% 4-7 hrs: 28% 8-10 hrs: 16% 10-15 hrs: 8% >15 hrs: 7%

7. If you assign new cases in your art unit, what correlates most closely to the time you spend per biweek?[2]
   0-2 hrs: 40% 3-6 hrs: 31% 7-10 hrs: 14% >10 hrs: 15%

8. If you classify new cases in your art unit, what correlates most closely to the time you spend per biweek?[2]
   0-2 hrs: 32% 3-6 hrs: 34% 7-10 hrs: 22% >10 hrs: 13%

9. Do you earn Special Achievement Awards (SAAs)?
   Yes: 43% No: 57%

10. Do you earn Gainsharing Awards?
    Yes: 42% No: 58%

11. Do you work paid overtime?
    Yes: 41% No: 59%

12. Is the availability of awards or the availability of overtime more important to you?
    Awards: 13% Overtime: 24% Both: 48% Neither: 16%

13. Do you think you are over or under 80% examining time?
    Over: 36% Under: 44% Do Not Know: 21%

14. In view of the assumptions for the Flat Goal Plan for annual leave, do you think that you will be unable to use annual leave you earn? Yes: 72% No: 28%

15. In a year when no one in your family or yourself has a serious medical condition or birth or adoption of a child, how much sick leave do you use?
    0-7 days: 38% 8-26 days: 55% >26 days: 7%

16. Will you be volunteering for the Flat Goal Program? Yes: 5% No: 95%

17. Will you quit training, assigning, and/or classifying under the Flat Goal Program?
    Yes: 98% No: 2%

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[1] Percentages may not total 100% due to rounding.
[2] Based on responses, questions 6, 7 and 8 were ambiguous, i.e., responses suggest that those who did not train, assign cases or classify cases may have responded either under the 0-3 hours category or simply did not respond at all to one or more of these questions.

Mr. BERMAN. Well, thank you very much, Mr. Budens.

And Mr. Kasper, why don't you conclude for us, and then we will have questions?

TESTIMONY OF ALAN J. KASPER, FIRST VICE PRESIDENT, AMERICAN INTELLECTUAL PROPERTY LAW ASSOCIATION, SUGHRUE, MION, PLLC, WASHINGTON, DC

Mr. KASPER. Thank you very much, Mr. Chairman and Members of the Subcommittee. I am pleased to have the opportunity to present the views of AIPLA at this oversight hearing on the U.S. Patent & Trademark Office, an entity vital to maintaining American innovation.

Since my time is limited, I will highlight only a few of the points made in my written statement. I will focus on current procedures, practices and administration of the patent examination process that I and other practitioners find are resulting in delays and added costs to applicants, and we believe to the office, as well.

First, I would like to express my appreciation to the thousands of dedicated patent examiners in the USPTO without whom the system simply could not function. We believe, however, that their jobs and their efficient processing of applications could be facilitated if steps are taken to change the adversarial culture that appears to exist in the USPTO.

For example, if examiners, following their detailed review of a claimed invention and a prior ART that their search has identified, were encouraged to make suggestions to applicants for amendments to the claims. We believe that more applications could be examined better and more efficiently.

While such suggestions may not be accepted in every case, they would surely lead to a rapid narrowing of issues and a meeting of the minds as to what language best defines the patentable subject matter. Extended prosecution through RCEs or continuations could be avoided in many cases.

Second, overly formalistic rules that are strictly applied and result in frequent notices of noncompliant responses requiring written replies within specified periods should be relaxed. Often, the ensuing delays and costs to correct these deficiencies could be avoided with an informal communication to the applicant, permitting the examiner to amend or annotate the application, showing a correction of the error. This too would speed processing.

While formal errors in papers filed by applicants should not occur, the rigidity with which the office approaches them is in dramatic contrast to the manner in which it treats deficiencies in communications from the office. For example, the failure to list relevant prior ART in certain forms, or a failure to fully complete other forms, requires applicants to make unnecessary requests for correction so that a complete and accurate record in the file history is obtained.

A greater stress on thorough and competent supervision of the entire work product before it is mailed from the USPTO would enhance the overall quality of the examination process and save both applicants and the office time and money. The greater emphasis on avoiding formal errors and resolving them more expeditiously at all levels should be coupled with appropriate metrics for the examiner,

support staff and supervisor performance, and matched with better training of and incentives for all PTO employees.

My final comments on USPTO procedures concerns the pre-appeal submission process outlined in Director Dudas's testimony. This procedure was intended to avoid unnecessary appeals and save costs. It was universally welcomed by applicants when announced. However, its full potential has not been realized in practice.

In reality, the reviewing panel of preferably three persons typically includes the examiner and his supervisor, thereby skewing the process against applicants. At least two senior examiners not involved with the application should be part of any reviewing panel.

Lastly, in my experience as an examiner, in-house attorney and outside counsel, I found the European practice of placing reference characters from the description into the claims to be immensely helpful as a roadmap to efficiently understanding the invention as claimed. We have recommended that this practice be adopted by all three trilateral patent offices.

Unfortunately, current U.S. law as interpreted by the courts effectively precludes such practice by allowing courts to reach restrictive claim interpretations or impose an estoppel. A legislative fix to this problem is needed so that reference characters can be placed in the claims of U.S. patent applications and issued patents.

Such a legislative fix, together with an amendment relieving applicants from a statutory obligation to include certain legends in applications rather than accompanying documents would facilitate adoption of an international common application format with attendant cost savings.

I wish to thank the Subcommittee for the opportunity to present these views, and I would be pleased to answer any questions you may have.

[The prepared statement of Mr. Kasper follows:]

PREPARED STATEMENT OF ALAN J. KASPER

AIPLA

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STATEMENT OF ALAN J. KASPER

FIRST VICE PRESIDENT

AMERICAN INTELLECTUAL PROPERTY LAW ASSOCIATION

BEFORE THE

SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY,

COMMITTEE ON THE JUDICIARY

UNITED STATES HOUSE OF REPRESENTATIVES

OVERSIGHT HEARING ON

THE UNITED STATES PATENT AND TRADEMARK OFFICE

FEBRUARY 27, 2008

Mr. Chairman and Members of the Subcommittee,

I am pleased to have the opportunity to present the views of the American Intellectual Property Law Association ("AIPLA") at this oversight hearing on "The U.S. Patent and Trademark Office." Let me express our appreciation for your continuing interest in this vital government office.

AIPLA is a national bar association of more than 17,000 members engaged in private and corporate practice, in government service, and in the academic community. AIPLA represents a wide and diverse spectrum of individuals, companies and institutions involved directly or indirectly in the practice of patent, trademark, copyright, and unfair competition law, as well as other fields of law affecting intellectual property. Our members represent both owners and users of intellectual property, and therefore have a keen interest in an efficient and smoothly functioning Office.

As outlined in my biography, I began my career in patent law as an Examiner in the United States Patent and Trademark Office ("USPTO" or the "Office"), worked for over 15 years in-house in a corporate setting, and have been a partner in an IP firm here in Washington, DC for over 20 years. My practice involves patent prosecution, litigation, opinions and client counseling in the patent field, and I have both domestic and foreign clients. My firm, Sughrue Mion, PLLC, is an IP boutique with over 100 IP professionals that filed over 7,000 U.S. patent applications and obtained over 3,300 U.S. patents for their clients in 2007. Many of the applications filed in the USPTO are based upon international applications that were previously filed under the Patent Cooperation Treaty (PCT) and the majority of our U.S. applications are filed in parallel in other patent offices, particularly those in Japan, Europe, China, Korea and India.

In preparing for this hearing, I draw from my professional experience and that of my colleagues in my firm and in AIPLA. I also draw upon a variety of roles that I have played over the past few years in connection with AIPLA activities. In that connection, I served as chair of an ad-hoc Special Committee on the USPTO Strategic Plan for 2007-2012, as the leader of an AIPLA delegation that participates as one of two U.S. IP associations in the Industry Trilateral, and my recent experience of participating on behalf of AIPLA in a "focus group" conducted by a consultant working for the USPTO under the auspices of the Patent Public Advisory Committee. In this latter capacity, I had the opportunity to hear the views of other patent practitioners regarding the challenges and problems they see presently confronting the USPTO. Thus, while there has been insufficient time to conduct a survey of AIPLA's members, I believe that the comments that I will offer this afternoon represent the views of many practitioners who work daily with the USPTO.

General Background

Patent Prosecution Process

At the risk of providing background already known to the Members of the Subcommittee, I would simply like to note briefly that the U.S. Patent law (35 USC 1, *et seq*) grants a limited term right to exclude others from making, using, selling, offering to sell, and importing an invention in consideration for a clear and enabling public disclosure of an invention, including the manner of making and using the invention. The grant is based upon a patent application filed with the USPTO that has a written disclosure, typically including drawings, that must enable one of ordinary skill in the relevant technology to make and use the invention. The application also includes claims, which are single sentence statements that define the invention and delineate its

scope, based upon differences that the Applicant perceives the invention possesses over the prior art known to the Applicant at the time the application is filed.

During examination of the application, the Examiner will search for and evaluate the prior art as well as assess whether the claims are too broad or are indefinite. The Examiner's initial assessment of the patentability of the claims, against the standards for patentability defined by the statute, is identified in an "Office Action" that states the Examiner's assessment of the patentability of the invention in light of the relevant prior art. In response to the Examiner's position as expressed in the Office Action, the Applicant will respond with arguments to further clarify the invention or may further amend the claims to define over the cited prior art.

If the Examiner disagrees with the reply, the next communication may be a "final" Office Action in which at least some or all of the claims are finally rejected, while some others also may be allowed (i.e., considered patentable). If some claims are finally rejected, under existing USPTO practice, the Examiner will often repeat the previous basis for rejection and provide a "Response to Arguments" that is intended to address the arguments or amendments submitted by the Applicant and focus the issues that remain for resolution, through appeal or further prosecution.

In accordance with current USPTO rules, the Applicant may file a Response to the "final" Office Action but may not further amend the claims, may not submit evidence in support of patentability, and may not even conduct an interview with the Examiner, without the filing of a Request for Continued Examination (RCE) or a continuation application. Substantive interviews or other contact between the Applicant and the Examiner after final Office Action are discouraged. Thus, an Applicant's options after a "final" rejection are to file an RCE or continuation application, appeal the Examiner's final rejection or abandon the application.

The cost for an RCE or continuation application, including government fees and service charges, is approximately the same as that for filing the original application. In my experience, the RCE is by far the more popular option selected by an Applicant in order to continue the process of seeking a patent.

Diversity of Reasons for Filing U.S. Patent Applications

As indicated in my biography, I have had substantial experience as a USPTO examiner, as an in-house lawyer and as outside counsel for patent Applicants. This experience has provided me with detailed knowledge of workflows, costs and budget considerations related to the filing and prosecution of U.S. patent applications, as well as the enforcement of resulting patents through litigation and licensing. On the basis of that experience, I have observed that Applicants have a wide variety of reasons for filing a patent application and seeking to obtain a U.S. Patent.

In the vast majority of cases, the inventions relate to actual products or processes that have been developed by the inventor or his employer. Thus, two major goals for such applicants are (1) to provide a public disclosure of an idea so that such disclosure serves as a barrier to patenting by competitors, and (2) to secure claims directed to the particular features of the commercial embodiment of a product that contains the invention to protect against the copying of that product. In other words, in my experience, the perspective of the majority of Applicants is simply to obtain a patent that reasonably covers their commercial product or process. There certainly are Applicants that are willing to exhaust all administrative and legal options in order to obtain the broadest possible coverage for their invention.

Determining the Meaning of Claims

In addition, based upon my prior experience, I am mindful of the challenges faced by Examiners, the public and even Applicants and their representatives to efficiently review and

assess the scope and meaning of claims in an application or issued patent. Any given word or phrase may have different meanings and different scope to different individuals. Applicants who provide Examiners guidance with regard to the meaning of claim terminology run a risk, however, that an unintended restriction on the scope of the invention may result based upon principles such as prosecution history estoppel, as explained by the Supreme Court in the *Festo* case (*Festo Corp. v. Shoketsu Kinzoku Kogyokabushiki Co.* 535 U.S. 722 (2002)). Moreover, comments made during prosecution may have an adverse effect on the enforcement of patents based upon principles of inequitable conduct, and may unduly affect the interpretation that a U.S. District Court may give to the meaning of claim terms during litigation. Because of this adverse effect, there is a reluctance on the part of Applicants and their representatives to identify the relationship between claims and the original disclosure, to characterize the invention and the prior art during prosecution, and to explain the basis for amendments to the claims during prosecution.

Risk of Charges of Inequitable Conduct

Lastly, I wish to note the existence of the duty of disclosure that is placed upon Applicants, their representatives and others involved in the prosecution of an application under the Patent Rules (37 C.F.R. § 1.56), and the manner in which such duty is discharged with respect to relevant prior art by the filing of an Information Disclosure Statement (IDS) as provided under the Rules (37 C.F.R. §1.97 and §1.98). Where Applicants are aware of prior art that is material to the examination of a patent application before the filing of the application, or they subsequently become aware of such prior art, for example due to citations during prosecution of corresponding applications in other countries, a disclosure of such art to the U.S. Examiner through an IDS is required. Given their source, these types of documents often are not in the English language and often are merely cited by other offices as sources of background technology. The relevance of

such documents is summarized in search reports or brief comments by the Examiners in other offices. Typically, other published patents that correspond to a cited prior art reference are identified by number and country in the report. Also, typically, an English language Abstract of the reference is available that summarizes the disclosure of the references, and such an Abstract currently is accepted by the USPTO in satisfaction of the duty of disclosure.

Costs of Preparation and Prosecution

The costs to prepare and file a non-provisional utility patent application are substantial and are reported in the AIPLA Report of the Economic Survey 2007. For example, the preparation and filing of an original application of minimal complexity (10 page specification, 10 claims) on average by a firm having my firm's size is $8,548.00. Similar costs exist for relatively complex biotechnology/chemical cases ($15,398.00), relatively complex mechanical cases ($11,482.00) and relatively complex electrical/computer cases ($13,684). The average cost for filing an Amendment in a case of minimal complexity is $2,244.00, in a relatively complex biotechnology/chemical case is ($4,448.00), in a relatively complex electrical/computer case is ($3,910.00) and in a relatively complex mechanical case is ($3,506.00). (Pages I-78, I-79 and I-80 of the Survey). The government fees related to such filings are the same (unless the Applicant is a small entity) -- $1,030.00. The cost for filing an RCE is $810.00 plus a service charge, which in the case of my firm, is $350.00. The cost for filing of a continuation application is $1,030.00 plus a service charge, which in the case of my firm is $585.00.

Costs, Pendency and Quality

At the outset, I would like to acknowledge the difficulties the USPTO faces in processing the ever increasing number of patent and trademark applications it receives. These difficulties have been exacerbated by the diversion of fee income in years past, which prevented the Office from hiring and training the qualified staff it needed to handle its workload. The USPTO has been in a catch-up mode for the last few years, when it finally has been appropriated essentially all of the fee revenues it has received. Of course, members of this Subcommittee are keenly aware that the quality and pendency problems confronting the Office can be directly traced to the diversion of USPTO fee revenues. The beginning steps taken to address these issues made possible by the last four Appropriation Acts demonstrate the absolute necessity of the Office retaining and using its fee revenues, as would be guaranteed by the amendment to S. 1145 sponsored by Senator Coburn. The Office must have such a guarantee of full funding in order to intelligently plan for the recruiting, training and retaining the numbers of qualified Examiners needed to overcome the challenges it faces.

Strategic Plan

The USPTO identified a broad spectrum of solutions to meet these problems in its draft Strategic Plan for FY 2007-2012, as published in the Federal Register on August 24, 2006 (71 Fed. Reg. 50048). AIPLA submitted comments on the draft Strategic Plan in a letter to the USPTO dated October 6, 2006. In its comments, AIPLA stated its strong support for the stated goals of quality, certainty, cost effectiveness and accessibility, but encouraged greater emphasis by the USPTO on transparency, accountability and sensitivity to the costs and risks of USPTO policies to users and their representatives. AIPLA also expressed its support for programs to provide Examiner retention, including pilot programs to investigate satellite offices, compensation initiatives, diversity of career paths and enhanced resources and office support.

While many of the initiatives identified in the Strategic Plan published in 2007 were focused on quality, the main focus of the programs subsequently announced by the USPTO is on the establishment of additional responsibilities and restrictions on Applicants, for example, in connection with the Rules packages on continuations and claims, as announced on August 21, 2007 (72 Fed. Reg. 46715). The implementation of these specific Rules have been preliminarily enjoined and is currently under review by the U.S. District Court for the Eastern District of Virginia.

The Office published a Notice of its intent to engage the patent community in the development of an objective set of review criteria that could be applied across its examination processes on July 24, 2007 (72 Fed. Reg. 40286). It also announced its intention to study patent Examiner production goals on October 4, 2007 and stated an intention to review assumptions underlying current production standards in order to encourage a fresh look at production in a manner that will motivate employees, improve its work environment and enhance the quality and efficiency of the patent examination process. However, no additional initiatives that are related to quality and are focused on Examiners have been announced since the publication of the final Strategic Plan. Accordingly, in anticipation of the establishment of further initiatives, I would like to take this opportunity to identify a number of problems that those of us on the front lines of patent practice have experienced. Let me begin with some patent examination issues.

Patent Examination Issues

As already noted, in my experience, the vast majority of Applicants wish to obtain a patent so that their idea is disclosed to the public and serves as a barrier to competition, but also covers the particular product that embodies the invention. In the interest of cost saving, Applicants often forego seeking the broadest possible protection. In those rare cases where an Examiner on his/her

own initiative suggests limitations to a claim that would overcome prior art, the frequent response by Applicants is to accept reasonable proposals, notwithstanding the strength of the Applicant's substantive position or the likelihood of success on appeal. I believe that, if the culture of the Office were to encourage Examiners to propose claim amendments that would, at least in the Examiner's view, distinguish the claimed invention over the prior art, the need for further amendment, filing of RCE or continuation applications and appeals, and their attendant costs, could be avoided. In other words, the desired benefits of shorter prosecution and lower costs to both Applicants and the Office could be attained.

Examiner Adversarial Approach

In general, however, Examiners do not provide such suggestions and the current production goal system encourages extended prosecution. Even where interviews are held between an Applicant and an Examiner in order to identify patentable subject matter, there is a reluctance on the part of the Examiner to suggest or even commit to further claim limitations or modifications that would result in allowable claims and thereby shorten the prosecution process. As a result, an Applicant is forced to guess what an Examiner might accept, and then file a Response with the hope that the Examiner does not find some further, previously undisclosed interpretation of the claims or the prior art that results in yet another rejection.

The foregoing example suggests the existence of an underlying adversarial approach that is compounded by both the failure of Examiners often to address all arguments made in a reply by the Applicants or to fully explain their interpretation of the prior art. All too often, the specific teachings of the prior art and the Examiner's technical description of how the prior art meets the limitations of a claim are omitted from the "Response to Arguments" that the Examiner is required to provide.

Rigid Application of Rules

Further, formality reviews of responses and papers submitted by Applicants to the Office are often unnecessarily technical and rigid, resulting in waste and inefficiency. For example, where an Applicant erroneously designates a claim in an Amendment as "currently amended" or "previously presented" or "original", a "Notice of Non-Compliant Amendment" is mailed to the Applicant, thereby further delaying the processing of the application. Often, the delays and costs related to this procedure could be avoided with an informal communication to the Applicant, permitting an Examiner's amendment to correct the error, or a comment in a subsequent Office Action. Similar issues arise with respect to informalities in Appeal Briefs, Reexamination Requests and Reissue Requests.

Quality of Office Communications

While such formalistic errors by Applicants should not occur, the rigidity with which the Office approaches them is in dramatic contrast to the manner in which it treats the formalities governing communications by the Examiner with Applicants. All too often, an omission or error in an Office Communication results in additional costs and delays due to procedural errors, incomplete work, inconsistencies in stated positions within an Office Action and errors in law. For example, from time to time, prior art that has been discussed in an Office Action is not listed in a standard USPTO form (PTO 1449), even though such listing is required to ensure that the cited art will be identified in the published patent, once issued. Similarly, the Office Action Summary, which accompanies each Office Action prepared by the Examiner and contains a variety of boxes for checking the current status of the application, its content and received papers, is frequently incomplete. Applicants often must make multiple requests to the Examiner before the record is made complete.

Yet a further example of incomplete examination, often experienced by Applicants is the failure of the Examiner to consider highly pertinent prior art that is expressly identified during an earlier international search of the related PCT application and listed in an International Search Report.

The foregoing are common errors and, I believe, could be addressed by a greater stress on thorough and competent supervision of the Examiner's work product before it is mailed from the USPTO. Initiatives identified in the Strategic Plan included enhanced measurement of Examiner work product quality, better supervisory training, and the establishment of relevant quality metrics and measurements for these significant details.

This apparent lack of uniform supervision is further exemplified by the all-too-frequent failure of Examiners and supervisors to return telephone messages, even multiple messages, forcing extensions of time. This problem is exacerbated by Examiners who have full voice mailboxes or mailboxes that simply do not work.

Administrative Processes

Problems with regard to such procedural issues, as contrasted with substantive issues, are also found in the administrative areas. Numerous instances of errors by USPTO clerks in preparing filing receipts and other documents often require correction by Applicants, adding to costs for both the Applicant and Office. Further, all too often, USPTO clerks fail to promptly enter E-filed amendments into PALM, so that an Examiner cannot act promptly on a response and issue an Advisory Action in sufficient time for an Applicant to avoid having to pay an extension fee.

Pre Appeal Conferences

I would offer a final comment with regard to what appears to users to be an inherent bias present in the pre-appeal submission process. Under this process, in effect since 2005 as a pilot, following a final rejection of claims and concurrent with the filing of a Notice of Appeal, an Applicant can submit a "pre-appeal submission" that summarizes and highlights what it believes are errors in factual findings or legal analysis by an Examiner. Ideally, the "panel" comprises three members, including the Examiner, who will evaluate the reasonableness of the Examiner's position. This procedure, the purpose of which was to avoid the expense and time of an unnecessary appeal, was universally welcomed by Applicants, but its full potential has not been realized in practice. All too often the "panel" includes the Examiner and the supervisor originally responsible for the case, giving the third Examiner a minority position from the beginning. Moreover, as recently experienced, the "panel" may include only the Examiner and the supervisor.

Possible Solutions

As solutions to the foregoing problems, I would encourage the Office to restore a more positive climate for examination, including improvements in the diversity and quality of opportunities for professional development so that Examiner retention may be improved. Chronically poor performers, including Examiners and supervisors, should be addressed. Examiners should be encouraged to be more pro-active, offering suggestions of claim limitations or amendments that the Examiner would consider adequate to overcome rejections. Further, Directors of technology centers should closely monitor the quality of supervisory review of Examiner work product and initiate programs to enhance higher quality supervision. For example, applications having more than three Office Actions on the merits should be investigated, and spot checks of the work of a supervisor/Examiner team should be conducted more frequently than at present. The Office should also institute better policies procedures and supervision of clerical

functions with a view to reducing work that costs Applicant time and money, particularly with regard to filing receipts. Finally, with regard to pre-appeal submissions, at least two senior Examiners not involved in prosecution of an application should be involved in any review of such submissions.

By implementing these changes, I believe that costs to the Office and Applicants can be decreased, the time for prosecution of applications and resulting pendency would be reduced and the overall quality of the resulting patents would be improved.

Since this is an oversight hearing on the USPTO as we know it today, I am limiting my comments to the situation as it exists today. However, I would not like to leave the topic of costs to both the Office and Applicants without mention of the "Patent Reform Act of 2007." While that pending legislation is not the subject of today's hearing and it would be premature to offer any definitive comments on its costs, it will clearly increase the USPTO's costs of operation as well as the costs for applicants to obtain patents. Administration of a post-grant opposition system would add costs to operating the Office and present a challenge to the USPTO to find a sufficient number of qualified individuals to serve as Administrative Patent Judges. On the Applicant's side, the mandatory search and patentability analysis requirements will significantly increase the costs of filing patent applications, and increase the risk that charges of inequitable conduct will become more dominant in patent litigation. As indicated, until the final shape of the legislation is known, I would simply note that there will be cost consequences and operational challenges.

Industry Trilateral Initiatives

The "Industry Trilateral" is an industry group from the three jurisdictions served by the Japan Patent Office (JPO), the European Patent Office (EPO) and the USPTO. The membership includes the Japan Intellectual Property Association (JIPA), BUSINESSEUROPE, and both IPO

and AIPLA for the United States. The organization was formed in 2004 and meets approximately twice annually to address issues concerning costs reduction, workload sharing, pendency reduction and efficiency in the patent and trademark prosecution areas. Among its projects are initiatives to define a single search mechanism through which search results by one office can be shared with and utilized by other offices and a common application format that all three offices would accept. The use of this common application format alone would provide users an estimated savings of $300 million annually, to say nothing of the savings by offices themselves.

A common application format was proposed by the Industry Trilateral in 2006 and was partially adopted by the Trilateral offices (USPTO, JPO, and EPO) in 2007, but substantive issues contained in the Industry Trilateral proposal which would represent the vast majority of savings, were deferred.

One such recommendation is for the United States to amend its law to permit reference characters from the detailed disclosure of an application to be used in the claims as initially filed in an application without the creation of an estoppel limiting the interpretation of the claims. The inclusion of reference numerals in the claims and Abstract of an application would provide a convenient reference for Examiners, third parties and even Applicants who wish to easily correlate the disclosure of an application or a patent to the claimed subject matter. From personal experience in each of these roles, I know that substantial efficiencies would be obtained. Although the USPTO has taken the position that such reference numerals should not limit the claims, courts are not bound by USPTO policies and have acted to limit the interpretation of claims based upon these and similar correlations between the disclosure and the claims. Thus, in order to avoid such restrictions, Applicants and their representatives avoid providing such correlation in public documents. As suggested above, in order to encourage such practice, the

U.S. Patent Statute would have to be amended to provide an exemption for such correlation provided in the application as filed. Subsequent correlations provided during prosecution would continue to be subject to established rules governing estoppel and claim interpretation.

Another recommendation would be to remove the statutory requirements to include "legends" in applications (statements identifying the origin of federal funding of inventions in applications and the domestic priority of an application). With regard to such legends, alternative approaches, such as the use of the application data sheet, would avoid the need to amend applications while still providing the necessary notice to the public.

USPTO Disciplinary Rules and Inequitable Conduct

Another topic that I believe is important to address at this time concerns the current activities of the USPTO with regard to proposed disciplinary rules and inequitable conduct issues. The conduct of attorneys and agents who practice before the USPTO is subject to regulation according to statute (35 U.S.C. §2(b)(2)(D)). Practitioners may be disciplined for failure to comply with established regulations (35 U.S.C. §32). The Office of Enrollment and Discipline (OED) is charged with responsibility to monitor and investigate conduct that may violate USPTO regulations.

Proposed rules governing enrollment and discipline were published by the USPTO on February 28, 2007 (72 Fed. Reg. 9195). AIPLA submitted comments to the Office on May 26, 2007. None of those provisions concerned USPTO Rules 37 C.F.R. §10.18(b)(2) or 35 U.S.C. §1.56. We understand the proposed rules have been revised and are being reviewed by OMB, but they have not yet been officially promulgated. In public presentations by the USPTO in the fall 2007, however, the proposed changes were summarized and included some troubling proposals that were not presented as part of the original rules package. These proposed changes

are based on the duty to make reasonable inquiry, consistent with Rule 10.18(b)(2), and the duty of disclosure (Rule 56).

The public presentation by the USPTO includes examples of improper conduct that may be a basis for disciplinary action and a finding of inequitable conduct. On the basis of the yet-unseen revisions of Rule 10.18(b)(2), the Office has publicly stated that petitioners submitting papers must read each paper in its entirety, regardless of the source. Such a requirement is particularly problematic for foreign language documents, large documents provided by an applicant, or complex documents provided by an applicant. First, such documents may be provided on the basis of search reports and other corresponding applications and may have no specific relevance to the invention in the U.S. application. Alternatively, only a specific portion of the document may be relevant and only that portion translated. Finally, some documents may be cited solely for background purposes by another Office.

A requirement to have the entire document reviewed by a practitioner before submission would be burdensome at best, extremely expensive, and ultimately of little or no benefit to the Office or the Examiner. Nonetheless, failure to conduct such review has been identified by the USPTO in these recent presentations as a basis for inequitable conduct. Further, the Office is apparently taking the position that there is a continuing duty to review such documents for each claim, while pending, until withdrawn. Thus, following each amendment of the claim, the references must be reviewed again.

The foregoing has never been considered a basis for a violation of USPTO ethical rules nor even generally a basis for an ethical problem or for inequitable conduct. Indeed, there never was a proposal by way of a rule change that would have permitted the public to comment on this proposal.

Nonetheless, the public presentations by the USPTO give the impression that this now is the practice to be followed. The statements in the USPTO presentation may be asserted to a court in litigation to represent acts supporting a finding of inequitable conduct and serving as a basis for unenforceability of a patent despite the fact that such a rule has never been proposed, discussed with users, or promulgated.

These comments are offered to illustrate the dangers and damage that can be caused where highly sensitive and legally significant issues are addressed by the USPTO prior to any public vetting and opportunity for input.

Rules Packages

Lastly, I would like to address the variety of rules packages that have been proposed by the USPTO and published for comment. The packages containing limitations on continuations and claims, issued as final rules August 21, 2007 (72 Fed. Reg. 46715), were to go in effect on November 1, 2007, but are now on hold and awaiting a decision by the U.S. District Court for the Eastern District of Virginia. A package related to changes in the requirements for an Information Disclosure Statement (IDS), which we understand has been approved by OMB, has not yet been released. Other rules packages involving appeals and multi-invention alternative claims, with a goal to improve patent quality and reduced pendency, have been proposed, but have not yet been finalized.

I wish to make clear that both the practitioners' bar and users acknowledged the need for solutions to the pendency and quality problems identified by the USPTO. Users and the bar have consistently voiced their willingness to work with the USPTO to find solutions, and AIPLA has supported reasonable limits on claims and even financial incentives to implement such limits, but without loss of rights. Users and the bar stand ready to work with the USPTO through a dialogue

in which the interests of all stakeholders are recognized. A key to any solution, however, is the avoidance of requirements that foster charges of inequitable conduct or force undue limitations on the scope of protection that can be provided for an invention. As stated by the Courts, charges of inequitable conduct are a plague on the patent system and any initiative to address the pendency and quality problems should avoid exacerbating this significant issue.

Conclusion

I wish to thank the Committee for the opportunity to present these views and I look forward to any questions that you may have concerning the observations and solutions that have been presented.

Mr. BERMAN. Well, thank you very much. A number of issues raised.

I will recognize myself for 5 minutes.

There is a tension here between pendency and all of the negatives caused by that, and quality. And in a way, all of you have spoken to this issue.

At this point, I would like to just engage, maybe even in a bit of a dialogue back and forth, Mr. Dudas, Ms. Nazzaro and Mr. Budens on how we can accommodate this tension, deal with the terrible pendency problem and deal with some of the quality issues that you address in the context of goals and working conditions and requirements. So let me just ask a few questions.

First, to Ms. Nazzaro, I want to clarify one point in your report. Your report found that, within a 1-year period, 70 percent of patent examiners worked unpaid overtime to meet their production goals.

Did these examiners occasionally or consistently work unpaid overtime to meet their goals? Was this a—sort of a once in a while kind of situation, or was this a regular? And to what extent, if you know, did examiners work unpaid overtime to make production bonuses?

Ms. NAZZARO. The second part I can answer quicker. We don't know whether the intent of working the overtime was to meet the production goals. We didn't ask that question. But of the 70 percent that said that they worked overtime, five said they worked less than 1 hour, 62 percent said they had worked 1 to 10 hours, 23 percent said——

Mr. BERMAN. Over what period of time?

Ms. NAZZARO. It is over the past 12-month period how much overtime worked per biweek.

Mr. BERMAN. Okay.

Ms. NAZZARO. Twenty-three percent said they had worked between 11 to 20 hours, 5 percent said they worked 21 to 30 hours, and 5 percent said they had worked more than 30 hours. So that is worked per biweek in the 12-month period.

Mr. BERMAN. Okay.

Mr. Dudas, after the GAO report came out, the USPTO issued a press release in October stating that it will review assumptions the agency uses to establish production goals for patent examiners. What steps thus far has the agency taken to study these assumptions? When do you think we will have the results of your study? And will these results be made publicly available?

Mr. DUDAS. Since that time, we have begun to look particularly at breaking down attrition and retention numbers not just across the board but specifically based on year. And we found that, as things are more focused, when you get more focus on things, you see patterns that begin to develop.

I will ask that we put up a chart that shows that attrition throughout the USPTO is high in the first 3 years. As it gets past the first 3 years, it drops to about eight, six, four, three, two, one, and drops down dramatically. So we recognize—that is not the right one, the one—the chart that has got the—shows retention over 30 years, our attrition over 30 years.

The bottom line on that front is is that we have high attrition in the first 3 years. That attrition lowers down dramatically after

3 years, and then again lowers down—one of the things we are focusing on is specifically why are people leaving in the first year, the second year, the third year?

We do actual exit interviews. I think it is important what GAO did, where they asked the question, "If you were to leave, why would you leave?" Best practice—yes?

Mr. BERMAN. But is that responsive, though, to the issue of reviewing the assumptions and establishing the production goals?

Mr. DUDAS. Oh, yes. On that front, well, we are certainly—everything we are doing is looking at the assumption under the production goals. Patent is doing that review across the board.

And again, even on that basis, you have to understand that the production goals, that process has begun. That process is looking at examiner's production—some examiners do roughly 2½ times more production than other examiners. It is based on the level of experience the examiner has. It is also based on the number of hours that are given per complexity for the technology.

So yes, that study has begun. Patents is looking at that. They want to look at that over time, and they want to look at that. So yes, we are happy to make those results public as we go through that process.

But what I am trying to focus on particularly is we have to make—go beyond what the study did in the GAO report, and we have gone beyond that for the last several years, to focus on specifically where do we have attrition issues. We know that we have attrition issues certainly in the first 3 years. We are also putting things in place to try to address those attrition issues.

We have actually lowered the attrition for first-years, where we have our highest, by far. We have lowered that by 25 percent. We targeted that area with retention and recruitment bonus and actually cut it in half.

But for the last 10 years, the PTO has lost about 20 percent of their first year examiners. We have lowered that to 10 percent where we have targeted retention and recruitment bonuses, and to 15 percent across the board.

Mr. BERMAN. All right. I am going to give myself, and then give other people, an additional minute to just finish my three questions. And then, when—if there is a second round, although I do—I should mention that we have to be out of here at 3.

Mr. Budens, the USPTO study—let us assume, when that study is completed, and I am not quite sure when that is supposed to be, but when it is completed, it finds an increase in examination time is warranted, and the increase is implemented. How do you believe this will impact patent pendency? Is there any way to accurately calculate how incremental increases to examination time would address examiner attention?

Mr. BUDENS. Well, first of all, I think that increasing—giving examiners more time will directly impact retention. I go down—I get talked to by examiners every day and get stopped in the hallways, go—thank you for getting us some more money, but what we really need now is more time. We have got to have more time to do the work.

I believe the results of the study from the GAO because it correlates with everything I hear and I see in the hallways. We did a very similar study——

Mr. BERMAN. I also believe in the studies that correlate with what I already believe, too.

Mr. BUDENS. We—interestingly enough, before the GAO study came out, we had actually done a survey of our own—of examiners ourselves, which ended up having results essentially analogous to what they found.

And one of the questions you asked of Ms. Nazzaro, what we found—because we actually asked the question, what we found was roughly a third of examiners—and we asked a similar size cohort, about 1,200, 1,300 examiners—about a third of them were working unpaid overtime, significant amounts, just to keep their jobs.

Another third were working significant amounts of unpaid overtime in order to make outstanding ratings and get bonus awards. So hopefully that—and that is a statistic I think would—correlates perfectly with what the GAO found.

Dealing with how increasing those times is going to hit pendency, obviously the short answer would be it has got to hit pendency early on. But there are a number of factors that I think are coming together at this point in time that may change that.

The recent court case in KSR that may change where obviousness goes, the fact that, if we can increase quality, if we can start keeping the examiners and getting these people experienced and examining and making the best rejections they can, applicants are going to start seeing that it is not just kind of a turkey shoot to go into the Patent office, and they are going to stop filing and wasting their time and money. It is not cheap to get a patent. They are going to stop filing that.

I think those combination of things actually could lower pendency in time. But pendency has been a problem that took us 20 years to get here. I don't think it is—I can't—I don't know of any solution that is going to make it go away in a year, or overnight.

Mr. BERMAN. My time has more than expired.

I recognize the Ranking Member, Mr. Coble.

Mr. COBLE. Thank you, Mr. Chairman.

Good to have you all with us.

Attrition is a bad word. None of us embraces attrition. But I am pleased to learn, Mr. Dudas, that your attrition rate is more favorable than the Federal Government at large. I did not know that. So that is the good news about attrition.

Now, you indicate, Mr. Dudas, that we cannot hire our way out of the pendency and backlog problems. Are these problems manageable?

Mr. DUDAS. I think these problems are manageable, but there are changes that are going be—need to be made, and I want to support something that Robert Budens said.

If we could put up a chart that shows the allowance rate at the Patent & Trademark Office, this is the number of patent applications that ultimately lead to a patent issue. As you can see, in year 2000, 70 percent of all applications led to a patent. First quarter last year, it was 44 percent.

There is a dramatic drop in the number of applications that have come in the door. Some of that is quality initiatives. Some of those are things outside. But it is one of the things we think—and I think Robert hit it on the head—KSR makes a difference, that—what applications that come in the door are sometimes quite problematic. And we have gone from having 70 percent approvals to 44 percent approvals.

That has also led to a behavior that is basically do-overs. I will try again and again. I will ask for my continuation if I don't like your answer. I will ask again. I will ask again. I will ask again.

Unlimited do-overs we have right now. If there were no do-overs, no continuing applications—and there are legitimate reasons for them—that is 30 percent of our applications right now, and that is growing.

Mr. COBLE. Thank you, sir.

Mr. DUDAS. So yes, we need better applications, as well.

Mr. COBLE. Thank you.

Mr. Kasper, in your statement you say that the industry are Trilateral, in which AIPLA participates, recommended a common application format to the Trilateral patent offices. You furthermore estimate that adoption of this format would yield a savings of $300 million annually to patent applicants, but that certain substantive issues prevent most of these savings from being realized.

Expand on that, if you will.

Mr. KASPER. Yes. The common application format would assume that there is a single format acceptable by all three Trilateral offices. There are a number of components to that, some very formal, such as common titles, common organizations. Others are substantive, such as the content of the claims.

Now, in the study by the Industry Trilateral, in preparation for discussions with the Trilateral offices, we identified five different areas that were significant. One I mentioned earlier in my testimony, it deals with adding numbers to claims, where it is popular in Europe but not popular in the United States.

Another is legends that are required under U.S. law. In Europe there is a requirement that, once an application is filed, there must be a description of the then-most pertinent prior ART in the specification. Similarly, the claims must be changed to comport with the specification. And finally, in Japan, you have a requirement that the prior ART be listed in the specifications.

Those are the major areas where costs would be saved if they could be unified. So $300 million based upon each of those requirements and those different jurisdictions would be saved in the event that they could be eliminated or made uniform.

Mr. COBLE. Thank you, sir.

Ms. Nazzaro or Mr. Budens, either one, what compensation-related incentives are the most cost-efficient and attractive to step the tide of attrition? Either of you? Either or both.

Ms. NAZZARO. I was going to say, we have not done any analysis as to which ones are most cost effective.

Mr. COBLE. Mr. Budens?

Mr. BUDENS. I think that, right now from my point of view, our most cost effective use of money has been in higher salaries for ex-

aminers, which has kept them in the neighborhood. Washington is not a cheap place to live.

And the use of recruitment bonuses. One area I would challenge Mr. Dudas on is that he keeps referring to recruitment and retention bonuses. We are using recruitment bonuses to get people in the door. I am not aware that we are using—that any senior examiners have received retention bonuses at all, and I think that is some place where we could expand usage.

The recruitment bonuses, it is a little early yet, from my view, to say that they are going to work, because they are spread out over 4 years. But they are certainly an incentive to get people in the door. But it is the higher salaries that we have gotten with the special pay rates and that we need to maintain in time that I think keep people in the door.

Mr. COBLE. I want to try to beat that red light illumination with this question, Mr. Budens. How does outsourcing searches waste time and resources at the PTO, and how do you feel it diminishes patent quality?

Mr. BUDENS. The first problem I have, the resources that have been wasted is the fights that we have had ongoing on this issue for years. We fought this battle in 2005, and then we are fighting it again now with applicant quality submissions.

My belief is that those things are not going to put better ART in front of examiners because an applicant themselves is probably going to most likely be searching the same databases that the examiner searches. They are going to be finding roughly the same ART in a narrow area of their invention.

The problem with that is that examiners don't look at just their invention. We give claims that have broader, reasonable interpretation, and we may go out and find ART that reads on the claims that their reading that the applicant doesn't think about. Their view is more focused.

And I just don't believe in any way that it is going to put more ART in. We already have the rules in place that, if applicant knows about a Norwegian telecommunications ART or something, they are supposed to be giving it to us. we need to enforce that so BlackBerry cases don't come up again.

Mr. COBLE. And I thank the Chairman for not penalizing me for not beating the red light. I yield back.

Mr. BERMAN. The gentleman from Michigan, Mr. Conyers.

Mr. CONYERS. Thank you, Chairman Berman .

You are a union man, Mr. Budens, Patent Office Professional Association. What is the problem here? We have got tremendously talented people here.

Mr. Undersecretary, you have been through this and helped prepare us for many years. And I sense, quite frankly, that this isn't complex. I mean, there is something more simple than is coming forward.

Can you give me an idea about this, Mr. Budens? What is going on underneath the radar for people that really want to understand why we can't resolve the problem?

Now, I know that, for years, there was no replacement money, and there were backlogs generated. Here we have a part of our

Government winning all kind of awards, and yet there is a lot of severe criticism.

How do we sort these disparate facts out here and get to the bottom of this? Start me off, please.

Mr. BUDENS. Well, first of all, I think that we have a—somewhat of an atmosphere of conflict in the office. There is certainly the normal kinds of conflicts that you always have between management and labor.

But I think one of the biggest problems that we have that I see plaguing us is that we don't have enough interaction between each other on where the agency is going, how it wants to solve problems.

When you really need to find out how to get the job done, you go to the trenches. You go get the people who are actually making the widgets involved in the process, in developing better ways to do things and developing—and deciding the paths you can go. This is something we haven't done.

Mr. Dudas says that they have started undertaking a goal study of examiner goals. My viewpoint is POPA should be involved in that study from day one, and I am just finding out about it, that it is going on right now today at this table.

When the GAO report first came out, I met with the commissioner of patents and the deputy commissioner for operations, and I asked them, "Okay, we have got this study out. It clearly shows what the problem is. When are we going to sit down, and let us start talking about what we can do with goals."

Their response to me is, "Well, we can't really do that right now because we need to see what efficiency gains we can get from the rules change packages and the applicant quality submission and other things—initiatives that we have got going on, and we really won't know how to do the goals.

Well, the rules change packages is tied up in court. AQS is tied up here in the Congress. In the meantime, examiners just keep working, but we are not—we are not being involved in the processes early on. We get things basically shoved at us at the last minute and are told, "Have a nice day."

Mr. CONYERS. Ms. Nazzaro, what do you see underneath the radar screen that can help us out here? We want to help the Patent and Trademark Office. Everybody is conscious of the importance of what they do.

Ms. NAZZARO. I think my comment would be very similar to Mr. Budens'. I mean, we have gotten an agreement from PTO that they are going to look at the production goals, but we don't have any time frame.

We don't know really what they are doing. This is the first I have heard as well, and I did ask my staff before coming in here, you know, what reaction have we gotten from the agency, what response have we got, because we do track all of our recommendations. And we had no idea that they were doing something, as well.

We are not against production-based goals. Setting goals is a good thing. You can't measure performance if you don't have goals, so we are not against production goals. We just think they have to be reasonable.

The agency has not met its goals for the 5-year period that we looked at USPTO 2002 to 2006. So if they are not even meeting these goals, they are unrealistic goals.

And yet, the number of staff who are very concerned with these goals to me seems to be really off the radar screen. They are very appreciative of all the initiatives that the agency has taken, and we applaud them because they are in the forefront of making a family-friendly workplace.

Being a woman myself, I know having an on-site daycare and all of these things are commendable, being able to tele-work in the Washington, D.C. area, all commendable. But they are missing the point. When 67 percent of the agency says they have a problem with production goals, it seems like they should at least study it.

Mr. CONYERS. Mr. Chairman, could I get enough time to ask the undersecretary to respond after Mr. Kasper?

Mr. BERMAN. I think it makes sense.

Mr. CONYERS. All right.

Mr. Kasper, please, do you have anything to add to this?

Mr. KASPER. Thank you.

From my perspective, as I said, as an ex-examiner and certainly now outside, one of the things that is most important is to have enough funding for the examiners, enough training for the examiners, and to provide them with proper supervision so that they can do their jobs in a consistent way so that, to the outside world, they appear to be uniform and provide a high quality output.

Thank you.

Mr. CONYERS. Mr. Undersecretary?

Mr. DUDAS. Thanks very much.

I do think that much of the issue at hand is what Chairman Berman raised earlier, which is there is an inherent tension between quality and production. We could certainly get rid of the backlog overnight by cutting time in half. It would be ridiculous. Quality would be terrible.

We had a 2004 study done by the inspector general who concluded the opposite of what the GAO study was, which is that we are giving too much time, because so many of our examiners, more than 60 percent of our examiners actually achieved productions standards of 10 percent higher than what is required of them. It is beyond the goal.

We didn't instantly run in and say, well, let us, you know, raise the goal for examiners, because we recognized there are a lot of challenges, and there are many, many challenges. Balancing that is critically important.

But I think, again, we believe very strongly in studying all the assumptions under the production goals. They are 25 years old. I do listen to examiners.

We talk a great deal, everything from official functions and brown-bag lunches. So quite honestly, I learn a whole lot at the gym, talking to examiners about what kinds of issues there are.

The claims package that is now being held up in court were ideas that came from examiners because they look at too many claims, and they said, "This is a quality problem. It is a production problem."

I think where I see attention is I think the conclusion that has come from the GAO study for many people is that what we need to do is lower standards across the board. And I would have to tell you, the USPTO disagrees that we need to lower standards for examiners. We are a performance-based organization with high achievers.

And let me tell you what this means. It means that 60 percent of all of our folks work beyond the level they need, beyond 10 percent and beyond, to get higher bonuses. What we need to do is not lower standards. We need to increase opportunity.

We need to increase flexibility. We need to let examiners have the opportunity to do what they do best from wherever they want, whenever they want, and however they want.

And let me tell you about just three programs where this has been put in place in the last 2 years. Tele-working, which we didn't have in patents but had in trademarks, 1,000 patent examiners are now working from home.

Eighty-three percent increased in morale. Eight-seven percent say they would be more likely to work more years—retention. And 10 percent increase on average in production because they have the opportunity to work from home. When they had more time, they chose to do more work and have more flexibility.

A flat goal program, where we say, "Listen, you get paid per patent beyond a certain amount." Less people apply. It is a voluntary program. Over 150 people. Eighty-three percent of examiners reported higher job satisfaction. Over three-quarters, which is not enough to conclude there is a 5 percent increase in production across the board. Again, something voluntarily chosen.

And laptop programs. This should have made sense a long time ago. We said to patent examiners, "Have a laptop. Take it home."

Mr. CONYERS. Well, this impresses me, but does it pass the test with Budens? That is the question.

Mr. DUDAS. He is a tough, tough grader. I haven't passed——

Mr. CONYERS. What do you say?

Mr. BUDENS. I appreciate Mr. Dudas's comments, and we do agree that some of the things they have done have been very good. Laptop program was very well received. It was a little of a concern to us because we knew that examiners would be using it to work more unpaid overtime, but examiners wanted it because they are a dedicated bunch.

We are not necessarily opposed to production goals, by the way, like the GAO is, either. We understand their needs. But there are a lot of things that just aren't meshing.

You mentioned the flat goal program. The flat goal program, almost all examiners just find that program reprehensible and are scared to death that the agency is going to implement it and pretty much run most of us out the door because it is not unrealistic. We believe it is illegal. We are fighting it.

He made a—my brain went dead.

Mr. CONYERS. Well, would going to the gym more with Dudas help you or hurt you?

Mr. BUDENS. Well, one look at me says it may help me in some ways. I am not sure that it would necessarily improve our relationship all that much.

Actually, Mr. Dudas and I get along very well, I think, one-on-one. We have had a lot of good conversation. Where the real problems are is in the real development of where—and direction of where the agency is going.

The employees need to be empowered. We need to be involved in that process.

We are a very dedicated bunch. We believe in this system. We want it to be successful, and we want to do a good job for the American people. We need—we have one of the smartest, highly educated workforces in the country. Put us—let us help design where the agency is going and design the right tools that we need and the right direction that we need to go to be able to do the job that the American people deserve.

Mr. BERMAN. Very good.

The gentleman from Ohio. Again, 3 is our flat production goal.

Mr. CHABOT. Thank you, Mr. Chairman. I had another meeting that conflicted with this. That is why I am a little bit late. If I am repeating my questions, anything that you already covered or anything my colleagues already covered, I apologize in advance for that.

Mr. Undersecretary, I will begin with you. And if any of the other witnesses want to either supplement or disagree with or add to my questions to the undersecretary, that is fine. But I will direct the questions to him.

Why did the USPTO wait until the 2007 GAO report to initiate a study on patent examiner production goals when a 2005 GAO report identified unrealistic production goals as a problem?

Mr. DUDAS. Again—and you are not asking a—it is a new question.

Essentially, we are—we have not agreed with the conclusion that has come from GAO that it was intimated in 2005, and I think more directly said in 2007, the conclusion that what we need to do is adjust production goals and that that will somehow really increase production.

And the reason being—and so, in 2004, I mentioned earlier, the inspector general did a report that said the opposite, essentially. It said we need to raise our production goals, not lower them.

So I think what we are constantly looking at what should production goals be and how do they work. We are also looking in terms of what does it really mean in terms of attrition.

What the GAO study did was gave a lot of good, raw data, but we have spent a lot of time doing—digging deeper under that data since earlier than 2005, really trying to find out what really is—what matters most for attrition and retention by year.

So I had mentioned earlier that what we found is that we do exit interviews. Everyone who leaves, we ask them why did you leave, and they will come in and—not everyone chooses to do them, but of those that do, we have a higher response rate than generally in industry.

And what we have found is that the primary reason why people are leaving in their first couple years, 41 percent said the primary reason is the nature of the work. That agrees with what the GAO says, what Robert Budens has said there.

We found in years 3 to 10, though, that no one said that it was the nature of the work. They said that they think it was supervisor issues or management issues, along those lines.

So what we have started to do, we have had 2 years in a row where we have had a management competence, working with our managers to work, "How can we address that problem?" We have looked at——

Mr. CHABOT. I tell you what. I have only got 5 minutes.

Mr. DUDAS. I am sorry.

Mr. CHABOT. That is all right. Let me cut you off there and ask if any of the other witnesses want to supplement that answer, or——

Ms. NAZZARO. Well, maybe there is a misunderstanding of why GAO believes the way it does. I mean, what the testimony we have heard today is that the more senior employees are the more productive employees. Over 70 percent of the workload is done by the more senior employees.

If you consistently have turnover, particularly among those junior staff, you are never going to be developing that senior cadre. What we see is the problem with the attrition among the people who have less than 3 years, it takes 4 to 6 years for someone to really become a journeyman or become proficient in that profession. It is also taking the senior people more time to provide that on-the-job training then, too.

So I mean, we really see a problem with this whole attrition. And until they can effectively reduce that attrition, I don't think we are going to work out of the problem. And so, that is where we are saying that, if they are continuing to say production goals are driving us out because the nature of the work is too competitive, too production-oriented, we need to figure out a way to have a happy medium.

Mr. CHABOT. Okay, thank you.

Let me ask my second question, Mr. Dudas. Was there any discussion within the USPTO management team over whether Congress should have been notified of the re-organization of the Office of External Affairs?

Mr. DUDAS. Absolutely. In fact, we look at—there are three different types of changes that might trigger different requirements, a re-organization, a re-alignment and a reprogramming. So we certainly have that discussion every time we make a change.

A realignment is, if you will, changing people within a box. A reorganization is changing boxes on the org chart, getting rid of a different type of a thing. And a reprogramming is a significant change in funding.

So there is no question. We had our chief financial officer in every one of these cases. We have done five realignments in the last year. On each one of those cases, our chief financial officer gets together with our office of general counsel as needed, our office of government affairs, to determine is this the kind of thing that triggers that appropriations requirement to notify the Appropriations Committee that this is a re-organization.

So we definitely have that conversation every time. There have been a number of times where re-organizations in the last few years. I have got examples of when wee determine that they are

re-organizations. We have come up and notified Congress officially, and in each case it is a re-organization.

I have examples of when it has been a reprogramming, and we have come up and notified the Appropriations Committee and others of what change is going to be made. But a realignment, we don't do that, but we certainly have discussions n that in a very formal way with a lot of——

Mr. CHABOT. Let me squeeze my last question in quickly here. What has been the effect of the re-organization of the Office of External Affairs on USPTO, Intellectual Property Enforcement efforts?

And my time has expired, so, if you would keep your answer relatively brief, and I would like to go to the others quickly if they have some response to that.

Mr. DUDAS. Higher efficiency, essentially. We had an organization that had Government Affairs, International Affairs and Enforcement all in one. Five years ago we change that and split them out among three.

And what we found is our people were bumping up against each other. Enforcement people and International Affairs people often do very much the same thing. We have stationed people in the embassy in Thailand. We had people that were working in that. That was from International Affairs.

We had people that were working from Enforcement bumping into each other. What we have now is a team of more lawyer. No on transferred out of the office or into the office. More lawyers who can work on our global intellectual property academy and gear themselves toward enforcement or gear themselves toward the international relations or policy.

So it is a more efficient operation. We made a mistake 5 years ago when we split them into three. We should have split them into two. Government Affairs should be separate—International Relations.

Mr. CHABOT. Thank you. Any of the other witnesses need to comment on anything? Okay. Thank you. I yield back the balance of my time, Mr. Chairman. Thank you.

Mr. BERMAN. I recognize the gentleman from Florida, Mr. Wexler.

Mr. WEXLER. Thank you, Mr. Chairman.

Mr. Dudas, if I could go back to the list that I had read at the beginning in terms of, if my understanding is correct, at least a dozen senior people in your office have left involuntarily, not voluntarily. These involuntary dismissals represent an extraordinary degree of talent, expertise, technical knowledge developed over decades.

And it raises the question why so many career professionals, if my understanding is correct, have involuntarily been dismissed. So could you please tell us what the numbers are in terms of this level? We are talking about commissioners, deputy commissioners, administrators, chiefs of staff, financial officers, deputy financial officers information officers, chief information officers, deputy information officers. What is going on?

Mr. DUDAS. Yes. And you are talking about at the senior elective service. This is the highest level within leadership in our organization.

There haven't been a lot of involuntary dismissals. A lot of people have chosen to leave. There have been some folks that I have said, "I don't think performance is where it should be."

I am really glad you asked this question because I worked on this Committee in 1999 when the USPTO was made a performance-based organization. We were about performance. And our examiners had been under performance standards for a long time. Our management wasn't always under performance standards.

When I came into the office, the Appropriations Committee report came through, and Congress said, "PTO management has not been sufficiently innovative. Finally, we lack full confidence in the information provided by PTO management regarding its needs and performance."

So the first thing we did was look at what is happening within this office. Why aren't we achieving our goals? And we looked at Government, performance and results——

If I can show you here, this is the history of the office. The blue line going up, we met on average 25 percent of our goals at the Patent & Trademark Office before 2004. We are now up to 90 percent.

I am embarrassed to say that last line doesn't go up to 100 percent. All of our major goals that we report to the Administration and the Congress, we have moved up from an average of 25 percent to over 100 percent.

I will also show you the line that moves more downward. That is the ratings outstanding for senior elective service people in our organization. In 1999 we met 18 percent of our goals, and 82 percent of the senior executives were ranked outstanding. We don't even—we don't have about half of our patent examiners ranked outstanding, and they have tight production standards.

So the bottom line is it became a little harder to work there. We said—and if you see, as our goals met went up, our ratings of SESrs went down. A number of people left, quite honestly just said, "It is too hard. You have strategic plans. I don't want to do this. I have other places I can work."

There were others. I waited 3 years to have full discussions where I said, "I would like to reassign you because I don't think we are meeting our goal. I want people in place who will meet their goal."

So I am happy to go over any individual, but I will say there is little question that I came in with a sense of what this Committee wanted and what that law said, is to become a performance-based organization, and that is what we have done.

I am proud to say we brought down the ratings to a point that I think is more reasonable. And in the last year, last 2 years where we have broken records, literally 12 records, historical records at the Patent & Trademark Office, that yes, we started to see some of those outstanding ratings go up.

Mr. WEXLER. So if I just sum up your testimony then, in regard to these senior managers, it is your testimony some have left voluntarily, for whatever their reasons, and those that have left invol-

untary—on an involuntary fashion have been dismissed because they failed to meet your guidelines, they failed to meet the levels of required expertise?

Mr. DUDAS. Yes. I would say—I can't think of the people that I actually—that I went through a process of actually dismissing, going through the process of firing, et cetera. I had hard conversations with a lot of our managers, where we sat down and discussed whether or not we were meeting our goals and what kind of support that I had given.

In the patents organization, at one point I sat down with some leaders of the organization and said I would plan to reassign you, and did make reassignments, which is—so that is not a dismissal, but that is me saying that I think that the fact that we have missed these goals, I would like to get people in place who are—and quite honestly, I felt that I had been asking for, wanting information for some time that would help us meet our goals, and that we weren't doing that.

Mr. WEXLER. Just to follow up and be done, is this quantifiable in terms of individuals? If they—is there something in writing that says they haven't met their goals?

Mr. DUDAS. Well, we certainly do performance appraisal plans and the like. And like I said, in many cases, it is not, "You have not met your goals, and you are not doing the findings." In many cases it is a sit-down conversation of, "Why aren't we being sufficiently innovative? Why aren't we doing the things that Congress has been asking us to do?"

I mean, again, I will tell you, I hold senior executives to a very high standard because we certainly hold our examiners to a very high standard.

Mr. WEXLER. Thank you very much.

Mr. BERMAN. Thank the gentleman.

From what I heard from the Chairman and from what I see in the audience, we are going to have a gig that implicates the performance right soon, so we are going to have to start wrapping up.

But Mr. Watt is recognized.

Mr. WATT. I will be very quick because I am going to ask Mr. Dudas to provide some information in writing, if I can. You said you anticipated what the oversight hearing would be about, but I doubt you have a chart with you that will reflect what I am getting ready to ask you.

As a new Member of this Subcommittee, I have noticed the same thing that I have noticed as a Member of the Financial Services Committee, on which I also sit, that there doesn't seem to be a lot of diversity in what is going on.

So if you could just send us the information about the diversity of your workforce at the Patent office——

Mr. DUDAS. Congressman, I am happy to, but I can answer you if you want me to. I am happy——

Mr. WATT. Well, in the interest of time, I would rather see it in writing anyway. If it is not going to take you any longer than it would take you to answer it, then I am going to be disappointed anyway. I would rather be disappointed in private than in public. And you would probably rather for me to be disappointed in private.

Mr. DUDAS. Right. I don't think you will be disappointed. Let me just—54 percent diversity.

Mr. WATT. Four percent?

Mr. DUDAS. Fifty-four.

Mr. WATT. Fifty-four. Well, I want to see the numbers up and down the line.

Mr. DUDAS. That is fine. We will give it to you broken down, and we will give it to you whatever way you want.

Mr. WATT. Yes.

Mr. DUDAS. And if you want more information, we are happy to give you more information.

Mr. WATT. I appreciate it.

Mr. DUDAS. Thank you.

Mr. WATT. That is the only question I have. I appreciate it. I yield back, because I want to hear the whinings [sp] also.

Mr. BERMAN. The gentleman from Georgia, Mr. Johnson.

Mr. JOHNSON. Thank you, Mr. Chairman.

Mr. Dudas, as a follow up to Mr. Watts' questions, in your testimony you state that the various recruitment efforts, you state the various recruitment efforts made to attract science and engineering students to create a pool of potential examiners for the agency. Could you please tell us your efforts in ensuring the diversity in this pool of potential candidates?

And I will rest with that.

Mr. DUDAS. Like many large organizations, we recognize that diversity is something that is of great benefit to our agency. So I can go into specific programs. The U.S. government is about 32 percent diverse. The USPTO is 54 percent diverse. Our examiners are 51 percent diverse. And in the last 2 years, our recruiting classes have been 52 percent diverse.

That is broken down by a number of different categories. We have been improving in a number of categories, seeking that type of diversity. We have partnered with the Minority Business Development Administration to help us with outreach because we are hiring 1,200 examiners a year. We want to work with them to do that.

We have now gone to—much more to historically Black colleges and had I think 145 people hired at historically black colleges in the last few years. We have partnerships with minority student engineering societies at some of the major schools we go to, MIT, some of the big universities where we traditionally—not just said let us go in through the recruiting, but let us work with the minority student engineering societies that they have there as well.

We have a Community Day every year where we basically celebrate the variety of cultures and the variety of ethnicities we have, and celebrate that we are all at the USPTO. We held 26 events specifically focused on minority recruitment last year. And as I mentioned—in the last 2 years, I am sorry—it is 145 people that we have recruited from historically Black colleges.

We are challenged in recruitment on gender in the same way that the industry for engineers are challenged. We need to improve in terms of how many women that we are recruiting. We are trying to expand that as well. That is something that you see in the engi-

neering professions throughout, but we are trying to increase that number—that level of diversity as well.

And I will throw just one more thing that wasn't intended, necessarily, to be a diversity effort. But Chairman Conyers came down and spoke to a recruitment class that we had, and he came down right around Martin Luther King Day and shared with—his efforts, what he managed to do to make Martin Luther King Day a holiday.

That was something that we had about 200 people in that academy that were graduating that day. They were inspired. But the word spread throughout, just about how we are bringing people in from outside traditionally USPTO environment, and that was something that was inspirational to many of our folks.

So there is a lot that we are trying to do not only to recruit, but also to make sure that it is an environment where people want to stay.

Mr. JOHNSON. Thank you.

Mr. DUDAS. Thank you.

Mr. BERMAN. The gentlelady from Texas, Ms. Sheila Jackson Lee.

Ms. JACKSON LEE. Thank you very much, Mr. Chairman. I know the pending issue of importance that is about to come upon us, so let me rush through and welcome the witnesses, thank them for their presentation, and basically focus on the good friend and assistant secretary of the office.

First of all, the President has put forward his budget for forthcoming. And are you here applauding the budget, or are you prepared to see it tweaked because there is a greater need, particularly in the inspectors—examiners, rather?

Mr. DUDAS. We are actually quite pleased with the budget because it is the fifth year in a row that the President's budget has said that all of the fees that come into the agency should stay with the agency. And Congress has followed that lead 4 years in a row.

And so to us, we are a fee-funded agency. Our goal is really to see that those fees stay within for the inventors, and so we have been pleased.

Ms. JACKSON LEE. So that framework, it gives you the sufficient amount of money?

Mr. DUDAS. Yes. Well, it gets us all of our fees. It gets us all our fees.

Ms. JACKSON LEE. All right. I know I can probe that in a further letter.

Let me just quickly—if I could follow up on Mr. Watt's question and ask you, in the breakdown of his request regarding diversity. If you can also categorize it by GS level, how many are 13s, how many are coming at that level, because I would imagine that you are taking some laterals, and it is very important to see the ability of people moving up. Can you provide it in that manner?

Mr. DUDAS. I think we can. I am almost certain we can.

Ms. JACKSON LEE. Management is important.

Let me also suggest that you—actually you talk about minority engineering societies, very important. But I would encourage you to formulate a direct program with Hispanics serving in historically Black colleges, which the President has a framework, the college—

the Congress has a framework. We have worked—and so those frameworks are already in place.

One, the knowledge of them, the organizations are there, and we would like you to have a report back if you utilize those resources of students. And I might, just for the record, throw out Purview A&M in Texas.

My other question is—quickly is what efforts are being undertaken by the USPTO in the area of enforcement, particularly with respect to China? And what has been your challenges? What have been your success rates, because I can tell you that many of our businesses and constituents, and they fall on different sides of the lot on this.

Certainly there are some successful, but others are complaining that the trade imbalance, the infringement, rather, which Mr. Conyers has worked on extensively, the Judiciary Committee has worked on extensively. I don't know what progress we have been able to make.

Mr. DUDAS. The challenge, as I think you are implying, is very clearly that, with all the efforts that are underway, including a World Trade Organization action against China, the metrics still show that China is responsible for 80 percent of all of the counterfeit goods that are attempting to come in the United States, and we see similar numbers in Japan and in Europe.

And so there is no question. The challenge is that the results are that counterfeiting is happening in China, that their laws need to change, and that more needs to be done.

How are we involved? We are involved very directly. Sometimes—we actually have a very unique position in the U.S. government. Sometimes we are shaking our finger or telling China, "Listen, there is more that needs to be done." This needs to be done, and we support the WTO case and work with the U.S. trade representative.

But we also come in and work very carefully with all of the agencies in China. We work with the customs people. we work with the police. We talk to the Supreme Court justices. We have a number of programs where we bring in hundreds of Chinese officials to help train them and teach them and work with them about how intellectual property is an important point.

We have had very successful relationships, particularly with the head of office in the Chinese intellectual property office. So what we do is we partner very closely with the people who are pro-intellectual property in China, and we develop and we help strengthen those ties. That is where we have been very successful, particularly.

Ms. JACKSON LEE [continuing]. I don't want to leave you out of my last question. Can you give me an assessment of the professional workers and the issues or—of your association, or treatment of your association, or comfort level that you have with the office at this point?

Mr. BUDENS. As I said before, the examiners are very highly educated and highly skilled force, and they are highly dedicated to the patent system. We want to do the job right. We really understand the importance of patents in driving innovation in this country and throughout the world.

I think there is a sense of frustration that we are not more involved in developing the kinds of things and tools and policies and stuff that we need to be able to do the job right.

In I think several areas of the office, I think we are very pleased with this Administration, some of the initiatives they have put forward. The Hotelling program has been well received. The laptop program has been well received.

On the flip side of that, we are in the middle of a contract negotiation right now for our term contract in where the positions of the agency on many very important things like grievance rights and performance appraisal stuff, the agency has taken very decidedly anti-employee positions on those areas. And we are scared to death of what is coming out of that negotiation.

We are starting mediation on that next Tuesday, I believe, and expect the agency to have us at the impasses panel very quickly. And I don't think—I don't see right now anything good coming out of those mediation. I hope I am wrong, because I think it is going to be a decidedly negative impact on examiners if nothing happens, if the positions of the parties don't change right now.

Ms. JACKSON LEE. Mr. Chairman, let me thank you very much for your indulgence, and just conclude by saying Mr. Budens' comments disturb me. And I believe if we are to have an efficient, effective and professional office and staff, if we are to build on our recruitment, obviously the Federal Government needs to be a leader in respecting worker's rights or opportunities to have—express a grievance.

So I don't know what statement that Congress can make at this point, but I hope that we can make a statement that indicates that we are watching, and we are concerned. And I hope that we can get a report back that our parties have come together, and they have done the right thing. Otherwise, I hope maybe we will have a hearing on the issue.

Mr. BERMAN. We will take a closer look at the current round of bargaining on this issue.

I will now thank the gentlelady, and I will recognize myself. I am told we have a little bit more time, so, Mr. Kasper, I would like to go to your testimony to examine one particular statement. Page five where, in the middle paragraph, where you start out, "In the vast majority of cases, inventions relate to actual products or processes that have been developed by the inventor or his employer."

And you talk about two major goals for such applicants, and you have one, and then you have the second one, and that is the one I want you to focus on, "To secure claims directed to the particular features of the commercial embodiment of a product that contains the invention to protect against the copying of that product." You see where I am talking?

Is what you are saying here, the phrase, "The particular features," is the particular features is the invention, but the claims may be defined broader to cover and include the commercial embodiment that contains that inventive feature. Is that basically what you are intending?

Mr. KASPER. Chairman Berman, the intention was to show that, in some cases, you can have a claim that is broad enough to cover both the commercial embodiment as well as competitors' embodi-

ments. So in other words, the scope of protection is broad, and stops many competitors from entering the field.

Mr. BERMAN. Can the scope of the claim be written to cover sort of the commercial embodiment, and therefore is broader than the description of the inventive feature?

Mr. KASPER. Yes, it can be broader. You may—and typically, it is broader than the description of the invention. However, sometimes the applicant will take a much narrower scope of protection that covers only what he has in the marketplace. He doesn't care about a competitor's product or getting the broadest possible protection, as long as his widget, as it is sold, is actually covered. So he is prepared to compromise and to truncate the prosecute——

Mr. BERMAN. And in that case, the claim would only cover the inventive feature.

Mr. KASPER. Correct.

Mr. BERMAN. All right. And then, one last—I have a lot of questions, but I am not going to do that. But I just—in your testimony, you speak about many applications your firm files every year. We hear—I hear that part of the patent pendency problem stems from overly aggressive lawyering on behalf of applicants, where the lawyers exploit the system in ways that create many burdens on the examiner despite the current rules.

What additional duties, if any, would you impose on applicants to improve the patent examination process?

Mr. KASPER. Well, certainly the additional duties could involve more full description of the features of the invention during the application prosecution process. In some cases, for example, the applicant may simply say there is a difference between the invention and the prior ART, and then leave it to the appeal process to have that worked out by the Board of Appeals.

What I believe is that, in a dialogue between the examiner and the applicant, if that dialogue could be open and free, without concern for inequitable conduct, you would have an opportunity to have the important inventive features identified, recited in a claim, and eventually have the claim and the application issued as a patent in a much more expeditious manner.

Mr. BERMAN. All right. Unless there is some reason to the contrary, we are—votes have been called. I appreciate very much—they are not all the—there are a lot of issues out there. In fact, I just will make an observation for Mr. Dudas on one very specific point that was raised by you and commented by one of the Members.

When you split the Office of External Affairs into three offices 5 years ago, that was—this was Mr. Chabot, I think was pursuing this line of questioning—that you considered an executive reorganization. So wouldn't it follow that the collapse of those three offices into two would be considered an executive reorganization?

Mr. DUDAS. It is not, and I will tell you why. The difference between it is it is a—when the split came in first—I am not certain if it was a reorganization, but I will tell you the difference between that split and the flip back was.

There was a specific position that was Administrator for External Affairs. When we decided to put it into three, we said that position should rest in the deputy undersecretary. And the deputy under-

secretary—at that level, this is policy for the entire Patent & Trademark Office, lead advisor to the President and others.

That statement—that right there stayed the same in this realignment. It is still the deputy undersecretary that leads that organization. So that would have been a change from someone who reports to deputy undersecretary to someone who is within.

I can tell you, I am happy to go into——

Mr. BERMAN. I will think about your statement on the matter.

Mr. DUDAS [continuing]. Sure, that is——

Mr. BERMAN. Okay.

The Committee hearing is adjourned. I thank you all for coming, and there are things to follow up both on your part and on our part, which we will do. Appreciate it.

[Whereupon, at 3:07 p.m., the Subcommittee was adjourned.]

APPENDIX

MATERIAL SUBMITTED FOR THE HEARING RECORD

PREPARED STATEMENT OF THE HONORABLE SHEILA JACKSON LEE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS, AND MEMBER, SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY

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Congress of the United States
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COMMITTEES:
JUDICIARY
SUBCOMMITTEES:
COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY
IMMIGRATION, CITIZENSHIP, REFUGEES, BORDER SECURITY, AND INTERNATIONAL LAW
CRIME, TERRORISM AND HOMELAND SECURITY

HOMELAND SECURITY
SUBCOMMITTEES:
CHAIR
TRANSPORTATION SECURITY AND INFRASTRUCTURE PROTECTION
BORDER, MARITIME, AND GLOBAL COUNTERTERRORISM

FOREIGN AFFAIRS
SUBCOMMITTEES:
AFRICA AND GLOBAL HEALTH
MIDDLE EAST AND SOUTH ASIA

CHIEF DEPUTY
DEMOCRATIC CAUCUS

CHAIR
CONGRESSIONAL BLACK CAUCUS

CHAIR
CONGRESSIONAL CHILDREN'S CAUCUS

CONGRESSWOMAN SHEILA JACKSON LEE, OF TEXAS

STATEMENT BEFORE THE

JUDICIARY SUBCOMMITTEE ON COURTS, INTELLECTUAL PROPERTY, AND THE INTERNET

OVERSIGHT HEARING ON: THE U.S. PATENT AND TRADEMARK OFFICE

FEBRUARY 27, 2007

Thank you, Mr. Chairman, for your leadership in convening today's very important hearing on the oversight of the U.S. Patent and Trademark Office. I would also like to thank the ranking member, the Honorable Howard Coble, and welcome our panelists. I look forward to their testimony.

In this hearing, Congress exercises its duty of oversight over the U.S. Patent and Trademark Office ("USPTO"). This hearing will explore the efforts being made by the USPTO to tackle patent application backlog. This hearing will also review recent USPTO organizational changes.

The USPTO is responsible for issuing patents and trademarks. Patents grant exclusive economic rights in new inventions. Trademarks grant exclusive rights to use a word, phrase, or symbol to denote the source of origin of goods or services. Because the USPTO has made considerable gains in reducing the time it takes to process trademark applications, i.e., pendency, my statement will focus upon the steady rise in patent applications and the time it takes to process patent applications.

In order to determine whether to grant a patent, examiners must ascertain whether a discovery is of patentable subject matter, useful, novel, non-obvious, and accompanied by an adequate description. The USPTO requires an adequate number of examiners and easy access to information resources in order to process the high number of patent applications filed each year.

The USPTO also requires adequate financial resources to

properly respond to the increase in patent applications. The USPTO is authorized to collect statutorily set fees for the services it provides.

Since 1991, USPTO operations have been entirely fee supported. However, as an agency within the Department of Commerce, the USPTO is subject to the appropriation process. Because each year the USPTO must wait to see whether it will be appropriated all of the funds it collects, it cannot plan the hiring of staff or the implementation of patent quality initiatives in advance.

Some attribute the lack of resources at the USPTO as the cause of deterioration in patent quality. This deterioration in patent quality has wasted valuable resources, by sanctioning frivolous third-party court challenges, and has discouraged private-sector investment.

As the world's technology leader and center of innovation, America must set a high standard to ensure that undeserving inventions do not pass through the patent process. To that end, the USPTO needs more guidance so that it only issues patents to discoveries that are truly inventive.

Once the USPTO issues a patent of questionable quality, it is easier for unscrupulous patent holders to engage in abusive practices that hurt the economy. American inventors should no longer receive

threatening licensing letters containing vague patent infringement accusations from patent holders, raising the specter of treble damages if they do not give in to the senders' demands. There needs to be a proper balance between patent holder rights and the prevention of abusive practices so that the patent system would protect and reward the hard work of American inventors.

The availability of meaningful and low-cost alternatives to litigation for challenging patent validity would provide an additional quality check. Possible alternatives to litigation could include: (1) giving third parties an opportunity to submit "prior art" to patent examiners before the issuance of a patent, (2) creating a post-grant opposition procedure that would allow administrative challenges to patent validity instead of the current option of going to court, and (3) relaxing estoppel and other re-examination requirements to make them more attractive as options for opposing patent validity.

The quality and timeliness of the USPTO's work has a direct impact on the willingness of American companies to use our patent system. The USPTO has some work to do in reducing the time it takes to process patent applications. Indeed, for the last several years, the time it takes for patent applications to be processed has

steadily increased.

According to the USPTO, patent pendency rates have risen on average from 27.6 months to 31.9 months between 2004 and 2007. Additionally, the number of patent applications awaiting initial review has also steadily risen over the last several years. As of the end of FY 2007, there were over 760,000 patent application awaiting initial review by a patent examiner and over 1.1 million pending patent applications in total. Without corrective action being taken, average patent pendency could rise to 52 months.

Many reasons have been cited for the rise in the pendency for patent applications, including increased demand for patents, a chronic lack of employee and financial resources, and the increasing complexity of patent applications. The growing patent pendency, and associated backlog of patent applications awaiting review, could put the United States innovation system in jeopardy as companies move away from using the patent system and towards secrecy as a means to protect their inventions.

For the patent system to function properly, there must be some level of certainty in the right conferred and the right must be provided in a timely manner. For years, critics have pointed out that the

quality of patents issued has diminished, resulting in increased litigation and greater uncertainty that an issued patent would stand up to the scrutiny of litigation.

Over the years, the USPTO has attempted to address its decline in patent quality. For example, in 2002, the USPTO published a document called the 21st Century Strategic Plan. This document provided a comprehensive blueprint that detailed a number of reforms to improve USPTO's performance. The 21st Century Strategic Plan identified patent pendency as a problem and proposed various measures to improve examination productivity as a means to address the problem.

The USPTO published a revised strategy in its 2007-2012 Strategic Plan. In its 2007-2012 Strategic Plan, the USPTO laid out a multi-prong approach to improve the timeliness of patent examination. The approach consisted mainly of hiring new patent examiners, improving patent examiner retention, and establishing rule changes that would reduce the number of continuation applications and the number of claims in many applications.

As discussed above, the USPTO receives yearly appropriations equivalent to the fees it collects. These appropriations are subject to

clauses within the appropriations act that require Congressional notification prior to changes in approved programs.

Specifically, Section 605 of the 2006 State, Commerce, Justice Appropriations Act stipulates that no appropriated funds may be made available through a reprogramming of funds unless the Appropriations Committees of both Houses of Congress are notified 15 days in advance. A reprogramming of funds occurs when appropriated funds are used to create a new program, when a funded program, project or activity is eliminated, when an office is reorganized or renamed, or when a program or activity is reorganized.

The purpose of this Congressional notification requirement is to ensure that Congress maintains clear oversight in any of the administration's spending changes. There are assertions that the USPTO has taken actions that could be considered a reprogramming of funds, and it is unclear whether any notification was provided.

Regardless of whether the changes made at the USPTO constitute a realignment or reorganization, the USPTO should have notified the Judiciary Committee of the changes it intended to make, prior to making them. Now that these changes to the USPTO's

organizational structure have been made, it is important that the members of this Subcommittee know and understand the reasons for these changes.

Mr. Chairman, I am hopeful that the USPTO can be placed in a position to bring the American patent system up to speed for the twenty-first century. Instead of remaining a hindrance to innovation and economic growth, the patent system should work for inventors and with competitive market-forces to ensure that America's patent system remains the best in the world.

I look forward to hearing from our distinguished panel of witnesses. Again, thank you Mr. Chairman for holding this hearing. I yield the remainder of my time.

PREPARED STATEMENT OF THE HONORABLE BETTY SUTTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO, AND MEMBER, SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY

Congresswoman Betty Sutton
Judiciary Subcommittee on Courts, the Internet and Intellectual Property
Oversight Hearing on the United States Patent and Trademark Office
Record Statement
February 27, 2008

Mr. Chairman,

Thank you for calling this hearing today for giving us the opportunity to have this dialogue with and about the US Patent and Trademark Office.

I would like to begin by thanking the representatives from the USPTO for their ongoing support of the National Inventors Hall of Fame. The National Inventors Hall of Fame, located in my district, in Akron, Ohio has received invaluable support from the USPTO over the last several years. Thank you so much for that support!

For those who have not been fortunate enough to visit Akron, the Inventors Hall of Fame honors the women and men responsible for the great technological advances that make human, social and economic progress possible.

Every year, the Hall of Fame welcomes new inductees who have made significant inventions during their lifetime. This year, the auspicious list of inductees included the inventor of fiber optic cable, the inventor of packet switching, the means by which information travels over the internet, and the inventor of implantable defibrillator. The Inventors Hall of Fame is a

tangible tribute to the advancement and innovation that is possible when intellectual property is properly protected.

Because I am fortunate enough to have the Inventors Hall of Fame in my district, I am visited by a great many inventors, and other folks who have extensive contact with the Patent and Trademark office. As you might expect, pendency in the patent process is a primary concern and, unfortunately, often a frustration of theirs.

While it is promising for our country and our economy that part of this pendency is due to the overwhelming amount of innovation that is taking place in our country, that does not excuse the problem. We must focus on making this process as smooth and efficient as possible so that we can continue to encourage the entrepreneurial expansion that makes our country great.

Intellectual property is often the only property that matters in our new economy. And while we cannot hold onto it tightly with our hands in order to protect it, we can help our inventors to hold it tightly within the patent and trademark process.

Thank you all for coming today and I look forward to your testimony.

PREPARED STATEMENT OF THE HONORABLE DARRELL ISSA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA, AND MEMBER, SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY

Opening Statement of Congressman Darrell Issa
Subcommittee on Courts, the Internet and Intellectual Property

Oversight Hearing on the USPTO
February 27, 2008

Thank you, Mr. Chairman, for holding this hearing. It's always important for us to hear how the PTO is functioning and try to determine what improvements are needed, if any.

Our oversight over the PTO over the past few years has been closely intertwined with the patent reform debate. It's safe to say that this room wouldn't be quite as full if that were not the case.

One of the points I have focused on within that debate is the question of how to structure any post grant review process and how to restructure the current reexamination procedure.

I have long believed that the PTO's past reexam process allowing the same patent examiner who granted a patent to conduct the reexam was a mistake. I believe the PTO has made strides away

from this process by forming a separate group of examiners whose only job is to conduct reexaminations. To my knowledge, these individuals are never the same examiner who granted the patent.

This is a good start, but as I have discussed with the Chairman and Undersecretary Dudas among others, I believe the reexamination process should not be the purview of the PTO.

A more practical and less biased solution would be to give reexamination responsibilities to a body separate from the PTO. The patent reform bill passed by the House creates a system similar to this model, by using Administrative Patent Judges for post grant and reexam procedures rather than examiners, but process still takes place within the PTO. I am concerned that institutional bias may still remain in such a process.

Beyond that, while I am supportive of the single window post grant review that the House patent reform bill creates, I do want to make

sure that the burdens imposed upon the PTO by the new process do not move resources needed to reduce patent pendency away from the examination process toward a reexamination process. It is more important to get it right the first time by granting strong, deserving patents, and therefore we must ensure that the PTO is able to use its funding most efficiently on the front end.

United States Government Accountability Office

GAO

Report to the Ranking Member, Committee on Oversight and Government Reform, House of Representatives

September 2007

U.S. PATENT AND TRADEMARK OFFICE

Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog

GAO-07-1102

GAO
Accountability · Integrity · Reliability

Highlights

Highlights of GAO-07-1102, a report to the Ranking Member, Committee on Oversight and Government Reform, House of Representatives

September 2007

U.S. PATENT AND TRADEMARK OFFICE

Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog

Why GAO Did This Study

Increases in the volume and complexity of patent applications have lengthened the amount of time it takes the U.S. Patent and Trademark Office (USPTO) to process them. In addition, concerns have continued about USPTO's efforts to hire and retain an adequate patent examination workforce that can not only meet the demand for patents but also help reduce the growing backlog of unexamined patent applications. In this context, GAO was asked to determine for the last 5 years (1) USPTO's process for identifying its annual hiring estimates and the relationship of these estimates to the patent application backlog; (2) the extent to which patent examiner hiring has been offset by attrition, and the factors that may contribute to this attrition; and (3) the extent to which USPTO's retention efforts align with patent examiners' reasons for staying with the agency. For this review, GAO surveyed 1,420 patent examiners, and received an 80 percent response rate.

What GAO Recommends

GAO recommends that USPTO undertake a comprehensive evaluation of the assumptions that the agency uses to establish its production goals. USPTO generally agreed with this recommendation.

www.gao.gov/cgi-bin/getrpt?GAO-07-1102.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Anu Mittal, 202-512-3841, mittala@gao.gov.

What GAO Found

In each of the last 5 years, USPTO primarily identified its projected annual hiring estimates on the basis of available funding levels and its institutional capacity to support additional staff and not on the existing backlog or the expected patent application workload. USPTO's process for identifying its annual hiring estimates is generally consistent with accepted workforce planning strategies. Each year the agency determines how many new patent examiners it has the budget and supervisory and training capacity to hire. However, because this approach does not take into account how many examiners are needed to reduce the existing patent application backlog or address the inflow of new applications, it is unlikely that the agency will be able to reduce the growing backlog simply through its hiring efforts.

Although USPTO is hiring as many new patent examiners as its budget and institutional capacity will support, attrition is offsetting hiring progress, and agency management and patent examiners disagree about the causes for attrition. From 2002 through 2006, one patent examiner left USPTO for nearly every two the agency hired. This represents a significant loss to the agency because 70 percent of those who left had been at the agency for less than 5 years and new patent examiners are primarily responsible for the actions that remove applications from the backlog. According to USPTO management, patent examiners leave the agency primarily for personal reasons, such as the job not being a good fit or family reasons. In contrast, 67 percent of patent examiners identified the agency's production goals as one of the primary reasons examiners may choose to leave USPTO. These production goals are based on the number of applications patent examiners must complete biweekly and have not been adjusted to reflect the complexity of patent applications since 1976. Moreover, 70 percent of patent examiners reported working unpaid overtime during the past year, in order to meet their production goals. Such a large percentage of patent examiners who are working extra time to meet their production goals and would choose to leave the agency because of these goals may be an indication that the production goals do not accurately reflect the time patent examiners need to review applications and is undermining USPTO's hiring efforts.

The retention incentives and flexibilities provided by USPTO over the last 5 years generally align with the primary reasons identified by patent examiners for staying with the agency. Between 2002 and 2006, USPTO used a variety of retention flexibilities such as a special pay rate, performance bonuses, flexible work schedules, and a telework program to encourage patent examiners to stay with the agency. According to USPTO management the most effective retention efforts were those related to compensation and an enhanced work environment. GAO's survey of patent examiners indicates that most patent examiners generally approved of USPTO's retention efforts, and ranked the agency's salary and other pay incentives as well as the flexible work schedule among the primary reasons for staying with the agency.

Contents

Figures

Abbreviations

GS	general schedule
OPM	Office of Personnel Management
PALM	Patent Application Locating and Monitoring
POPA	Patent Office Professional Association
UPR	utility, plant, and reissue
USPTO	U.S. Patent and Trademark Office

GAO
Accountability • Integrity • Reliability
United States Government Accountability Office
Washington, DC 20548

September 4, 2007

The Honorable Tom Davis
Ranking Member
Committee on Oversight and Government Reform
House of Representatives

Dear Mr. Davis:

Protecting intellectual property rights and encouraging technological progress are important for ensuring the current and future competitiveness of the United States. The U.S. Patent and Trademark Office (USPTO) helps protect the nation's competitiveness by granting patents for innovations ranging from new treatments for diseases, to new wireless technology applications, to new varieties of plants.[1] USPTO's ability to keep up with the demand for patents is essential for achieving its mission. However, increases in both the volume and complexity of patent applications have lengthened the amount of time it takes the agency to process them. As a result, the inventory of patent applications that have not yet been reviewed, called the backlog, has been growing for over 15 years—since fiscal year 2002 alone, the backlog has increased by nearly 73 percent to about 730,000 applications.

Inventors submit applications to USPTO to obtain a patent for their inventions and the right it affords the holder to exclude others from making, using, or selling the patented item in the United States. USPTO is funded by fees collected from the public for specific activities related to processing applications. The spending of these fees is subject to provisions determined by Congress in annual appropriations acts. USPTO relies on a workforce of nearly 5,000 patent examiners—attorneys, engineers, and other scientific and technical professionals—to review and make decisions on patent applications. The number of these professionals that USPTO hires, as well as the overall size and experience of the patent examination workforce, affects the number of applications that can be reviewed in any given year. As part of the review process, patent examiners are assigned what is known as a biweekly "production goal" on the basis of their position in the agency and the types of patent

[1]USPTO, an agency within the Department of Commerce, consists of two organizations: one for patents and one for trademarks. This report focuses on the patent organization.

applications they are assigned to review.[2] Production goals are the number of specific actions and decisions that patent examiners must make about patent applications they review during a 2-week period.[3] Patent examiners' performance is assessed biweekly on their ability to meet their production goals; their inability to meet these goals could have an impact on their compensation and continued employment with the agency. However, as we noted in 2005, the assumptions underlying the agency's production goals were established over 30 years ago and have not since been updated.

Since 2000, USPTO has implemented a variety of human capital flexibilities intended to help recruit and retain enough patent examiners and maintain a workforce that is sufficient to meet the demand for patents. These flexibilities have included the use of recruitment bonuses, law school tuition reimbursement, and a casual dress policy. In 2005, in response to congressional concerns about USPTO's efforts to attract and retain a qualified workforce, we reported that it was too soon to determine the long-term success of USPTO's recruitment and retention efforts because, in part, they had been inconsistently sustained during the limited time they had been in effect, and that not all of the planned initiatives had been implemented.[4] However, concerns have continued because of increasing patent examiner attrition, especially among patent examiners who have been at the agency for less than 5 years, which is causing the

[2]USPTO assigns patent applications to one of its eight technology centers for review: (1) Biotechnology and Organic Chemistry; (2) Chemical and Materials Engineering; (3) Computer Architecture, Software, and Information Security; (4) Communications; (5) Semiconductors, Electrical and Optical Systems and Components; (6) Transportation, Electronic Commerce, Construction, Agriculture, National Security and License and Review; (7) Mechanical Engineering, Manufacturing, and Products; and (8) Designs for Articles of Manufacture.

[3]USPTO tracks two key milestones in the patent application process to evaluate patent examiners' performance. One milestone is the patent examiner's initial action on the merits of the case. Most patent applications are removed from the backlog when this initial action is made. The other milestone is when the application is allowed, abandoned, or sent to the Board of Patent Appeals and Interferences.

[4]GAO, *Intellectual Property: USPTO Has Made Progress in Hiring Examiners, but Challenges to Retention Remain*, GAO-05-720 (Washington, D.C.: June 17, 2005).

workforce to grow at a slower rate than would be expected given the number of patent examiners the agency has been hiring each year.[5]

In this context, you asked us to determine, for the last 5 years, (1) USPTO's process for identifying its annual hiring estimates and the relationship of these hiring estimates to the patent application backlog; (2) the extent to which patent examiner hiring has been offset by attrition at USPTO, and what factors may contribute to patent examiners' decisions to leave the agency; and (3) the extent to which the retention incentives and flexibilities USPTO has implemented align with patent examiners' reasons for staying with the agency.

To determine USPTO's process for developing annual hiring estimates and the relationship these estimates have to the patent application backlog, we interviewed agency officials and reviewed agency documents and reports by other organizations relating to USPTO's workforce planning process, including data the agency used to identify the number of patent examiners it planned to hire in each of the last 5 fiscal years. We analyzed patent examiner and patent application data for the last 5 fiscal years, as well as USPTO's projections of that data through fiscal year 2012. In addition, we reviewed the Office of Personnel Management's (OPM) workforce planning guidance and interviewed officials from OPM's Human Capital Assessment and Accountability Framework Office to develop criteria to assess USPTO's workforce planning process. To determine the extent to which patent examiner hiring has been offset by attrition at USPTO over the last 5 years, we analyzed patent examiner workforce, hiring, and attrition data from this time period. To determine factors that may contribute to patent examiners' decisions to leave the agency, we conducted a Web-based survey of a stratified random sample of 1,420 USPTO patent examiners. Overall, we received an 80 percent response rate to our survey. Estimates based on this survey allow us to project our results to all patent examiners at USPTO with a 95 percent level of confidence. All percentage estimates included in this report have a 95 percent confidence interval with plus or minus 5 percentage points. To

[5]USPTO includes patent examiners who transfer or are promoted out of the patent examination workforce to another position within the agency in its attrition count, in addition to those patent examiners who leave the agency. This report uses USPTO's inclusive definition of attrition in order to be consistent with the agency's projections used in this report, and therefore will be different from USPTO attrition data as reported by the Office of Personnel Management, which does not include intra-agency transfers or promotions as part of attrition.

address this objective, we had to rely on the views of current patent examiners because USPTO does not maintain contact information for patent examiners that have left the agency and we could not identify any organizations that maintain this information for USPTO staff. In addition, we interviewed USPTO officials, representatives of the patent examiner union—the Patent Office Professional Association (POPA)—and an official from the American Intellectual Property Law Association. To determine the extent to which the retention incentives and flexibilities provided by USPTO align with patent examiners' reasons for staying with the agency, we interviewed USPTO officials about the retention incentives and flexibilities they have used in the past 5 years, reviewed our previous report on USPTO's recruitment and retention efforts, interviewed representatives from POPA and an official from the American Intellectual Property Law Association to obtain their perspectives on factors affecting patent examiner retention and workload, and used the Web-based survey described above to obtain patent examiners' views on USPTO's retention incentives and flexibilities. Specifically, we sought patent examiners' views on the reasons they would choose to stay at the agency. Appendix I contains a more detailed discussion of our scope and methodology. We conducted our work from August 2006 through July 2007 in accordance with generally accepted government auditing standards.

Results in Brief

In each of the last 5 years, USPTO has identified its annual hiring estimates on the basis of the agency's funding levels and institutional capacity to support additional staff and not on the existing backlog or the expected patent application workload. Because of its increasing workload relative to its existing workforce, over the last 5 years, USPTO has had to hire additional patent examiners each year. The primary factors that determined USPTO's annual hiring estimates during this time have been the agency's annual funding levels and its capacity to train and supervise new patent examiners. About 18 months before the start of the hiring year, USPTO considers these factors to determine its projected hiring estimates for the coming year. During these 18 months, the agency refines these estimates on the basis of its most current budget and patent examination workforce data to determine the number of patent examiners the agency can actually hire. In each of the last 5 years, for various reasons, the number of patent examiners the agency actually hired differed from the hiring estimate that the agency had originally projected. For example, the projected hiring estimate for fiscal year 2004 was 750 patent examiners, but the agency actually hired 443 because of subsequent funding limitations. USPTO's current process is consistent with workforce planning strategies endorsed by OPM, though it is a significant deviation

from the agency's previous workforce planning strategy, which was more directly linked to the patent examination workload. Over the last 5 years the agency has moved away from its prior strategy because it realized that it did not have the institutional capacity to train and supervise the relatively large number of new patent examiners it would need to hire annually to keep pace with the increasing number of incoming patent applications expected each year. Although shifting to its current approach has enabled USPTO to better match its hiring estimates to its institutional training and supervisory capacity, this approach does not take into account how many patent examiners are needed to reduce the backlog of existing patent applications or address the expected inflow of new applications. Consequently, the patent application backlog has continued to increase, and it is unlikely that the agency will be able to reduce the backlog simply through its hiring efforts.

From 2002 through 2006, patent examiner attrition has continued to significantly offset USPTO's hiring progress. Although USPTO is hiring as many new patent examiners as it has the annual capacity to supervise and train, for nearly every two patent examiners it has hired over the last 5 years at least one has left the agency. Specifically, USPTO hired 3,672 patent examiners between 2002 and 2006, and 1,643 patent examiners left the agency during this time. More importantly, of those who left, 70 percent had been at USPTO for less than 5 years. This is a significant loss to the agency because, according to USPTO officials, new patent examiners are primarily responsible for making the initial decisions on applications, which removes them from the backlog. We found that within the agency there is significant disagreement about why patent examiners are continuing to leave. According to USPTO management, patent examiners leave primarily for personal reasons—for example, because the job is not a good fit for them or they need to relocate because of a spouse's job. In contrast, patent examiners, and the union officials who represent them, identified unrealistic agency production goals, which were established 30 years ago, as one of the primary reasons patent examiners may choose to leave. For example, union officials told us that attrition can primarily be attributed to the insufficient amount of time provided to patent examiners to meet their production goals. This was supported by our survey of patent examiners, in which 67 percent indicated that the agency's production goals were among the primary reasons they would consider leaving USPTO. Moreover, to meet their production goals, the majority of patent examiners had to work substantial unpaid overtime in the last 12 months, while many others worked while on annual leave. According to one of our survey respondents, "vacation time means catch up time." Such a large percentage of patent examiners working extra time

to meet their production goals, is an indication that USPTO's production goals may no longer accurately reflect the time patent examiners need to review applications. Given the high rate of attrition that may result, in part, from such outdated production goals, we are recommending that USPTO undertake a comprehensive evaluation of how it establishes these goals and revise these goals as appropriate.

The retention incentives and flexibilities that USPTO has provided over the last 5 years generally align with the primary reasons patent examiners identified for staying at the agency. USPTO management told us that their most effective retention efforts have been those that provide additional compensation to and an enhanced work environment for patent examiners. Specifically, USPTO officials identified the agency's special pay rates, which can be more than 25 percent above federal salaries for comparable positions; the agency's bonus structure, which allows patent examiners to earn various cash awards for exceeding production goals; and opportunities for patent examiners to work either part-time or full-time from remote locations as being the most effective retention measures for the agency. For example, in fiscal year 2006, USPTO awarded 4,645 bonuses to patent examiners totaling over $10.6 million; patent examiners may receive up to three different types of bonuses in a fiscal year. That same year, approximately 20 percent of patent examiners participated in the agency's telework program, which allows patent examiners to work some or all of their time from an off-site location, and approximately 10 percent of patent examiners were enrolled in the hoteling program, through which USPTO provides equipment to those patent examiners who are approved to work full-time from an off-site location. According to our survey, most patent examiners generally identified these types of retention incentives and flexibilities as among the most important reasons to stay at the agency. For example, 58 percent of patent examiners identified salary, and 49 percent flexible work schedules, as the primary reasons for staying with the agency.

In its written comments on a draft of our report (reprinted in app. II), the Department of Commerce agreed with our findings, conclusions, and recommendation. In addition, the agency provided technical comments that we have incorporated as appropriate.

Background

To obtain a patent, inventors—or more usually their attorneys or agents—submit an application to USPTO that fully discloses and clearly describes one or more distinct innovative features of the proposed invention and pay a filing fee to begin the examination process. Patent examiners review

these applications to determine if a patent is warranted. In making this determination, patent examiners must meet two specific milestones in the patent examination process: first actions and disposals.

- First action. Patent examiners notify applicants about the patentability of their invention through what is called a first action. After determining if the invention is new and useful, or a new and useful improvement on an existing process or machine, patentability is determined through a thorough investigation of information related to the subject matter of the patent application and already available before the date the application was submitted, called prior art. Prior art includes, but is not limited to, publications and U.S. and international patents.

- Disposal. Patent examiners dispose of a patent application by determining, among other things, if a patent will be granted—called allowance—or not.

Patent examiners receive credit, called counts, for each first action and disposal, and are assigned production goals (also known as quotas) on the basis of the number of production units—composed of two counts—they are expected to achieve in a 2-week period. The counts in a production unit may be any combination of first actions and disposals.

The production goals that are used to measure patent examiner performance are based on the same assumptions that USPTO established in the 1970s. At that time, the agency set production goals in the belief that it should take a patent examiner a certain amount of time to review a patent application and achieve two counts based on the patent examiner's experience (as determined by the patent examiner's position in the agency) and the type of patent application reviewed. As a result, these goals vary depending upon the patent examiner's position in the federal government's general schedule (GS) pay scale and the technology center in which the patent examiner works.[5] For example, a GS-12 patent examiner working on data processing applications is expected to achieve two counts in 31.6 hours, whereas a GS-12 patent examiner working on plastic molding applications is expected to do so in 20.1 hours. In contrast, GS-7 patent examiners working on these two types of applications are expected to achieve two counts in 45.1 and 28.7 hours, respectively.

[5]Technology centers specialize in specific areas of science and engineering.

Patent examiner achievements are recorded biweekly, and, at the end of each fiscal year, those patent applications that have not been reviewed for first action are counted as part of USPTO's inventory of unexamined applications, otherwise known as the patent application backlog. In 2002, we reported that the patent application backlog had increased by nearly 250 percent from 1990 to 2001, and that USPTO had projected that the inventory would increase to between 393,000 and 512,000 in fiscal year 2002.[7] In addition, we reported that the agency had made three significantly different predictions about the future of the backlog in three separate reports that were based on different assumptions:

- In its *Fiscal Year 2002 Corporate Plan*, in 2001, USPTO projected that the backlog would increase to almost 1.3 million by the end of fiscal year 2006.
- In USPTO's *Business Plan*, in 2002, the agency projected that the backlog would increase to about 584,000 through fiscal year 2007.
- In the *21st Century Strategic Plan*, in 2002, USPTO projected that the backlog would decrease to about 144,000 through fiscal year 2007.[8]

In 2005, we also reported on USPTO's efforts and challenges in attracting and retaining a qualified patent examination workforce. Specifically, we reported that USPTO faced human capital challenges because, among other things, it had not established an effective mechanism for managers to communicate and collaborate with patent examiners, and managers and patent examiners had differing opinions on the need to update the monetary award system that is based on assumptions of the time it takes to review a patent application that were established in 1976. We recommended that USPTO develop formal strategies to improve communication and collaboration among management, patent examiners, and the union to resolve key issues identified in the report, such as the assumptions underlying the quota system. In response to that recommendation, USPTO conducted an internal survey on communication, and is working to develop a communication strategy on

[7]GAO, *Intellectual Property: Information on the U.S. Patent and Trademark Office's Past and Future Operations*, GAO-02-907 (Washington, D.C.: Aug. 23, 2002).

[8]USPTO's *Corporate Plan* was submitted with the fiscal year 2002 budget. USPTO's *Business Plan* was the agency's first 5-year strategic plan. It was replaced by the *21st Century Strategic Plan* after a new Director decided the *Business Plan* did not go far enough.

the basis of the results. However, the agency has not addressed the issues we identified relating to the assumptions underlying the quota system.

USPTO's Annual Hiring Estimates Are Determined by Funding and Institutional Capacity and Are Unlikely to Reduce the Patent Application Backlog

Over the last 5 years, as a result of its increasing workload relative to its existing workforce, USPTO determined that it would need to hire additional patent examiners each year. However, the agency identified its annual hiring estimates primarily on the basis of available funding levels and its institutional capacity to train and supervise new patent examiners, and not on the basis of the number of patent examiners needed to reduce the existing backlog or review new patent applications. While the process USPTO uses to identify its annual hiring estimates is consistent with OPM's workforce planning strategies and has enabled the agency to better match its hiring estimates to its institutional capacity, it is unlikely that the agency will be able to reduce the patent application backlog simply through its hiring efforts.

USPTO's Funding Levels and Supervisory and Training Capacity Determine Its Annual Hiring Estimates

According to USPTO, during the last 5 years, the agency has used its available funding levels and its capacity to supervise and train patent examiners as the primary factors for identifying its projected annual hiring estimates. Specifically, USPTO begins the process of identifying projected hiring estimates as part of creating its budget submission for the Office of Management and Budget (OMB) 18 months before the start of the hiring year in order to meet OMB's budget submission timeline. As part of this process, the agency considers expected funding levels and patent examiner workforce data that are available at that time.[3] On the basis of these data, USPTO next considers its institutional capacity to supervise and train patent examiners. For example, in identifying its fiscal year 2002 hiring estimate, USPTO determined that funding availability would limit the number of patent examiners the agency would be able to hire, and used the number of patent examiners it had hired in the most recent year as a guide for its projected hiring estimate. However, in fiscal years 2003 through 2006, USPTO determined that funding levels would not be a limiting factor for hiring, and therefore established its hiring estimates

[3]In commenting on a draft of this report, USPTO stated that it uses a robust forecasting and modeling process to determine the optimal hiring, staffing, and production levels. This model was evaluated by the National Academy of Public Administration and determined to be appropriate. While we acknowledge that USPTO uses this model to identify optimal hiring levels, we found that the determination of projected estimates was made on the basis of funding levels and the capacity to support additional staff.

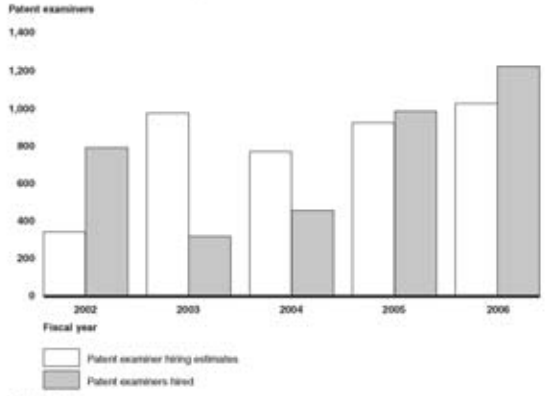
primarily based on its institutional capacity to supervise and train patent examiners.

In determining its institutional capacity to supervise and train new patent examiners, USPTO considers a number of factors. For example, the agency estimates its supervisory capacity by determining how many additional patent examiners can be placed in each of the technology centers. This number is limited by the number of supervisors available in each center who can sign patent application approvals and rejections and provide on-the-job training for new patent examiners. Although new patent examiners can review the prior art relating to a patent application, only supervisors can authorize a new patent examiner's decision to approve or reject a patent application.[10] Therefore, the agency tries to ensure that the patent-examiner–to-supervisor ratio is about 1 supervisor for every 12 patent examiners; otherwise it could result in delays and inefficiencies in making initial and final decisions on patent applications. Similarly, USPTO's training capacity is determined by the number of patent examiners the agency believes it can train in a year. Before fiscal year 2006, training capacity was determined by how many patent examiners could be accommodated in the required training courses offered by the agency to new patent examiners. This training consisted of 2- or 3-week courses that were offered throughout the year and were led by supervisory patent examiners. The courses could accommodate about 16 patent examiners each, and in fiscal year 2004, according to USPTO, the agency offered about 28 training sessions.

Because USPTO's projected hiring estimates are established at least 18 months in advance of the hiring year, USPTO continues to refine them to reflect changes that might occur during the 18-month period. For example, in 2002 USPTO established a projected hiring estimate of 750 patent examiners for fiscal year 2004 when it created its budget submission for OMB. However, USPTO actually hired 443 patent examiners in fiscal year 2004 because of budget constraints that had to be considered after its original estimates had been developed. Figure 1 shows USPTO's projected and actual hiring numbers for fiscal years 2002 through 2006.

[10]We are including both supervisory patent examiners and primary examiners as supervisors for the purpose of this report.

Figure 1: USPTO Patent Examiner Projected Hiring Estimates and Actual Number Hired, Fiscal Years 2002 through 2006



Source: USPTO.

The reasons for the differences between projected hiring estimates and the number of patent examiners hired in fiscal years 2002 through 2006 were primarily related to funding availability. In fiscal years 2003 and 2004, according to USPTO, the agency's appropriations were significantly less than the agency's budget requests. As a result, the agency could not financially support the number of new patent examiners it had initially planned to hire. Conversely, in fiscal years 2005 and 2006, USPTO hired more patent examiners than originally planned because the agency received greater funding for those years than originally anticipated.

The way in which USPTO identifies annual patent examiner hiring estimates is generally consistent with workforce planning strategies endorsed by OPM. OPM has identified key elements that agencies should consider when planning to hire additional personnel, and OPM officials told us that these key elements are well recognized throughout the field of workforce planning. For example, OPM recommends that agencies regularly track workforce trends to ensure updated models for meeting

organizational needs, base decisions on sources of information such as past workforce data, and include in its workforce planning process a workforce analysis system that identifies current and future losses due to attrition. We found that in identifying its hiring estimates, USPTO generally applies these principles because it makes decisions on the basis of trends in hiring, attrition, and total workforce data from recent years, and identifies current losses due to attrition when identifying its annual hiring estimates and estimates of attrition for the hiring year.

Although consistent with OPM's workforce strategies, USPTO's current approach is significantly different from the approach that the agency used prior to fiscal year 2002. At that time, the number of patent examiners USPTO wanted to hire was based on the number of patent applications the agency expected to receive in the hiring year, as well as on the anticipated patent application backlog at the beginning of the hiring year. According to USPTO officials, since fiscal year 2002, the agency has moved away from this approach because it realized that it could no longer supervise and train enough patent examiners to keep up with the increasing workload.

However, USPTO recognizes that it needs to increase its institutional capacity to hire more patent examiners, and in this regard is taking steps to increase its training and supervisory capacity. For example, to increase its training capacity, USPTO implemented an 8-month training program in fiscal year 2006 called the Patent Training Academy that will provide the agency a constant annual training capacity of 1,200 new patent examiners for each of the next 5 years. USPTO also believes that the academy may indirectly improve the agency's supervisory capacity because it will better prepare new patent examiners to start work in a technology center, and therefore they will need less supervision and on-the-job training. USPTO plans to monitor new patent examiners after they have graduated from the academy in order to determine if the agency can further use this approach to increase its institutional capacity and, therefore, its future annual hiring estimates.

Even with its increased hiring estimates of 1,200 patent examiners each year for the next 5 years, USPTO's patent application backlog will continue to grow, and is expected to increase to over 1.3 million at the end of fiscal year 2011. According to USPTO estimates, even if the agency were able to hire 2,000 patent examiners per year in fiscal year 2007 and each of the next 5 years, the backlog would continue to increase by about 260,000 applications to 953,643 at the end of fiscal year 2011. The agency has acknowledged that it cannot hire its way out of the backlog despite its

recent increases in hiring, and is now focused on slowing the growth of the backlog instead of reducing it.

Attrition Has Greatly Offset Hiring over the Last 5 Years, and Agency Management and Patent Examiners Disagree about the Reasons for Attrition

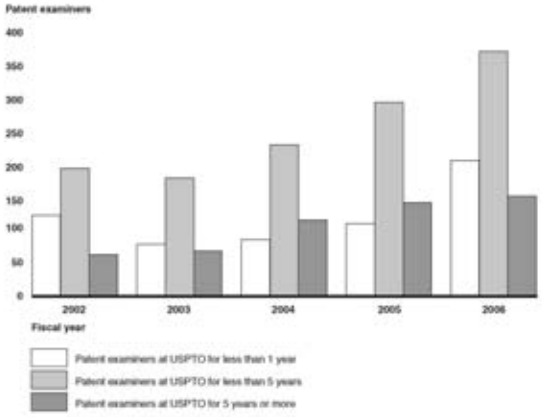
Although USPTO is hiring as many new patent examiners as it has the annual funding and institutional capacity to support, increasing attrition among patent examiners has resulted in the loss of one patent examiner for nearly every two hired over the last 5 years. While agency officials cited personal reasons for patent examiner attrition, patent examiners disagreed and cited the agency's outdated production goals as one of the primary reasons they would choose to leave the agency.

Over the Last 5 Years, One Patent Examiner Has Left USPTO for Nearly Every Two Hired

Although USPTO hired 3,672 patent examiners from the beginning of fiscal year 2002 through fiscal year 2006, the patent examination workforce increased by only 1,644 because 2,028 patent examiners either left the agency or moved to other positions. More specifically, during this time, 1,643 patent examiners left the agency, and 385 patent examiners were either transferred or promoted out of the position of patent examiner. As shown in figure 2, of the 1,643 patent examiners who left the agency, approximately 70 percent had been at USPTO for less than 5 years, and nearly 33 percent had been at USPTO for less than 1 year.[11]

[11]These percentages include patent examiners who transferred or were promoted out of the patent examination workforce, but remained at USPTO, and represent approximately 19 percent of patent examiner attrition from fiscal year 2002 through 2006.

Figure 2: Patent Examiner Attrition by Years of Experience, Fiscal Years 2002 through 2006



Source: USPTO.

Note: In each fiscal year, the number of patent examiners at USPTO for less than 5 years is inclusive of those at USPTO for less than 1 year.

The attrition of patent examiners who were at the agency for less than 5 years is a significant loss for USPTO for a variety of reasons. First, because these less experienced patent examiners are primarily responsible for making the initial decision on patent applications, which is the triggering event that removes applications from the backlog, attrition of these staff affects USPTO's ability to reduce the patent application backlog. Second, because patent examiners require 4 to 6 years of on-the-job experience before they become fully proficient in conducting patent application reviews, when these staff leave USPTO the agency loses as much as 5 years of training investment in them. Third, the continuous churning of so many new patent examiners makes the overall workforce less experienced. As a result, the more experienced patent examiners who have the ability to examine more applications in less time have to instead devote more of their time to supervising and training the less experienced

staff, thereby further reducing the overall productivity of the agency. Finally, these workforce losses affect the agency's supervisory capacity, because they reduce the pool of potential supervisory patent examiners for the future and therefore negatively affect USPTO's ability to increase its capacity and ultimately its hiring goals.

USPTO Management Links Attrition to Employees' Personal Reasons, while Patent Examiners Link It to the Agency's Production Goals

We found that USPTO management and patent examiners disagree significantly on the reasons for the attrition that is occurring at the agency. According to USPTO management, personal reasons are the primary reasons that cause patent examiners to leave the agency.[17] Some of these reasons include the following:

- The nature of the work at USPTO does not fit with the preferred working styles of some patent examiners such as those with engineering degrees who are looking for more "hands-on" experiences.
- Many patent examiners enter the workforce directly out of college and are looking to add USPTO to their résumés and move on to another job elsewhere rather than build a career at the agency, otherwise known as the "millennial problem."
- Patent examiners may choose to leave the area, as opposed to choosing to leave the agency, because their spouse transfers to a position outside of the Washington, D.C., area; the cost of living is too high; or the competition is too high for entry into the Washington, D.C., area graduate and postgraduate programs for those patent examiners who would like to pursue higher education.

USPTO management told us that the agency is taking steps to help address these issues through efforts such as developing a recruitment tool to better assess applicant compatibility with the agency's work environment; targeting midcareer professionals during the recruitment process; and considering the creation of offices located outside the Washington, D.C., area that would provide lower cost-of-living alternatives for employees.

While union officials agreed that in some cases personal reasons, such as the high cost of living in the Washington, D.C., area, may lead to attrition

[17]The term "primary reasons" in this report refers to the top three reasons patent examiners leave the agency provided by USPTO management, as well as the top three or more statistically significant reasons provided by patent examiners in our survey.

among patent examiners, they believe that attrition at USPTO can be primarily attributed to the unrealistic production goals that the agency sets for patent examiners.[15] Specifically, union officials explained that the production goals do not allow adequate time for patent examiners to do their work, especially in light of the increased scrutiny and quality initiatives implemented by management. They told us that the production goals have created a "sweat shop culture" within the agency that requires patent examiners to do more in less time and has therefore been a significant contributor to patent examiners' decisions to leave USPTO. To emphasize this concern, the union joined the Staff Union of the European Patent Office and other international patent examiner organizations in April 2007 to sign a letter declaring that the pressures on patent examiners around the world have reached such a level that in the absence of serious measures, intellectual property worldwide would be at risk. The letter recommended, among other things, an increase in the time patent examiners have to review patent applications.

According to our survey of patent examiners, 67 percent, regardless of their tenure with the agency, agree with union officials that the agency's production goals are among the primary reasons they would consider leaving USPTO. Moreover, we estimated that 62 percent of patent examiners are very dissatisfied or generally dissatisfied with the time allotted by USPTO to achieve their production goals. According to our survey, 50 percent of patent examiners are also very dissatisfied or generally dissatisfied with the way in which the agency's production goals are calculated, and a number of respondents noted that the production goals are outdated, have not changed in 30 years, and some technologies for which they evaluate applications had not even been discovered at the time the agency's production goals were set. When asked for suggestions on how to improve the production system, 59 percent of patent examiners felt that the system needs to be reevaluated, including altering the production goals to allow more time for patent examiners to conduct their reviews.

[15]Union officials also identified a recent decision by USPTO management to track when patent examiners enter and leave the building as another reason why patent examiners would choose to leave the agency. Union officials declined to rank the reasons they believe patent examiners leave USPTO, preferring instead that we rely on patent examiner survey results.

USPTO employees who participated in OPM's 2006 Federal Human Capital Survey reported similar results.[14] Specifically, 89 percent of the respondents, comprising both patent examiners and managerial/supervisory employees, reported that they believe the work they do is important.[15] However, respondents were almost evenly split on whether their workload was reasonable, with 41 percent considering their workload reasonable and 40 percent considering it unreasonable.

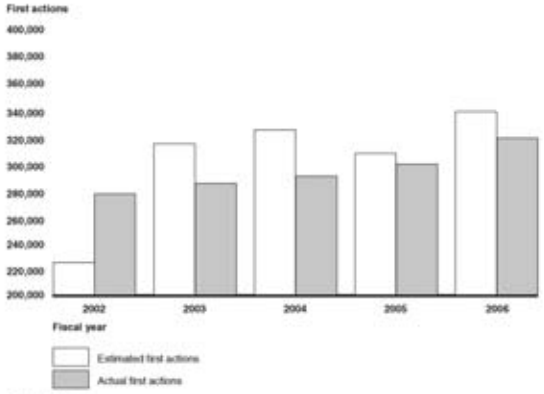
We and others have noted in the past that the assumptions the agency uses to calculate patent examiner production goals were established in the 1970s and have not since been adjusted to reflect changes in science and technology. Moreover, the agency uses these production goals to establish its overall performance goals, such as the number of first actions to be completed in a given year.[16] However, the agency has missed its projections for first actions completed in 4 of the last 5 years, as shown in figure 3, which further suggests that these goals may be unrealistic.

[14]OPM's Federal Human Capital Survey is a tool that measures employees' perceptions of whether, and to what extent, conditions that characterize successful organizations are present in their agencies.

[15]USPTO respondents to the Federal Human Capital Survey included employees from both the patent organization, which accounts for about 76 percent of the agency's resources, and the trademark organization.

[16]USPTO predicts first actions by multiplying the number of patent examiners in the workforce by production goals.

Figure 3: Estimated and Actual First Actions Completed, Fiscal Years 2002 through 2006



Source: USPTO.

Furthermore, according to our survey, patent examiners are discontented with the actions they have to take in order to meet their production goals. According to our survey, during the last year, 70 percent of patent examiners worked unpaid overtime to meet their production goals, some more than 30 extra hours in a 2-week period. The percentage of patent examiners who worked unpaid overtime increased with the length of tenure they had with the agency. We estimated that while 46 percent of patent examiners who had been at USPTO from 2 to 12 months had to work unpaid overtime to meet their production goals; 79 percent of patent examiners with over 5 years' experience at the agency had to put in unpaid overtime. In addition, we estimated that 42 percent of patent examiners had to work to meet production goals while on paid annual leave during the past year. The percentage of patent examiners working while on paid leave also was significantly higher for those with a longer tenure at the agency. We estimated that 18 percent of patent examiners who had been at USPTO from 2 to 12 months worked to meet their production goals while on paid leave, and 50 percent of patent examiners with over 5 years' experience at the agency had to work to meet production goals while on annual leave. As one respondent to our survey explained, "Vacation time

means catch up time." Another respondent summed up the situation as follows: "I know that the production goals are set to keep us motivated in order to help get over the backlog but if a majority of examiners cannot meet those goals without relying on unpaid overtime or annual leave then something is wrong with the system." We estimated that because of the amount of unpaid overtime that they have to put into meeting their production goals, 59 percent of patent examiners consider it one of the primary reasons they would choose to leave USPTO, and 37 percent identified the amount of time they must work during paid leave to meet their production goals among the primary reasons they would leave the agency.

This extensive amount of unpaid overtime does not appear to be a concern to USPTO management, even though the agency has not been able to meet its productivity goals for the last 4 years. When we queried USPTO management about the agency's policy regarding patent examiners working unpaid overtime to meet their production goals, the Deputy Commissioner for Patent Operations told us, "As with many professionals who occasionally remain at work longer to make up for time during the day spent chatting or because they were less productive than intended, examiners may stay at the office (or remote location) longer than their scheduled tour of duty to work."

Retention Incentives and Flexibilities Provided over the Last 5 Years Generally Align with the Primary Reasons Patent Examiners Identified for Staying at USPTO

From 2002 to 2006, USPTO offered a number of different retention incentives and flexibilities in three main areas to improve the retention of patent examiners, as shown in table 1.[17]

[17]GAO reported on key practices for effective use of human capital flexibilities in GAO, *Human Capital: Effective Use of Flexibilities Can Assist Agencies in Managing Their Workforces*, GAO-03-2 (Washington, D.C.: Dec. 6, 2002).

Table 1: Retention Incentives and Flexibilities Provided by USPTO by Category, and Other Retention Efforts, Fiscal Years 2002 through 2006

Category	Retention incentive, flexibility, or other
Compensation	• Performance bonuses
	• Flexible spending accounts that allow patent examiners to set aside funds for expenses related to health care and care for dependents
	• Law school tuition reimbursement program[a]
	• Noncompetitive promotion to the full performance level
	• Recruitment bonuses of up to $9,900
	• Special pay rate[b]
	• Transit subsidy program
Enhanced work environment	• Casual dress policy
	• Flexible work schedules, including the ability to schedule hours off during the day
	• Improved management communication techniques (e.g., town hall meetings, online chats with the Commissioner)
	• No-cost health screenings at an on-site health unit staffed with a registered nurse and part-time physician
	• On-site child care and fitness centers
	• Creation of a committee to organize recreational and social activities, such as a basketball tournament and Halloween party
	• Work at home opportunities
Other retention efforts	• Additional training for managers, such as workshops on intergenerational issues and technical training for patent examiners
	• Formation of a Patents Retention Council to focus on patent examiner retention issues at USPTO
	• A survey given to potential applicants during the recruiting process to better assess applicant compatibility with the USPTO work environment

Source: GAO analysis of USPTO information.

[a]USPTO provided the law school tuition program for 2 years between fiscal years 2002 and 2006.

[b]The special pay rate was approved in 2006 and went into effect in January 2007.

According to USPTO management officials, the three most effective retention incentives and flexibilities that they have offered are the special pay rates, the bonus structure, and opportunities to work from remote locations.

- Special pay rate. In November 2006, USPTO received approval for an across-the-board special pay rate for patent examiners that can be more than 25 percent above federal salaries for comparable positions. For example, in 2007, a patent examiner at USPTO earning $47,610

would earn $37,640 in a similar position at another federal agency in the Washington, D.C., area.

- Bonus structure. The agency awards bonuses at the end of each fiscal year to patent examiners who exceed their production goals by at least 10 percent. For example, according to USPTO, 60 percent of eligible patent examiners who exceeded production goals by 10 percent or more received a bonus in fiscal year 2006. As table 2 shows, USPTO awarded 4,645 bonuses totaling over $10.6 million to patent examiners in fiscal year 2006.[18]

- Opportunities to work from remote locations. In fiscal year 2006, approximately 20 percent of patent examiners participated in the agency's telework program, which allows patent examiners to conduct some or all of their work away from their official duty station 1 or more days per week. In addition, when USPTO began a hoteling program in fiscal year 2006, approximately 10 percent of patent examiners participated in the program, which allows some patent examiners to work from an alternative location.[19]

Table 2: Number of Bonuses and Bonus Amounts USPTO Awarded, and Number of Patent Examiners Participating in the Telework Program in Fiscal Years 2002 through 2006

	2002	2003	2004	2005	2006
Number of bonuses[a]	4,877	4,839	5,015	4,567	4,645
Bonus amount (dollars in millions)	$10.3	$10.9	$11.5	$10.9	$10.6
Patent examiners in telework program	Not applicable[b]	800	345	1014	999

Source: USPTO.

[a]Up to three types of bonuses may be awarded to one patent examiner in a fiscal year, one of which may be awarded twice per fiscal year.

[b]USPTO did not offer a telework program in fiscal year 2002.

[18]USPTO may award up to three types of bonuses to one patent examiner in a fiscal year.

[19]Patent examiners who qualify for hoteling are assigned USPTO computer hardware and are not assigned permanent office space but share space when it is necessary for them to come into the USPTO offices.

According to the results of our survey, patent examiners generally identified compensation-related retention incentives and USPTO's efforts to enhance the work environment as among the most important reasons for staying with the agency. (See app. II for more detailed information on the questions included in and the results of our survey.) Specifically, as table 3 shows, patent examiners ranked current total pay, flexible work schedules, the hoteling program, and federal benefits as among the primary reasons they would choose to stay at USPTO. Similarly, 51 and 87 percent of the USPTO employees who participated in OPM's 2006 Federal Human Capital Survey reported that they were satisfied with their pay and alternative work schedules, respectively.

Table 3: Patent Examiners' Views on Compensation-Related and Enhanced Work Environment Incentives and Flexibilities in Decreasing Order of Importance

USPTO incentives and flexibilities offered to patent examiners	Estimated percentage of patent examiners who identified these incentives and flexibilities as reasons to stay with the agency
Current total pay (excluding benefits)	58
The availability of the flexible work schedule program	49
The availability of a hoteling program	38
Current federal benefits	30
The availability of a teleworking program	17
The recent implementation of a special pay rate increase	16
Opportunities for career advancement	15
The ability to be promoted to the next GS level	14
The availability of the law school tuition program	10
The availability of monetary awards	5
The casual dress policy	4
Access to an on-site fitness center	4
The availability of a transit subsidy program	2
The availability of on-site child care	1
The availability of flexible spending accounts (i.e., the program that allows you to pay for eligible out-of-pocket health care and dependent care expenses with pretax dollars)	1
The availability of an on-site health unit	0
Activities offered by the Work-Life Committee	0

Source: GAO survey.

Note: To determine the estimated percentages in this table, we included the total number of times patent examiners identified a particular retention incentive and flexibility as one of the three most important reasons they would choose to stay at USPTO.

Conclusion

Despite its efforts to hire an increasing number of patent examiners annually and implement a number of retention incentives and flexibilities over the last 5 years, USPTO has had limited success in retaining new patent examiners. While many of the measures implemented generally align with the primary reasons that patent examiners would stay with the agency, these efforts have not been enough to prevent the agency from losing one patent examiner for nearly every two that it has hired, and especially troubling is the high loss of patent examiners who have been with the agency for less than 5 years. Although USPTO management does not agree, the root of this high level of attrition appears to be the stress resulting from the agency's outdated production goals. To meet the agency's production goals, most patent examiners, regardless of their tenure with the agency, have had to work unpaid overtime or work during paid leave time, and therefore consider this to be a primary reason for leaving USPTO. Because the production goals appear to be undermining USPTO's efforts to hire and retain a highly qualified workforce, we believe the agency will continue to be limited in its ability to meet the increasing demand for U.S. patents and reduce the growth of the patent application backlog, and ultimately may be unable to fulfill its mission of ensuring U.S. competitiveness.

Recommendation for Executive Action

We recommend that the Secretary of Commerce direct the Under Secretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office to undertake a comprehensive evaluation of the assumptions that the agency uses to establish patent examiner production goals and revise those assumptions as appropriate.

Agency Comments and Our Evaluation

We provided a draft of this report to the Department of Commerce and USPTO for review and comment. In its comments, the Department of Commerce agreed with our findings, conclusions, and recommendation and agreed that the agency's hiring efforts are not sufficient to reduce the patent application backlog. In light of this issue, the Department of Commerce stated that USPTO is implementing various initiatives designed to increase the productivity of the agency that will result in a more efficient and focused patent examination process. Once USPTO determines the effect of these initiatives on patent examiner productivity, it will reevaluate the assumptions used to establish patent examiner production goals. The agency also provided technical comments that we have incorporated as appropriate. The Department of Commerce's letter is included in appendix II.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to interested congressional committees and Members of Congress and the Secretary of Commerce. We also will make copies available to others upon request. In addition, the report will be available at no charge on the GAO Web site at http://www.gao.gov.

If you or your staff have questions about this report, please contact me at (202) 512-3841 or mittala@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix IV.

Sincerely yours,

Anu K. Mittal

Ms. Anu K. Mittal
Director, Natural Resources
and Environment

Appendix I: Objectives, Scope, and Methodology

To determine the U.S. Patent and Trademark's (USPTO) process for developing annual hiring estimates and the relationship these estimates have to the patent application backlog, we analyzed patent examiner data that USPTO extracts from the National Finance Center, and patent application data from the agency's Patent Application Locating and Monitoring (PALM) system,[1] from fiscal years 2002 through 2006, and projections of that data through fiscal year 2012.[2] Specifically, these data included actual end of fiscal year numbers from 2002 through 2006 and estimates from fiscal years 2002 through 2012 for patent examination workforce, patent examiners hired, patent examiners lost to attrition, first actions, received patent applications, and the patent application backlog. USPTO provided the majority of these data to us in the form of USPTO's fiscal years 2002 through 2008 Budget Requests of the President of the United States. The budget requests for fiscal years 2003 through 2005 contained the hiring estimates for each of those years as well as those projected for an additional 4 years, and the actual number of patent examiners hired for fiscal years 2002 and 2003.[3] USPTO provided the remaining estimates in an interview, and the remaining actual numbers hired by extracting that information from the National Finance Center into Excel documents.

We assessed the reliability of the patent examiner data USPTO extracted from the National Finance Center and the agency's PALM system and determined that they were acceptable for our purposes. We assessed the reliability of patent examiner data by comparing the data to patent examiner data in the Central Personnel Data File. To assess the reliability of the PALM system, we interviewed the Acting Director of the Office of Patent Audit and Evaluation. We also interviewed USPTO's Administrator of the Office of Patent Resources Administration to gain an understanding of the process through which USPTO identifies hiring estimates and the role of the backlog in that process. In addition, we reviewed reports by other organizations, such as the National Academy of Public Administration, relating to USPTO's workforce planning process. We

[1] PALM is an internal USPTO system that contains current patent application status information.

[2] USPTO officials explained that the agency does not store patent examiner data on site, but relies on access to the National Finance Center to obtain that information when necessary.

[3] According to USPTO, the data requirements for the budget requests can change and USPTO provides the required data to the Office of Management and Budget accordingly. As a result, not all of the information we requested was available in these documents.

reviewed the Office of Personnel Management's (OPM) workforce planning guidance and interviewed officials from OPM's Human Capital Assessment and Accountability Framework Office to develop criteria to assess USPTO's workforce planning process. We compared USPTO's process for developing annual hiring estimates to OPM's workforce planning strategies and other best practice information we received from OPM's Human Capital Assessment and Accountability Framework Office in order to determine if USPTO's process for identifying annual hiring estimates was consistent with OPM's recommended workforce planning strategies.

To determine the extent to which hiring patent examiners has been offset by attrition at USPTO over the last 5 years, we analyzed patent examiner workforce, hiring, and attrition data from this time period as described above. In addition, USPTO provided attrition data by years of experience for each of those years in separate documents derived from the National Finance Center. Specifically, we compared the total number of patent examiners hired in each of the last 5 years to the total workforce growth and the total patent examiner attrition in that time. To determine the factors that may contribute to patent examiners' decisions to leave the agency, we conducted a Web-based survey of a stratified random sample of 1,420 current patent examiners.[4] To address this objective, we had to rely on the views of current patent examiners because USPTO does not maintain contact information for patent examiners that have left the agency, and we could not identify any organizations that maintain this information for USPTO staff. Through the survey instrument, we gathered patent examiners' views on satisfaction with various aspects of working at USPTO, the time worked to meet production goals, and reasons they would choose to stay with or leave the agency. In addition, we asked for their views on ways to improve the production system.

The target population for our sample consists of patent examiners who were employed by USPTO as of November 22, 2006, and were still employed as of the survey closing date, February 28, 2007. We selected

[4]While we also surveyed supervisory patent examiners, we did not include their responses in our analysis and estimates because we determined during the course of our review that they perform a very different function than nonsupervisory patent examiners. Consequently supervisory patent examiners have different job-related concerns and different reasons than nonsupervisory patent examiners for choosing to stay with or leave USPTO. Because our report focuses on why staff performing the patent examiner function stay with or leave the agency, we focused only on the responses of nonsupervisory patent examiners.

our sample from a study population composed of all USPTO patent examiners as of November 22, 2006, and we asked agency officials to provide the names, e-mail addresses, and length of time at USPTO for patent examiners at the agency on that date. Patent examiners who were hired after November 22, 2006, are not represented in our sample. Similarly, patent examiners who left or retired from the agency between November 22, 2006, and February 28, 2007, might be sampled but would not be a part of our target population (and therefore are considered out of the scope of our survey). From that list, we selected a random sample of patent examiners,[3] stratified by the length of time they would have been at the agency at the beginning of the survey period in late January 2007.[4] Our sample consisted of 1,420 patent examiners, and we obtained complete survey responses from 1,129 of them, for an overall response rate of about 80 percent. Table 4 summarizes population size, sample size, and disposition of sample cases for each of these strata.

Table 4: Summary of Patent Examiner Population and Survey Sample by Stratum

Stratum[a]	Population	Sample	Respondents	Out of scope[a]	Response rate
1. Patent examiners: 2-12 months	1,007	430	342	0	80%
2. Patent examiners: 1-5 years	1,506	480	385	0	80%
3. Patent examiners: 5+ years	2,305	510	402	8	80%
Total	**4,818**	**1,420**	**1,129**	**8**	**80%**

Source: GAO.

[a]From the initial notification, we identified 8 sampled individuals who were outside the target population. Individuals were determined to be outside the target population for reasons such as they performed a function other than patent examination or they had since left the agency.

All sample surveys are subject to sampling error—that is, the extent to which the survey results differ from what would have been obtained if the whole population had been observed. Each patent examiner in the study population has a known nonzero probability of being selected, and the

[3]We defined patent examiners as those responsible for reviewing utility, plant, and reissue (UPR) patent applications.

[4]For example, a person newly hired at the time the population frame was created in late November 2006 would have been at the agency 2 months by late January 2007. This is why the shortest tenure displayed in table 4 is 2 months.

data for each respondent are appropriately weighted to account statistically for all patent examiners in that stratum, including those that were not selected. Because we followed a probability procedure based on random selections, our sample is only one of a large number of samples that we might have drawn. Since each sample could have provided different estimates, we expressed our confidence in the precision of our particular sample's results as a 95 percent confidence interval. This is the interval that would contain the actual population value for 95 percent of the samples we could have drawn. As a result, we are 95 percent confident that each of the confidence intervals based on the survey includes the true values in the sample population. Estimates based on this survey allow us to project our results to all patent examiners at USPTO with a 95 percent level of confidence. All percentage estimates in this report have a 95 percent confidence interval within plus or minus 5 percentage points of the estimate itself. For example, our survey estimates that 42 percent of patent examiners worked while on annual leave during the past year, and we are 95 percent confident that the actual proportion of patent examiners working while on leave during this period is within 5 percentage points of 42, i.e., between 37 and 47 percent. All reported comparisons of patent examiner groups for a particular survey question are statistically significant with a probability of 0.05.

In addition to the reported sampling errors, as previously indicated, the practical difficulties of conducting any survey may introduce errors, commonly referred to as nonsampling errors. For example, differences in how a particular question is interpreted, the information sources available to respondents, or the types of sample members who do not respond can introduce unwanted variability into the survey results. Our estimation method assumes that nonrespondents are missing at random. If characteristics of respondents are different from those of nonrespondents on key items, it could introduce a bias not accounted for in our analysis. We took extensive steps in questionnaire development, data collection, and the editing and analysis of the survey data to minimize nonsampling errors. For example, the survey was developed by a GAO survey specialist in conjunction with subject matter experts, and then reviewed by a second independent survey specialist. In addition, we pretested the survey with patent examiners. During these pretests, we asked the patent examiners to complete the survey as they would when they received it. We then interviewed the respondents to ensure that (1) the questions were clear and unambiguous, (2) the terms used were precise, (3) the survey did not place an undue burden on the patent examiners completing it, and (4) the survey was independent and unbiased. We also provided a copy of the survey to USPTO officials and representatives from the patent examiner

union—the Patent Office Professional Association (POPA)—to gain their thoughts on the four previously mentioned criteria. On the basis of the feedback from the pretests and our discussions with agency officials and union representatives, we revised the questions, as appropriate.

Additionally, the statistical programs that produced our survey estimates, including estimates of categories derived from content analysis, were reviewed by a second independent programmer to ensure accuracy in the logic and syntax of the program. Finally, to ensure security and data integrity, we provided all participants with a user name and a personal password that allowed them to access and complete the survey. No one else could access that survey or edit its data. To reduce survey nonresponse, we sent out e-mail reminder messages to encourage them to complete the survey. We activated the survey and informed respondents of its availability on January 25, 2007, and allowed respondents access to the survey through February 28, 2007.

We conducted a computer-enabled content analysis to analyze a key open-ended survey question soliciting respondents' suggestions for improvements to the production system. Two reviewers collaboratively developed content categories based on survey responses, and then independently assessed and coded each survey response into those categories. In cases where disagreements among the two reviewers regarding the coding of responses into content categories were found, all disagreements were resolved through reviewer discussion. Ultimately, there was 100 percent agreement between the reviewers.

In addition to the survey mentioned above, we spoke with USPTO officials, representatives from POPA, and an official from the American Intellectual Property Law Association, a national bar association of lawyers involved in fields of law affecting intellectual property, to gain their perspectives on why patent examiners leave the agency.

To determine the extent to which the retention incentives and flexibilities that USPTO provides align with patent examiners' reasons for staying with the agency, we spoke with USPTO officials, union representatives, and an official from the American Intellectual Property Law Association to gain their perspectives on the effectiveness of the retention incentives and flexibilities at USPTO. We also analyzed USPTO policies and information regarding the agency's retention incentives and flexibilities. In addition, we used the Web-based survey described above to obtain patent examiners' views on the reasons they would choose to stay at the agency.

We conducted our work from August 2006 through July 2007 in accordance with generally accepted government auditing standards.

Appendix II: Selected Survey Results

The following tables contain summary results of selected questions from our survey of patent examiners at USPTO. For each question reported below, the estimated percentage is presented. All percentage estimates have a 95 percent confidence interval within plus or minus 5 percentage points of the estimate itself. These tables do not include summary-estimate data for the demographic questions and do not include the results from any open-ended questions.

Q6. Over the past 12 months, on average, about how much voluntary/uncompensated overtime have you worked per biweek to meet your production goal?

Number of hours	Estimated percentage
Less than 1 hour	5
1-10 hours	62
11-20 hours	23
21-30 hours	5
More than 30 hours	5

Source: GAO survey.

Note: Respondents to this question had self-identified in a previous question as having worked voluntary/uncompensated overtime to meet their production goals.

Q8. Over the past 12 months, on average, about how much annual leave have you used per quarter to meet your production goal?

Number of hours	Estimated percentage
Less than 1 hour	2
1-10 hours	47
11-20 hours	29
21-30 hours	12
More than 30 hours	10

Source: GAO survey.

Note: Respondents to this question had self-identified in a previous question as having used annual leave to meet their production goals.

Q10a. How important, if at all, are each of the following factors as reasons for you to stay with USPTO?

Very important or important reason to stay

Reason	Estimated percentage
a. Your current total pay (excluding benefits)	77
b. Your current federal benefits	77
c. The availability of monetary awards	45
d. The recent implementation of a special pay rate increase	80
e. The caliber of your current supervision	58
f. The extent to which resources, such as mentors, are available to answer your questions	44
g. Your opportunities for career advancement	59
h. Your ability to be promoted to the next GS level	67
i. The extent to which this job fits your work style	71
j. Your production goals	17
k. The amount of paid leave that you must use to meet production goals	10
l. The amount of voluntary/uncompensated overtime that you must work to meet production goals	9
m. The amount of review of your work (i.e., for quality purposes)	14
n. Activities offered by the Work-Life Committee (e.g., 4 on 4 basketball tournament, trip to Atlantic City, but NOT activities run by the PTO Society or your Technology and/or Art Center)	11
o. The availability of the law school tuition program	43
p. The availability of a hoteling program (i.e., the opportunity for examiners to work full-time from an off-site location)	79
q. The availability of a teleworking program (i.e., the opportunity for examiners to work some hours from an off-site location)	77
r. The availability of the flexible work schedule program	94
s. The availability of flexible spending accounts (i.e., the program that allows you to pay for eligible out-of-pocket health care and dependent care expenses with pretax dollars)	42
t. The availability of a transit subsidy program	58
u. The availability of an on-site health unit	37
v. The casual dress policy	55
w. The availability of on-site child care	26
x. Access to an on-site fitness center	47
y. Other—Please specify below	34

Source: GAO survey

Q10b. How important, if at all, are each of the following factors as reasons for you to leave USPTO?

Very important or important reason to leave

Reason	Estimated percentage
a. Your current total pay (excluding benefits)	8
b. Your current federal benefits	3
c. The availability of monetary awards	8
d. The recent implementation of a special pay rate increase	0
e. The caliber of your current supervision	11
f. The extent to which resources, such as mentors, are available to answer your questions	12
g. Your opportunities for career advancement	14
h. Your ability to be promoted to the next GS level	9
i. The extent to which this job fits your work style	10
j. Your production goals	52
k. The amount of paid leave that you must use to meet production goals	49
l. The amount of voluntary/uncompensated overtime that you must work to meet production goals	61
m. The amount of review of your work (i.e., for quality purposes)	27
n. Activities offered by the Work-Life Committee (e.g., 4 on 4 basketball tournament, trip to Atlantic City, but NOT activities run by the PTO Society or your Technology and/or Art Center)	2
o. The availability of the law school tuition program	1
p. The availability of a hoteling program (i.e., the opportunity for examiners to work full-time from an off-site location)	0
q. The availability of a teleworking program (i.e., the opportunity for examiners to work some hours from an off-site location)	0
r. The availability of the flexible work schedule program	0
s. The availability of flexible spending accounts (i.e., the program that allows you to pay for eligible out-of-pocket health care and dependent care expenses with pretax dollars)	0
t. The availability of a transit subsidy program	1
u. The availability of an on-site health unit	0
v. The casual dress policy	1
w. The availability of on-site child care	1
x. Access to an on-site fitness center	0
y. Other—Please specify below	39

Source: GAO survey

Q11. Looking at the list of reasons in question 10, what are the top three reasons why you would choose to stay with USPTO?

Reason	Estimated percentage
a. Your current total pay (excluding benefits)	58
b. Your current federal benefits	30
c. The availability of monetary awards	5
d. The recent implementation of a special pay rate increase	16
e. The caliber of your current supervision	9
f. The extent to which resources, such as mentors, are available to answer your questions	3
g. Your opportunities for career advancement	15
h. Your ability to be promoted to the next GS level	14
i. The extent to which this job fits your work style	15
j. Your production goals	1
k. The amount of paid leave that you must use to meet production goals	0
l. The amount of voluntary/uncompensated overtime that you must work to meet production goals	0
m. The amount of review of your work (i.e., for quality purposes)	0
n. Activities offered by the Work-Life Committee (e.g., 4 on 4 basketball tournament, trip to Atlantic City, but NOT activities run by the PTO Society or your Technology and/or Art Center)	0
o. The availability of the law school tuition program	10
p. The availability of a hoteling program (i.e., the opportunity for examiners to work full-time from an off-site location)	38
q. The availability of a teleworking program (i.e., the opportunity for examiners to work some hours from an off-site location)	17
r. The availability of the flexible work schedule program	49
s. The availability of flexible spending accounts (i.e., the program that allows you to pay for eligible out-of-pocket health care and dependent care expenses with pretax dollars)	1
t. The availability of a transit subsidy program	2
u. The availability of an on-site health unit	0
v. The casual dress policy	4
w. The availability of on-site child care	1
x. Access to an on-site fitness center	4
y. Other—Please specify below	4

Source: GAO survey

Note: To determine the estimated percentages in this table, we included the total number of times patent examiners identified a particular retention incentive and flexibility as one of the three most important reasons they would choose to stay at USPTO. Percentages total more than 100 percent because respondents selected three reasons each.

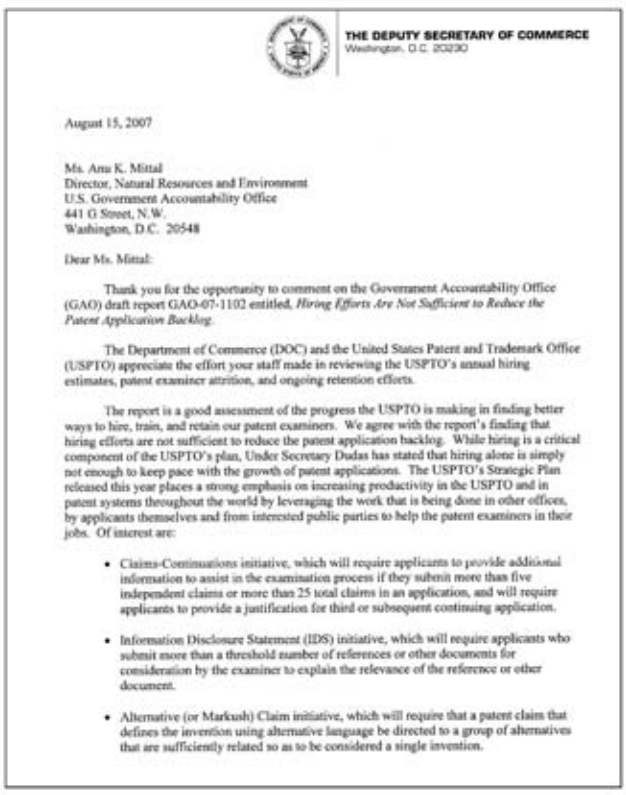
Q12. Looking at the list of reasons in question 10, what are the top three reasons that would cause you to consider leaving USPTO?

Reason	Estimated percentage
a. Your current total pay (excluding benefits)	16
b. Your current federal benefits	4
c. The availability of monetary awards	6
d. The recent implementation of a special pay rate increase	1
e. The caliber of your current supervision	13
f. The extent to which resources, such as mentors, are available to answer your questions	8
g. Your opportunities for career advancement	15
h. Your ability to be promoted to the next GS level	8
i. The extent to which this job fits your work style	11
j. Your production goals	67
k. The amount of paid leave that you must use to meet production goals	37
l. The amount of voluntary uncompensated overtime that you must work to meet production goals	59
m. The amount of review of your work (i.e., for quality purposes)	26
n. Activities offered by the Work-Life Committee (e.g., 4 on 4 basketball tournament, trip to Atlantic City, but NOT activities run by the PTO Society or your Technology and/or Art Center)	1
o. The availability of the law school tuition program	1
p. The availability of a hoteling program (i.e., the opportunity for examiners to work full-time from an off-site location)	2
q. The availability of a teleworking program (i.e., the opportunity for examiners to work some hours from an off-site location)	1
r. The availability of the flexible work schedule program	2
s. The availability of flexible spending accounts (i.e., the program that allows you to pay for eligible out-of-pocket health care and dependent care expenses with pretax dollars)	0
t. The availability of a transit subsidy program	0
u. The availability of an on-site health unit	0
v. The casual dress policy	1
w. The availability of on-site child care	0
x. Access to an on-site fitness center	0
y. Other—Please specify below	7

Source: GAO survey.

Note: To determine the estimated percentages in this table, we included the total number of times patent examiners identified a particular retention incentive and flexibility as one of the three most important reasons they would choose to leave USPTO. Percentages total more than 100 percent because respondents selected three reasons each.

Appendix III: Comments from the Department of Commerce



THE DEPUTY SECRETARY OF COMMERCE
Washington, D.C. 20230

August 15, 2007

Ms. Anu K. Mittal
Director, Natural Resources and Environment
U.S. Government Accountability Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Ms. Mittal:

Thank you for the opportunity to comment on the Government Accountability Office (GAO) draft report GAO-07-1102 entitled, *Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog.*

The Department of Commerce (DOC) and the United States Patent and Trademark Office (USPTO) appreciate the effort your staff made in reviewing the USPTO's annual hiring estimates, patent examiner attrition, and ongoing retention efforts.

The report is a good assessment of the progress the USPTO is making in finding better ways to hire, train, and retain our patent examiners. We agree with the report's finding that hiring efforts are not sufficient to reduce the patent application backlog. While hiring is a critical component of the USPTO's plan, Under Secretary Dudas has stated that hiring alone is simply not enough to keep pace with the growth of patent applications. The USPTO's Strategic Plan released this year places a strong emphasis on increasing productivity in the USPTO and in patent systems throughout the world by leveraging the work that is being done in other offices, by applicants themselves and from interested public parties to help the patent examiners in their jobs. Of interest are:

- Claims-Continuations initiative, which will require applicants to provide additional information to assist in the examination process if they submit more than five independent claims or more than 25 total claims in an application, and will require applicants to provide a justification for third or subsequent continuing application.
- Information Disclosure Statement (IDS) initiative, which will require applicants who submit more than a threshold number of references or other documents for consideration by the examiner to explain the relevance of the reference or other document.
- Alternative (or Markush) Claim initiative, which will require that a patent claim that defines the invention using alternative language be directed to a group of alternatives that are sufficiently related so as to be considered a single invention.

- Applicant Quality Submissions, which if pursued, will require most applicants to provide the USPTO with an applicant quality submission and written analysis to assist the examiner in the examination of the application.

In general, the USPTO agrees with GAO's assessment of the challenges facing it and GAO's conclusion that hiring efforts alone are not sufficient to reduce the patent application backlog. The above initiatives being implemented and those under consideration by the USPTO will result in a more efficient and focused examination on the part of the patent examiner. It is anticipated that there will be efficiencies gained from these initiatives. Once the USPTO determines the effect of these initiatives on examiner productivity, we will reevaluate the assumptions that we use to establish examiner production goals.

I enclose a list of specific technical comments that clarify and/or correct certain points covered in your report.

Many thanks to Michelle Triestman and Vondalee Hunt who spent many hours reviewing survey data and talking to USPTO employees. I also extend my appreciation to you and your team for your dedication to the highest standards of professionalism in preparing the draft report.

Sincerely,

David A. Sampson

Enclosure

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact	Anu K. Mittal, (202) 512-3841
Staff Acknowledgments	In addition to the contact named above, Vondalee R. Hunt (Assistant Director), Nancy Crothers, Nancy Hess, Stuart Kaufman, Grant Mallie, Rebecca Shea, Michelle K. Treistman, Lisa Vojta, and Greg Wilmoth made significant contributions to this report. Scott Derrick and Omari Norman also contributed to this report.

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To Report Fraud, Waste, and Abuse in Federal Programs	Contact: Web site: www.gao.gov/fraudnet/fraudnet.htm E-mail: fraudnet@gao.gov Automated answering system: (800) 424-5454 or (202) 512-7470
Congressional Relations	Gloria Jarmon, Managing Director, JarmonG@gao.gov (202) 512-4400 U.S. Government Accountability Office, 441 G Street NW, Room 7125 Washington, D.C. 20548
Public Affairs	Susan Becker, Acting Manager, Beckers@gao.gov (202) 512-4800 U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, D.C. 20548

U.S. House of Representatives
Committee on the Judiciary

Washington, DC 20515–6216
One Hundred Tenth Congress
April 29, 2008

The Honorable Jon W. Dudas
Undersecretary of Commerce for Intellectual Property
Director of U.S. Patent and Trademark Office
U.S. Department of Commerce
600 Dulany Street - Madison West
Alexandria, VA 22314

Dear Mr. Dudas:

On behalf of the Committee on the Judiciary, Subcommittee on Courts, the Internet, and Intellectual Property, we would like to reiterate our appreciation for your participation in the February 27, 2008, oversight hearing concerning the "U.S. Patent and Trademark Office." We have forwarded the official transcript to your office for review.

Given the limited time allotted for questions during the hearing, there were a number of questions that I was not able to ask you. As such, I am including the below questions and your subsequent responses in the official record:

1. *Accurate projection of the number of patent applications that the USPTO will receive in coming years is critical to planning and resource allocation decisions being made today. Please describe in detail the methods the USPTO uses to project the number of future patent applications. What economic and legal factors, including anticipated rule changes, does the USPTO assume in developing its patent application projections? What kind of computer models and other tools do you employ to make such projections?*

2. *In the USPTO's FY2008 budget document, it was projected that the number of patent applications would grow by 8% over each of the next 5 years. (See attachment 1). This projection was supported by the FY2007-2012 Strategic Plan, which stated "this strategic plan anticipates that patent application filings will continue to rise at the rate of eight percent per year, through 2012. This growth is not a surprise, nor is it new." (See attachment 2). However, in the USPTO's FY2009 budget document, it was projected that patent applications would grow by only 5% per year over the next 5 years. (See attachment 3). Please explain why the projected rise in patent applications was reduced in your FY2009 budget document.*

3. *Also the FY2009 budget document mentioned that the projected 5% application growth rate "may be affected by the Agency's rule governing continuation practice," but didn't indicate how it would be affected. (See attachment 3). Please explain what was meant by this statement. Also, if the 5% application growth rate projection took into account assumptions or expectations that no longer apply, such as implementation of the continuation and claims rules that were recently enjoined, please provide revised growth projections.*

4. *What role, if any, did the USPTO's Patent Public Advisory Committee have in determining and reviewing the agency's patent application filing projections in the FY2008 and FY2009 budget documents?*

5. *Aside from implementing the recently enjoined continuation and claims rules, describe all the possible actions the USPTO or Congress can take that would impact patent pendency and the respective impact each action would have on reducing patent pendency? What combination of these actions would be needed to reduce patent pendency if the application growth rate was held constant at 5% over the next 10 years? What if the application growth rate was held constant at 8% over the next 10 years? Please provide whatever computer or mathematical models used in answering these questions.*

6. *According to the recent GAO report titled "Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog," the GAO found that the USPTO cannot hire enough patent examiners to reduce patent pendency in the next five years. It seems, however, that this projection is based on estimates provided by the USPTO. The report states "[a]ccording to USPTO estimates, even if the agency were able to hire 2,000 patent examiners per year in fiscal year 2007 and each of the next 5 years, the backlog would continue to increase by about 260,000 applications to 953,643 at the end of fiscal year 2011." (See attachment 4). Please provide all data related to these "USPTO estimates," including mathematical models, and underlying statistics and assumptions such as examiner retention and productivity. Under these same assumptions, hypothetically, how many patent examiners would have to be hired in the next five years in order to reduce the patent backlog?*

7. *After release of the above mentioned GAO report, the USPTO issued a press release on October 4, 2007 that stated the USPTO would "review assumptions the agency uses to establish production goals for patent examiners." (See attachment 5). Then, before the Subcommittee, Director Dudas confirmed that the USPTO has begun to study patent examiner production goals. Please provide details on the methodology of the study and personnel conducting it. What is the current progress of the study and when can Congress expect the study to be completed? To what extent is the Patent Office Professional Organization and the Patent Public Advisory Committee involved in this study?*

8. *According to the above mentioned GAO report, 67% of patent examiners feel "that the [USPTO's] production goals are among the primary reasons they would consider leaving the USPTO." This statistic held true "regardless of their tenure." The GAO also reported that USPTO management felt that patent examiners left the agency primarily due to personal reasons. (See attachment 6). And, according to Director Dudas' testimony, exit interviews of employees who had been with the USPTO from 3 to 10 years showed that they left the agency because of "supervisor issues or management issues," and that no interviewees in this category said that they left because of the nature of the work (i.e., production goals). What may account for the discrepancy between what USPTO management believes are the reasons patent examiners leave the agency and the GAO's survey results? What percentage of people who left the agency after 3 to 10 years actually participated in the exit interviews Director Dudas cited? Are there any distinguishing characteristics of these people that would set them apart from those who didn't participate in exit interviews (i.e., disproportionately high production performance compared to peers)?*

9. *According to the language of the 2006 Science, State, Justice, Commerce Appropriations Act, before the USPTO can reprogram appropriated funds, it must notify the appropriations committees of both houses of Congress 15 days prior to any such reprogramming. For purposes of the Act, reprogramming includes eliminating a program, project or activity and reorganizing or renaming offices. Was the USPTO action that created the Office of Enforcement considered a reprogramming? If so, did the USPTO notify Congress pursuant to its statutory obligations? If so, please provide a copy of the notification you sent to Congress.*

10. *According to the Department of Commerce's Department Administrative Order (DAO) 203-13, a reorganization includes "the establishment, consolidation, abolishment or other significant change affecting an organizational unit's status, configuration, or mission, or the authority and duties of its management and staff." The DAO goes on to say that a reorganization is generally considered a reprogramming that requires both Congressional and Department notification. Is the USPTO subject to this and other DAOs issued by the Department of Commerce? Assuming the USPTO is subject to this DAO, when the Office of Enforcement was created, was the action creating it determined to be a reorganization? If so, did the USPTO notify Congress pursuant to its DAO obligations? If so, please provide a copy of the notification you sent to Congress.*

11. *In Director Dudas' testimony before the Subcommittee, he termed the action that eliminated the Office of Enforcement a "realignment." What criteria do you apply to classify an action as a "realignment" instead of a reprogramming as defined in the appropriations act or a reorganization as defined in DAO 203-13?*

12. *What other actions has the USPTO taken over the last 7 years that have also been or can be described as a "realignment"? Please list these actions and provide a detailed description of the nature of and justification for each so-called realignment.*

13. *On August 15, 2007, Barry Hudson, Chief Financial Officer for the USPTO, sent an email to top USPTO officials that stated the realignment of the Office of External Affairs "was a result of a five-year management review." (See attachment 7). In the USPTO Weekly Update dated September 10, 2007, Lois Boland, Director of the Office of Intellectual Property Policy and Enforcement, was quoted as saying that the realignment of the Office of External Affairs occurred "after a five-year management review of the programs within [External Affairs]." (See attachment 8). Please provide the Subcommittee a copy of this management review. Has the USPTO taken any other actions based on this management review? Does it plan to take any other actions based on this management review? Please provide a list of all senior USPTO officials who participated in this management review.*

14. *As evidence of greater quality, Director Dudas mentioned in his testimony that in 2000, 70% of all applications led to a patent while in the first quarter of 2007, only 44% of all applications led to a patent. How did the USPTO account in these statistics for Request for Continuing Examination (RCE) applications, continuation applications and the applications that had to be abandoned in order to file continuation applications?*

15. *According to USPTO organizational charts for the last several years, the Administrator of the Office of External Affairs reports directly to the USPTO Director and Deputy Director. (See attachment 9). However, as I understand from Director Dudas' testimony, the Administrator's position "rests" in the Deputy Director's office. Does this mean that the Deputy Director essentially runs the Office of External Affairs? If yes, why is there still an Administrator of External Affairs position listed in USPTO organizational charts? If so, does running the Office of External Affairs interfere with the other duties of the Deputy Director?*

16. *According to a Time article dated April 2, 2006, and supported by an email allegedly from James Toupin dated January 3, 2005, senior USPTO officials met with Research in Motion (RIM) CEO Jim Balsillie while a reexamination concerning patents owned by NTP and at issue in a lawsuit filed by NTP against RIM, was before the USPTO. (See attachments 10 and 11). Did this meeting take place? What was discussed at this meeting? What is the USPTO's policy concerning ex parte communications between senior USPTO officials and parties who have an interest in the outcome of proceedings before the Office? In what other instances, if any, did senior USPTO officials engage in similar ex parte communications with parties that had an interest in the outcome of a proceeding being conduct before the Office?*

17. *The FY2008 USPTO budget document mentioned that the USPTO was exploring the possibility of establishing regional offices that would house patent examiners. (See attachment 12). However, no mention of this effort was made in the FY2009 USPTO budget document. Is the USPTO still looking into this possibility? Over the last 3 years, what resources have been dedicated to the planning and establishment of USPTO offices outside of Alexandria, Virginia? If the USPTO has concluded its evaluation of establishing satellite, back-up, or other additional facilities, what were the agency's conclusions about the location, expense, and general feasibility associated with establishing and operating such facilities.*

18. *Please provide information concerning the diversity of the USPTO's workforce. Please breakdown this information by GS-level and function within the agency (i.e., SES, Schedule C, manager, examiner, support staff, etc.)*

In addition, I am enclosing the following questions from Representative Darrell Issa, a Member of the Subcommittee, to be included in the final record.

1. *Examination on Request (or, as the USPTO called it, Deferred Examination) is used in many countries such as Canada and Japan. Under such a system, applications are not examined automatically, as in the U.S., but only upon a specific Request for Examination within a set time-period, say 3 years. If no request is filed within that period, the application is deemed abandoned and is never examined. From experience of other patent offices, 10% to 40% of applications are never examined under Examination on Request systems, resulting in substantial workload reduction. This is due to applicants' voluntary abandonment of obsolete applications prior to the Request for Examination deadline. Under current USPTO practice, applications that become obsolete, but receive examination by the USPTO, are the worst investment the USPTO can make because their obsolescence means that the patents are unlikely to fetch any renewal fees.*

2. *Why did the USPTO reject such a method that has the potential to reduce its workload and increase efficiency?*

Please hand-deliver response to questions on official stationary to the Subcommittee on Courts no later than ***May 19, 2008***. The office address is B-352 Rayburn House Office Building, Washington, D.C. 20515.

If you have additional questions or concerns, please contact me or Shanna Winters, Chief Counsel of the Subcommittee at 202.225.5741. Thank you again for your testimony.

Sincerely,

Howard L. Berman

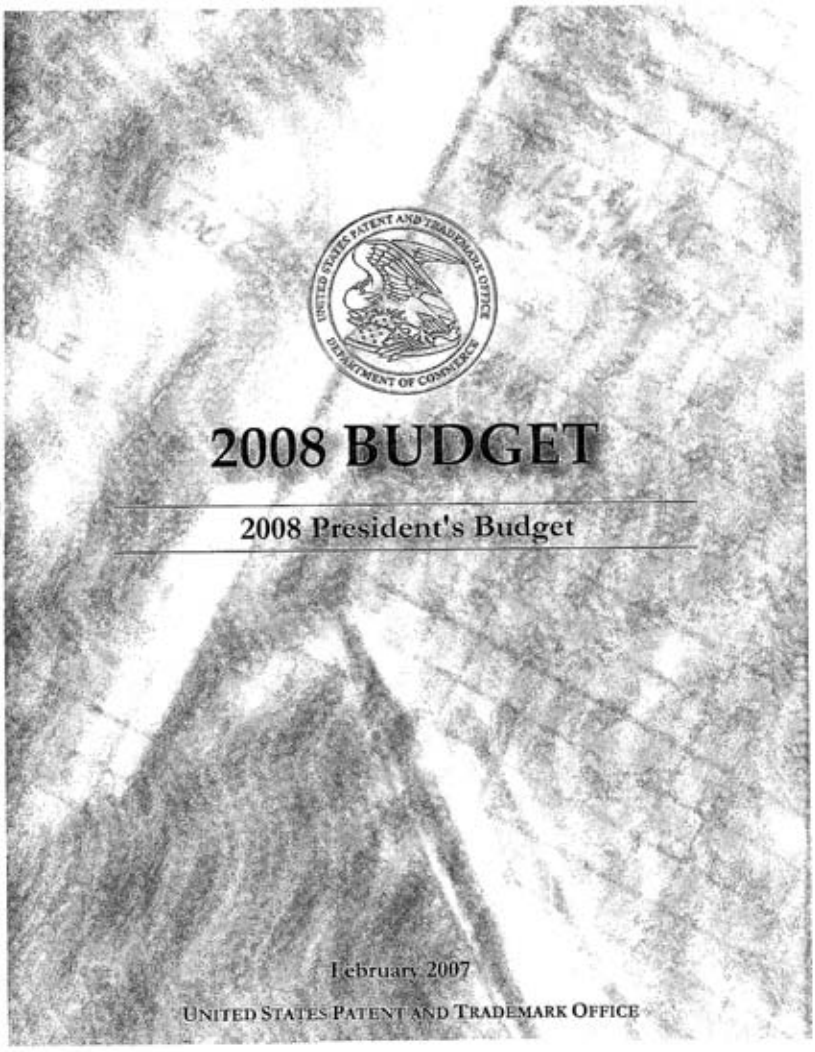
HOWARD L. BERMAN
Chairman,
Subcommittee on Courts, the Internet, and
Intellectual Property

U.S. House of Representatives
Committee on the Judiciary
Washington, DC 20515–6216
One Hundred Tenth Congress

QUESTIONS FOR THE FINAL RECORD

ATTACHMENT 1

2008 President's Budget


2008 BUDGET
2008 President's Budget
February 2007
UNITED STATES PATENT AND TRADEMARK OFFICE

Performance Goal 1: Optimize Patent Quality and Timeliness (FY 2007 – 2012)

Performance Measures/Targets	FY 2006 Actuals	FY 2007 Expected Enacted	FY 2008 President's Budget	FY 2009 Est.	FY 2010 Est.	FY 2011 Est.	FY 2012 Est.
Allowance Compliance Rate*	96.5%	96.0%	96.0%	96.0%	96.0%	96.0%	96.0%
In-Process Examination Compliance Rate	90.0%	90.0%	90.0%	90.0%	91.0%	92.0%	93.0%
Average First Action Pendency (Months)	22.8	23.7	24.9	25.5	26.5	27.0	28.9
Average Total Pendency (Months)	31.1	33.0	34.7	35.9	36.5	37.5	38.6
Efficiency	$3,798	$4,327	$4,254	$4,233	$4,361	$4,495	$4,587
Applications Filed Electronically	14.2%	40.0%	50.0%	60.0%	70.0%	80.0%	85.0%
Applications Managed Electronically	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
UPR Units of Production	315,019	323,900	355,500	388,400	411,800	435,900	460,300
Utility, Plant and Reissue (UPR) Applications Filed	419,760	445,800	479,200	517,500	558,900	603,600	651,900
UPR Applications Filed Percent Change Over Previous FY	10.2%	7.0%	8.0%	8.0%	8.0%	8.0%	8.0%
UPR Disposals	306,689	314,200	344,600	374,800	399,200	422,800	446,500
UPR Issues	164,115	177,400	192,500	210,100	224,800	238,400	252,000
UPR First Actions	320,349	333,600	366,200	398,100	424,000	449,000	474,100
Utility, Plant and Reissue (UPR) Examiners On-Board at End-of-Year	4,779	5,268	5,724	6,135	6,502	6,828	7,118

*Note: For consistency, all quality metrics are being reported as compliance rates.

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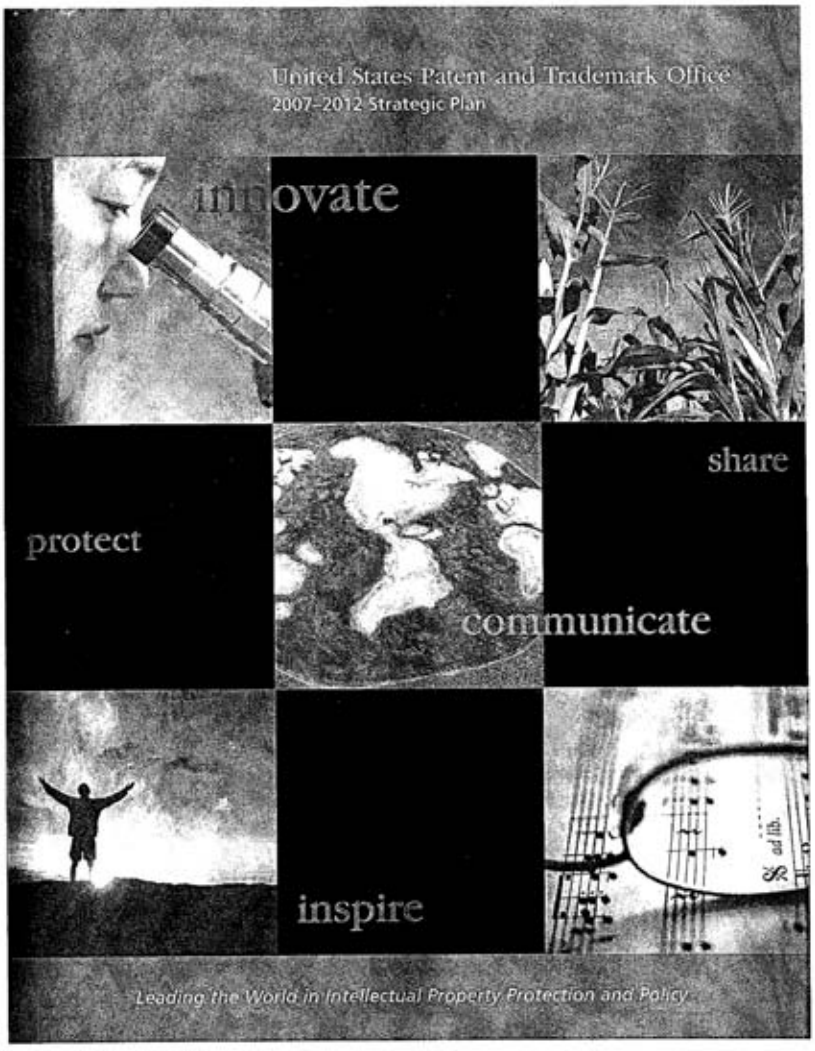
QUESTIONS FOR THE FINAL RECORD

ATTACHMENT 2

United States Patent and Trademark Office 2007 – 2012 Strategic Plan


United States Patent and Trademark Office
2007–2012 Strategic Plan
innovate
share
protect
communicate
inspire
Leading the World in Intellectual Property Protection and Policy

Our Challenges/Our Response

As represented by the model above, our strategic planning process encompasses end-to-end examination of all components of our core responsibilities.

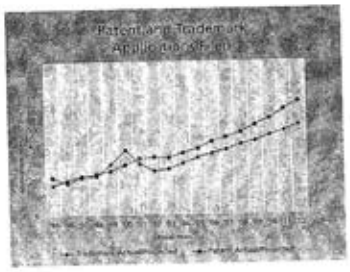
Innovation—both in the United States and throughout the world—is growing at a record pace. The United States is the fastest growing major industrialized economy in the world, with a Gross Domestic Product (GDP) value of about $12 trillion in 2005. GDP grew 3.2 percent in 2005, which is above average relative to annual rates since 2000. Research and development (R&D) expenditures are estimated to have increased by 4.7 percent in 2004, when adjusted for inflation. Since August 2003, more than 6.8 million jobs have been created—more jobs than in all the other major industrialized countries combined. Between October 2005 and October 2006, the U.S. economy grew 2.9 percent—faster than any other major industrialized country. And, as of October 2006, U. S. productivity has grown at an annual rate of three percent since the first quarter of 2001.

This growth makes the United States an attractive market for both domestic and foreign companies. Our stable economy, our commitments to the rule of law, our business values—and our strong IP system—combine to create the most favorable trade environment in the world. American innovators have consistently broken U.S. patent filing records—filing 218,472 patent applications in 2005 or 56 percent more than the number filed in 1995. Trademark applications filed by U.S. residents have followed a more circuitous trajectory in recent years, but the general trend from 1995 through 2005 is positive, with filings consistently growing every year after 2002 by an average rate of 8.1 percent.

The United States is not the only country experiencing dramatic economic growth and prosperity. A trend that we anticipate will grow—possibly at historic rates—is the large percentage of foreign applicants who file patent and trademark applications in the United States. A recent study conducted by WIPO noted that the United States, through the USPTO, receives more foreign patent applications than does any other patent office in the world—for example, 182,866 patent utility applications in 2005 or 107 percent more than in 1995.

For the past decade, patent application filings have consistently risen, sometimes at rates of 10 percent over the previous year. In fact, this strategic plan anticipates that patent application filings will continue to rise at the

rate of eight percent per year, through 2012. This growth is not a surprise, nor is it new. The various proposals the USPTO has put forward in the past, and most recently with draft proposed rules changes, have stemmed from a recognition of the need to handle growth. They have focused on encouraging more complete applications and urging "finality" to the patent process, with the objective of promoting certainty in a timely manner.

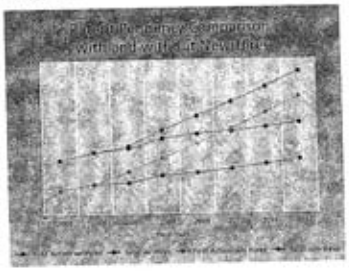


The chart above illustrates our planning assumptions with respect to projected filings of patent and trademark applications.

It is an unchallenged reality that the rate at which patent applications are being filed has increased beyond the rate at which the USPTO is presently able to examine them, resulting in an increasing backlog (cases that have not been examined). It is possible that this backlog could approach about 1.4 million by 2012—unless something is done.

It is fair to say that the USPTO's more recent patent pendency proposals have met with mixed, even negative, response. Many commentators recommend that the USPTO simply continue to hire patent examiners at record rates to ensure timely examination. Hiring is certainly an aspect of the ultimate answer to reducing pendency. Between 2005 and 2012, we will have hired over 9,000 new examiners.

A key question throughout the life of this strategic plan will continue to be, "How do we handle record growth in patent applications, consistent with our guiding principles of quality, timeliness, cost-effectiveness, and transparency?" We respectfully submit that hiring, while important, will not be the only answer to this critical question. As shown in the chart below, hiring will reduce the rate of increase in pendency time, but will not be sufficient to drive pendency time downward during the six years of this strategic plan.



Public confidence in the quality of our patent grants and trademark registrations is also a critical issue. Confidence is earned, and we do not take it for granted. We believe the essential components of quality are accuracy and consistency. We must ensure that allowed applications meet both statutory and regulatory standards, thus providing the certainty that enhances competition in the marketplace. We must not allow the need for timeliness to impact the requirement for quality.

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QUESTIONS FOR THE FINAL RECORD

ATTACHMENT 3

United States Patent and Trademark Office Fiscal 2009 Budget

UNITED STATES PATENT AND TRADEMARK OFFICE

FISCAL YEAR 2009 PRESIDENT'S BUDGET

February 2008

Qualitative Methodology

In addition to the two types of quantitative methods, a survey of domestic applicants is used to help forecast patent application filings. During the first quarter of calendar year 2007, the USPTO distributed questionnaires to 2,555 patent applicants, including U.S. large corporations, small businesses, universities and independent inventors identified by the USPTO and its contractor. The questionnaires were designed to obtain an indication of the applicants' future filing intentions. Survey forecasts have been found to be useful for intermediate-term forecasting or forecasts of application filings about 1.5 to 2.5 years in the future. The forecasts of domestic application filings from the survey are combined with a univariate model forecast of foreign application filings to obtain a forecast for total application filings. Based on the latest results, the average annual growth rate forecast is 5.0 percent through fiscal year 2009.

Forecasts

To develop forecasts for patent and trademark application filings through FY 2013, the USPTO considered forecasts from the models and the survey. In addition to the economic indicators previously discussed, patent applications filed at other IP offices are also considered. For access to the most timely overseas patent application filings data, the USPTO relies on its Trilateral Partners, the European Patent Office (EPO) and the Japan Patent Office (JPO). Annual patent application filings activities at these offices in calendar year 2006 were mixed; with EPO patent application filings increasing, but JPO patent application filings decreasing.

USPTO Application Filings Forecast

Taking into account the forecasts from the different models and methods, filing trends overseas, and the economic outlook, the following official forecasts presented in the table below for patent and trademark application filings have been established.

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Patent Application Filings	5.2%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Trademark Application Filings	11.2%	6.2%	6.7%	6.1%	6.1%	9.3%	6.7%

Patent application filings growth may be affected by the Agency's rule governing continuation practice.

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QUESTIONS FOR THE FINAL RECORD

ATTACHMENT 4

GAO Report – U.S. Patent and Trademark Office

Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog – GAO-07-1102

United States Government Accountability Office

GAO

Report to the Ranking Member, Committee on Oversight and Government Reform, House of Representatives

September 2007

U.S. PATENT AND TRADEMARK OFFICE

Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog

GAO-07-1102

organizational needs, base decisions on sources of information such as past workforce data, and include in its workforce planning process a workforce analysis system that identifies current and future losses due to attrition. We found that in identifying its hiring estimates, USPTO generally applies these principles because it makes decisions on the basis of trends in hiring, attrition, and total workforce data from recent years, and identifies current losses due to attrition when identifying its annual hiring estimates and estimates of attrition for the hiring year.

Although consistent with OPM's workforce strategies, USPTO's current approach is significantly different from the approach that the agency used prior to fiscal year 2002. At that time, the number of patent examiners USPTO wanted to hire was based on the number of patent applications the agency expected to receive in the hiring year, as well as on the anticipated patent application backlog at the beginning of the hiring year. According to USPTO officials, since fiscal year 2002, the agency has moved away from this approach because it realized that it could no longer supervise and train enough patent examiners to keep up with the increasing workload.

However, USPTO recognizes that it needs to increase its institutional capacity to hire more patent examiners, and in this regard is taking steps to increase its training and supervisory capacity. For example, to increase its training capacity, USPTO implemented an 8-month training program in fiscal year 2006 called the Patent Training Academy that will provide the agency a constant annual training capacity of 1,200 new patent examiners for each of the next 5 years. USPTO also believes that the academy may indirectly improve the agency's supervisory capacity because it will better prepare new patent examiners to start work in a technology center, and therefore they will need less supervision and on-the-job training. USPTO plans to monitor new patent examiners after they have graduated from the academy in order to determine if the agency can further use this approach to increase its institutional capacity and, therefore, its future annual hiring estimates.

Even with its increased hiring estimates of 1,200 patent examiners each year for the next 5 years, USPTO's patent application backlog will continue to grow, and is expected to increase to over 1.3 million at the end of fiscal year 2011. According to USPTO estimates, even if the agency were able to hire 2,000 patent examiners per year in fiscal year 2007 and each of the next 5 years, the backlog would continue to increase by about 260,000 applications to 953,643 at the end of fiscal year 2011. The agency has acknowledged that it cannot hire its way out of the backlog despite its

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ATTACHMENT 5

USPTO Will begin Study of Patent Examiners' Production Goals Study complement recommendation from GAO

October 04, 2007
#07-42

USPTO Will Begin Study of Patent Examiners' Production Goals
Study complements recommendation from GAO

The Commerce Department's United States Patent and Trademark Office (USPTO) today announced that, as part of its quality initiatives, it will review assumptions the agency uses to establish production goals for patent examiners. This announcement coincides with the release of the Government Accountability Office (GAO) report, "Hiring Efforts are not Sufficient to Reduce Patent Application Backlog." The report recommends that the USPTO "undertake a comprehensive evaluation of the assumptions that the agency uses to establish its productions goals." In its review, the USPTO will work with its examiners and user communities.

USPTO Director Jon Dudas praised the GAO report, stating "I am pleased that, after careful study, the GAO agrees with our assessment that hiring alone will not reduce the backlog of patent applications. By far, our most valuable resource is our employees. We believe that our 5-year strategic plan identifies initiatives that effectively protect innovation while promoting a quality workplace that attracts and retains employees. That is why many of our most current initiatives incentivize applicants and the public to provide the best information to patent examiners early in the examination process."

Focusing attention on the rapid changes the USPTO has faced, Director Dudas noted that "over the past decade, the USPTO workload has increased in size and complexity. In response, we have also implemented a long list of successful internal initiatives, from automating examiner search tools to hiring over 3,600 new examiners in the past three years. As a result, we have seen improvements in quality and production. A next logical step in bringing the USPTO fully into the 21st century is to reevaluate how these initiatives impact our goals."

The USPTO's review of assumptions underlying the current production standards will encourage a completely fresh look at production in a manner that will motivate employees, improve its work environment, and enhance the quality and efficiency of the patent examination process.

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QUESTIONS FOR THE FINAL RECORD

ATTACHMENT 6

United States Government Accountability Office

GAO

Report to the Ranking Member, Committee on Oversight and Government Reform, House of Representatives

September 2007

U.S. PATENT AND TRADEMARK OFFICE

Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog

GAO-07-1102

staff, thereby further reducing the overall productivity of the agency. Finally, these workforce losses affect the agency's supervisory capacity, because they reduce the pool of potential supervisory patent examiners for the future and therefore negatively affect USPTO's ability to increase its capacity and ultimately its hiring goals.

USPTO Management Links Attrition to Employees' Personal Reasons, while Patent Examiners Link It to the Agency's Production Goals

We found that USPTO management and patent examiners disagree significantly on the reasons for the attrition that is occurring at the agency. According to USPTO management, personal reasons are the primary reasons that cause patent examiners to leave the agency.[9] Some of these reasons include the following:

- The nature of the work at USPTO does not fit with the preferred working styles of some patent examiners such as those with engineering degrees who are looking for more "hands-on" experiences.
- Many patent examiners enter the workforce directly out of college and are looking to add USPTO to their résumés and move on to another job elsewhere rather than build a career at the agency, otherwise known as the "millennial problem."
- Patent examiners may choose to leave the area, as opposed to choosing to leave the agency, because their spouse transfers to a position outside of the Washington, D.C., area; the cost of living is too high; or the competition is too high for entry into the Washington, D.C., area graduate and postgraduate programs for those patent examiners who would like to pursue higher education.

USPTO management told us that the agency is taking steps to help address these issues through efforts such as developing a recruitment tool to better assess applicant compatibility with the agency's work environment; targeting midcareer professionals during the recruitment process; and considering the creation of offices located outside the Washington, D.C., area that would provide lower cost-of-living alternatives for employees.

While union officials agreed that in some cases personal reasons, such as the high cost of living in the Washington, D.C., area, may lead to attrition

[9]The term "primary reasons" in this report refers to the top three reasons patent examiners leave the agency provided by USPTO management, as well as the top three or more statistically significant reasons provided by patent examiners in our survey.

among patent examiners, they believe that attrition at USPTO can be primarily attributed to the unrealistic production goals that the agency sets for patent examiners.[25] Specifically, union officials explained that the production goals do not allow adequate time for patent examiners to do their work, especially in light of the increased scrutiny and quality initiatives implemented by management. They told us that the production goals have created a "sweat shop culture" within the agency that requires patent examiners to do more in less time and has therefore been a significant contributor to patent examiners' decisions to leave USPTO. To emphasize this concern, the union joined the Staff Union of the European Patent Office and other international patent examiner organizations in April 2007 to sign a letter declaring that the pressures on patent examiners around the world have reached such a level that in the absence of serious measures, intellectual property worldwide would be at risk. The letter recommended, among other things, an increase in the time patent examiners have to review patent applications.

According to our survey of patent examiners, 67 percent, regardless of their tenure with the agency, agree with union officials that the agency's production goals are among the primary reasons they would consider leaving USPTO. Moreover, we estimated that 62 percent of patent examiners are very dissatisfied or generally dissatisfied with the time allotted by USPTO to achieve their production goals. According to our survey, 50 percent of patent examiners are also very dissatisfied or generally dissatisfied with the way in which the agency's production goals are calculated, and a number of respondents noted that the production goals are outdated, have not changed in 30 years, and some technologies for which they evaluate applications had not even been discovered at the time the agency's production goals were set. When asked for suggestions on how to improve the production system, 59 percent of patent examiners felt that the system needs to be reevaluated, including altering the production goals to allow more time for patent examiners to conduct their reviews.

[25]Union officials also identified a recent decision by USPTO management to track when patent examiners enter and leave the building as another reason why patent examiners would choose to leave the agency. Union officials declined to rank the reasons they believe patent examiners leave USPTO, preferring instead that we rely on patent examiner survey results.

U.S. House of Representatives
Committee on the Judiciary
Washington, DC 20515–6216
One Hundred Tenth Congress

QUESTIONS FOR THE FINAL RECORD

ATTACHMENT 7

External Affairs Realignment

From: Hudson, Barry K.

Sent: Wednesday, August 15, 2007 5:23 PM

To: [redacted]

Subject: EA realignment

We are pleased to announce a realignment within the Office of External Affairs, effective immediately. The Office of External Affairs is an existing office reporting to the Administrator for External Affairs.

In furtherance of USPTO's strategic plan, this operational change will consolidate the current functions of the Office of External Affairs into business lines identified as the Office of Intellectual Property Policy and Enforcement and the Office of Governmental Affairs. All current functions of the Office of External Affairs will continue and will be expanded.

The realignment is a result of a five-year management review. It is designed to make the most efficient use of existing USPTO resources. In particular, consistent with the USPTO's Strategic Plan, the realignment devotes senior management attention to providing comprehensive intellectual-property and enforcement training and outreach. The change also promotes a more comprehensive government-affairs effort.

In terms of day-to-day operations, the realignment fosters a more efficient, effective and cohesive organization with more organizational support and resources for all substantive, administrative and support positions. Further, the realignment creates more flexibility to develop and tap the expertise of attorneys throughout the business area to better focus on intellectual property and enforcement issues.

Overall, the increased efficiencies and plans for additional resources will allow the USPTO to expand its highly successful efforts to grow international relationships, offer training and education to domestic and international officials, increase international enforcement of intellectual property rights, educate businesses and the public about intellectual property rights and work with the Congress and government agencies on intellectual property issues.

If you have any questions or require additional information, please contact Lois Boland, Director of the Office of Intellectual Property Policy and Enforcement, at (571) 272-9300 Barry Hudson Chief Financial Officer U.S. Patent & Trademark Office 571-272-9200

U.S. House of Representatives
Committee on the Judiciary
Washington, DC 20515–6216
One Hundred Tenth Congress

QUESTIONS FOR THE FINAL RECORD

ATTACHMENT 8

USPTO Weekly Update – 9.10.2007

USPTO Weekly Update
External Affairs Update - (09/10/2007)

While our focus usually is on the patent and trademark operational areas of the USPTO, we shouldn't forget that our office performs another important function for the U.S. – namely, providing IP policy guidance for the government, and IP training for the world. Some USPTO employees may already be familiar with the Office of External Affairs (EA), but we recently took the opportunity to interview EA's leaders to find out more.

Lois Boland, a former patent examiner and now a Director in the Office of External Affairs (EA), noted that EA has realigned its business operations to better fulfill USPTO's policy and training missions. According to Lois, after a five-year management review of the programs within EA, the former Office of Enforcement and Office of International Relations have consolidated into the Office of Intellectual Property Policy and Enforcement (OIPPE). OIPPE is responsible for domestic and international intellectual property policy and enforcement, including training and outreach. In addition, the Office of Congressional Relations has been renamed the Office of Governmental Affairs (OGA) to reflect its additional outreach responsibilities.

The new configuration of OIPPE "creates more flexibility to develop and tap the expertise of attorneys throughout the business area to focus on enforcement practice and policy as an integral aspect of all intellectual property disciplines," said Ms. Boland. "It also allows us to heavily emphasize education and outreach." Lois also noted that "everyone in OIPPE and OGA will continue their work to protect IP rights – both at home and abroad. Under this structure, our teams will be even more efficient and effective. In fact, the USPTO is considering expanding this important endeavor."

Bob Stoll, Dean for Training and Education, is another patent corps alum.. Mr. Stoll's title reflects the USPTO's strategic emphasis on international training and outreach. Bob is responsible for the comprehensive, multi-year strategic plan that encompasses all internationally focused intellectual property training and outreach. In addition, Mr. Stoll oversees the USPTO's Global Intellectual Property Academy (GIPA) which is located on the second floor of the Public Search Facility in the Madison Building. GIPA provides training for judges, prosecutors, examiners and other representatives from all around the world. It has even hosted Lucky and Flo, two Labrador retrievers specially trained to sniff out counterfeit DVDs. "The United States is already the respected world leader in intellectual property – from examination, to policy making, to enforcement," he said. "My job is to make sure the United States is recognized as the world's best place for IP training and expertise."

Expanded intellectual property education and outreach is a fundamental component of the USPTO's Strategic Plan, said Deputy Under Secretary Margaret Peterlin, who has responsibility for managing the Office of External Affairs. "Now, more than ever, the new global economy needs the leadership which the USPTO can provide. We have crucial IP experts – and we have an obligation to share the experience and expertise of USPTO employees with the world."

Jefferson Taylor, director of the newly named Office of Governmental Affairs, said that the office's new name more accurately reflects the scope of its work. "In addition to a focus on Congressional relations, we will also be working with governors, secretaries of states and others on policy issues," he said. "We want to interact more with other areas of government, including at the state and local levels." An emphasis on outreach to independent inventors is a high priority for the entire Office, including Governmental Affairs.

OIPPE's attorneys – many of whom have risen through the ranks of the patent and trademark corps – are assigned to IP subject-matter groups, including trade, enforcement, trademarks, patents, and copyrights. A specialized enforcement team consists of attorneys whose primary expertise is in customs and border issues, who work with other subject matter experts as needed. This new approach creates a strong USPTO "quick response" capability, with overall teams formed to address specific issues.

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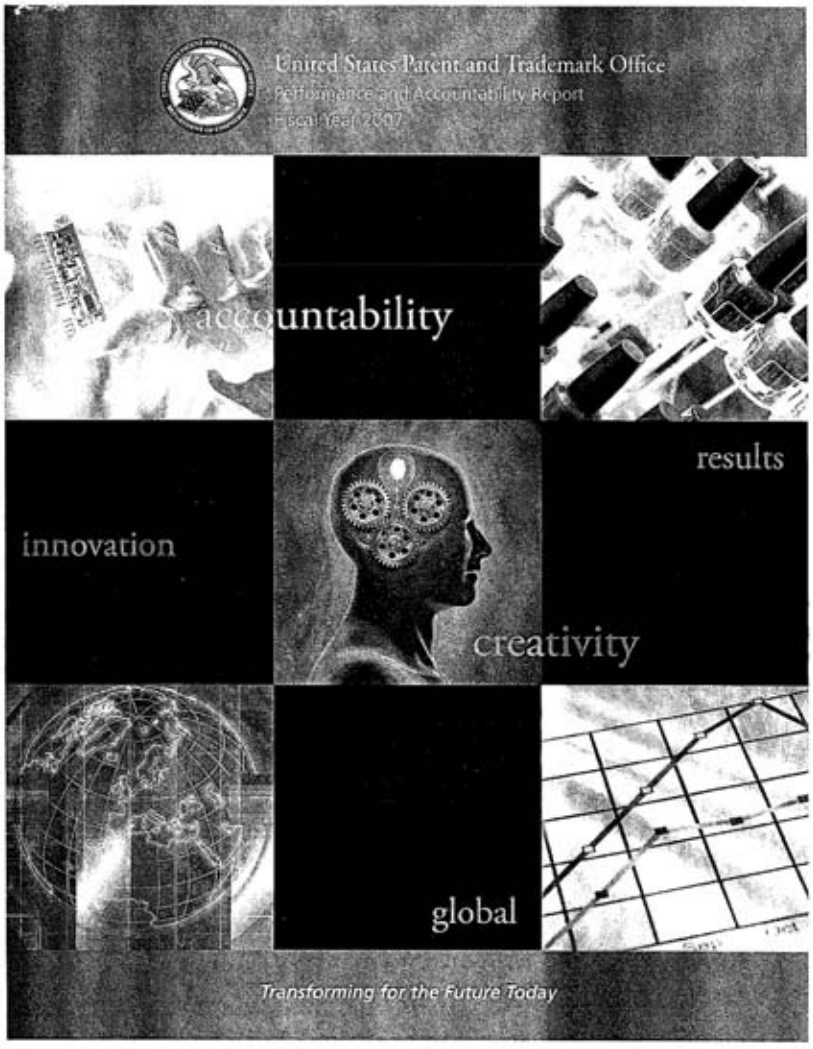
QUESTIONS FOR THE FINAL RECORD

ATTACHMENT 9

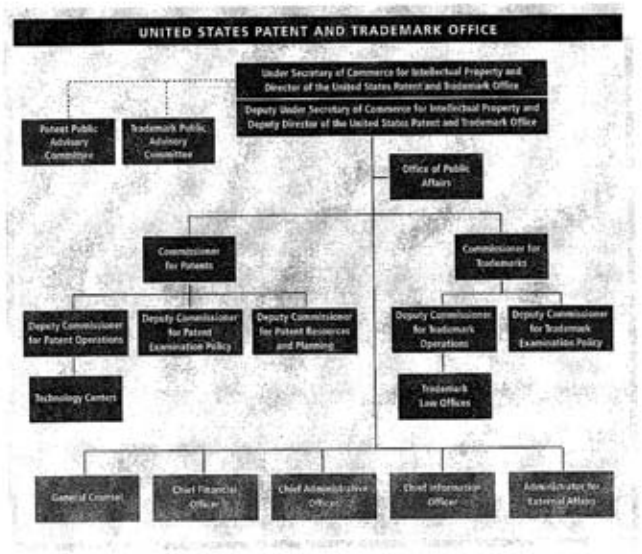
United States Patent and Trademark Office Reports –
Fiscal Year 2004, 2005, 2006, & 2007


United States Patent and Trademark Office
Performance and Accountability Report
Fiscal Year 2007
accountability
results
innovation
creativity
global
Transforming for the Future Today

Our Organization

The USPTO is an agency of the United States within the Department of Commerce (DOC). The Agency is led by the Under Secretary of Commerce for IP and Director of the USPTO who consults with the Patent Public Advisory Committee and the Trademark Public Advisory Committee.

The USPTO has two major business lines: Patents and Trademarks, as shown in the organization chart below. Headquartered in Alexandria, Virginia, the USPTO also has two storage facilities located in Virginia and Pennsylvania.



United States Patent and Trademark Office

PERFORMANCE AND ACCOUNTABILITY REPORT

FISCAL YEAR 2006

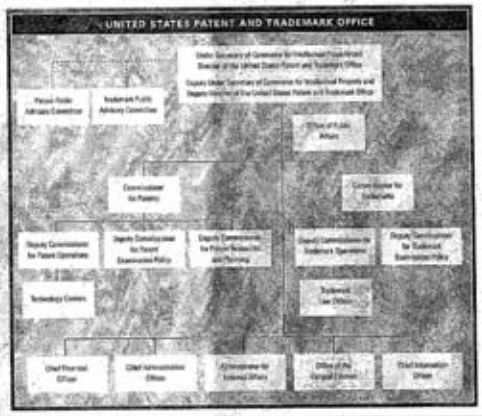
Our Record-Breaking Year |

LOCATION, ORGANIZATIONAL STRUCTURE, AND WORKFORCE

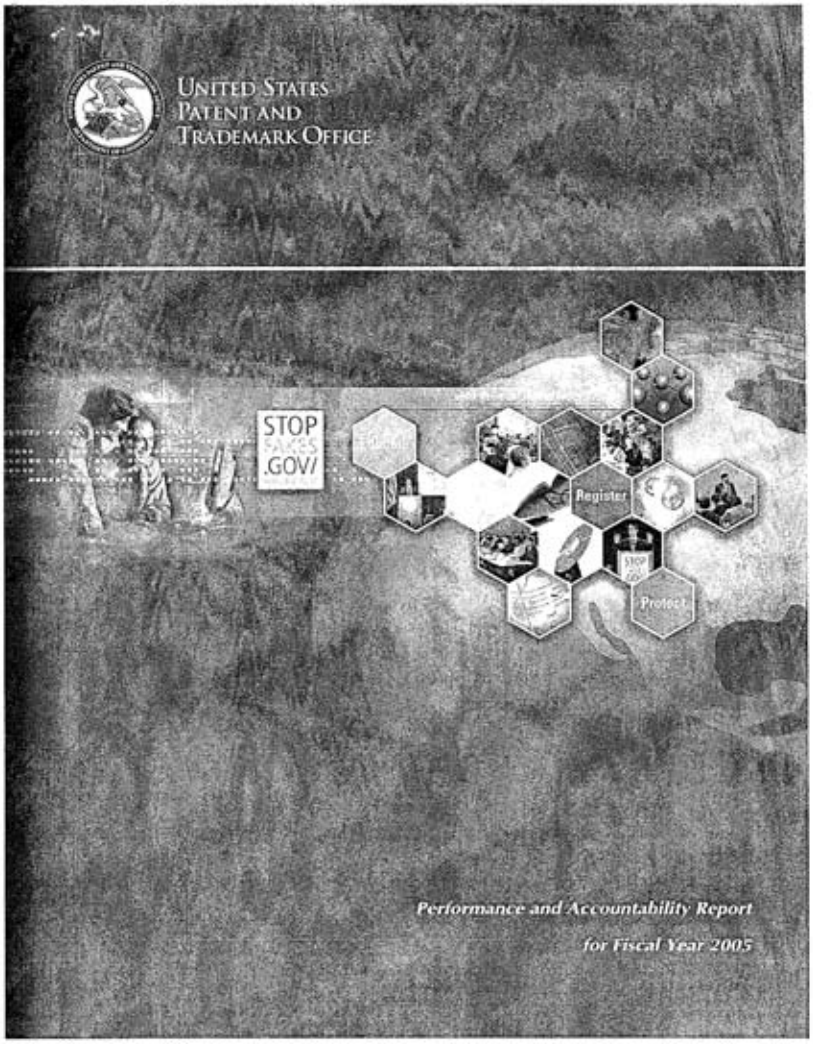
USPTO Director Jon Dudas congratulates Supervisory Patent Examiner Peter Paras, Jr. at an all-employee celebration of FY 2006, a record-breaking year.

The USPTO is an agency of the United States (U.S.) within the Department of Commerce (DOC). The USPTO is headquartered in Alexandria, Virginia and has two storage facilities located in Alexandria and Springfield, Virginia, as well as leased storage space in Boyers, Pennsylvania. At the end of FY 2006, the USPTO workforce was comprised of 8,189 federal employees, including 4,779 patent examiners and 413 trademark examining attorneys, and 3,817 contract employees.

The USPTO has evolved into a unique government agency. Since 1991—under the Omnibus Budget Reconciliation Act (OBRA) of 1990—the USPTO has received fees from users to fund its operations. The USPTO is led by the Under Secretary of Commerce for Intellectual Property and Director of the USPTO who consults with the Patent Public Advisory Committee and Trademark Public Advisory Committee. The USPTO has two major business lines – Patents and Trademarks – as shown in the following organization chart:



Fiscal year 2006 was a record-breaking year for the USPTO. For the third consecutive fiscal year, USPTO demonstrated consistent improvement in significant performance measures, including production and quality. In FY 2006, USPTO's employees led the agency to meet 92% of our Government Performance and Results Act of 1993 goals, and 94% of internal measured goals. USPTO is a performance-based organization – and we're proud that our emphasis on business-like metrics, goals, and an environment of accountability is leading us to continuous successes. Of course, given USPTO's responsibilities as a steward of the public trust, a business model has practical limits. While private businesses operate to maximize profits, the USPTO does not seek to profit maximization as, for example, by cutting unprofitable cost centers. We focus on responsible and efficient management of resources to ensure we achieve our most important goal: quality examination of patent and trademark applications. We are quality driven – not profit driven – and continue to use the best aspects of business models to provide outstanding patent and trademark examination, processing and services.

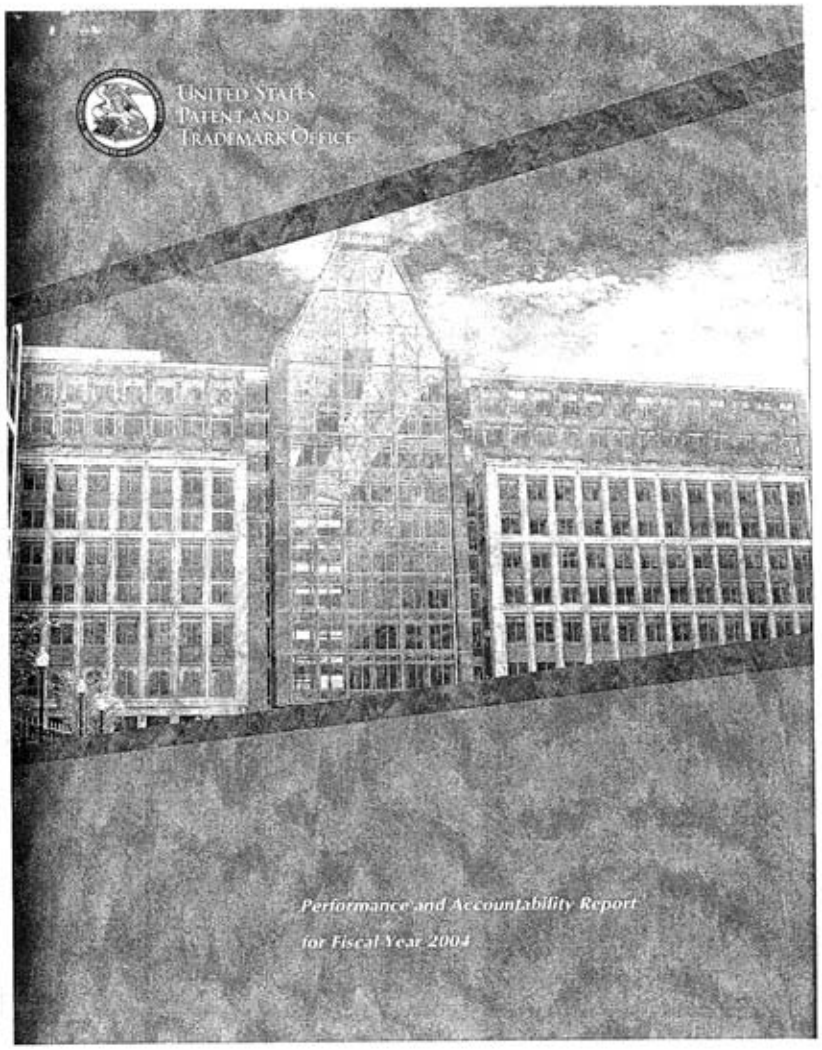

United States
Patent and
Trademark Office
STOP
.GOV
Register
Protect
Performance and Accountability Report
for Fiscal Year 2005

LOCATION, ORGANIZATIONAL STRUCTURE, AND WORKFORCE

The USPTO is an agency of the United States within Department of Commerce. In FY 2005, USPTO successfully completed its move to its new facility in Alexandria, Virginia. In addition, USPTO has two storage facilities in Alexandria and Springfield, Virginia, and leased storage space in Boyers, Pennsylvania. The USPTO workforce is comprised of 7,363 federal employees, including 4,268 patent examiners and 357 trademark examining attorneys, and 3,687 contract employees.

View of the USPTO headquarters from Dulany Gardens.

The USPTO has evolved into a unique government agency. Since 1991–under the Omnibus Budget Reconciliation Act (OBRA) of 1990–the USPTO has operated in much the same way as a private business, providing valued products and services to its customers in exchange for fees that are used to fund its operations. The USPTO is lead by the Under Secretary of Commerce for Intellectual Property and Director of the USPTO who consults with the Patent Public Advisory Committee and Trademark Public Advisory Committee. The USPTO has two major business lines – Patents and Trademarks – as shown in the following organization chart.


United States
Patent and
Trademark Office
Performance and Accountability Report
for Fiscal Year 2004

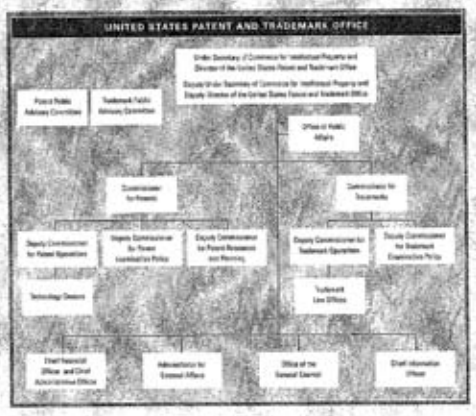
The strength and vitality of our economy depends directly on effective mechanisms that protect new ideas and investments in innovation and creativity. The continued demand for patents and trademarks underscores the ingenuity of American inventors and entrepreneurs. The USPTO is at the cutting edge of our nation's technological progress and achievement.

The primary services provided by the USPTO are examining patent and trademark applications and disseminating patent and trademark information. Through issuing patents, we encourage technological advancement by providing incentives to invent, invest in, and disclose new technology. Through registering trademarks, we assist businesses in protecting their investments, promoting quality goods and services, and safeguarding consumers against confusion and deception in the marketplace. By disseminating both patent and trademark information, we promote a global understanding of intellectual property protection and facilitate the development and sharing of new technologies worldwide.

LOCATION, ORGANIZATIONAL STRUCTURE, AND WORKFORCE

The USPTO is an agency of the United States within the Department of Commerce. The office currently occupies over 1,200,000 square feet in 15 buildings in the Crystal City neighborhood of Arlington, Virginia. The office recently accepted 2,000,000 square feet in four buildings at its new facility in Alexandria, Virginia. In addition, the USPTO has two storage facilities in Springfield and Alexandria, Virginia and leased storage space in Boyers, Pennsylvania. The USPTO workforce is comprised of 6,816 federal employees, including 3,253 patent examiners and 286 trademark examining attorneys. In addition, we have approximately 3,600 contract employees.

The USPTO has evolved into a unique government agency. Since 1991—under the Omnibus Budget Reconciliation Act (OBRA) of 1990—the USPTO has operated in much the same way as a private business, providing valued products and services to our customers in exchange for fees that are used to fund our operations. The powers and duties of the USPTO are vested in an Under Secretary of Commerce for Intellectual Property and Director of the USPTO who consults with the Patent Public Advisory Committee and Trademark Public Advisory Committee. The USPTO has two major business lines—Patents and Trademarks – as shown in the following organization chart:



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QUESTIONS FOR THE FINAL RECORD

ATTACHMENT 10

Daren Fonda, Patent Absurd, Time Magazine in Partnership with CNN, (April 2, 2006).

TIME IN PARTNERSHIP WITH CNN

Sunday, Apr. 02, 2006

Patently Absurd

By Daren Fonda

Cruise around eBay, and you may decide that auctions are too troublesome. If you gotta have that Balenciaga sweater, nothing beats the Buy It Now feature; simply meet the seller's price, and it's yours. Without that feature, in fact, eBay would make a lot less money. Fixed-price transactions accounted for about $14.6 billion in merchandise volume last year, a third of the total. So let's say you came up with that Buy It Now idea and filed for a patent. And let's say a jury concluded that eBay willfully infringed on your patent and owes you damages. Shoul a judge automatically order eBay to remove that feature? After all, it's your intellectual property, you have a business you would like to build, and eBay basically trespassed.

The question was debated before the Supreme Court last week in a high-profile patent case, one of several the Justices are hearing this term. The caseload reflects the court's mounting interest in patent wars, which seem to be producing lots of headlines lately. That would include the near shutdown of the popular BlackBerry device, owned by Research in Motion (RIM), of Waterloo, Ont., which had "CrackBerry" fans panicking. RIM coughed up $612.5 million to settle litigation brought by NTP Inc., despite the fact that the U.S. Patent and Trademark Office rejected all eight NTP patents that were the focus of the lawsuit. NTP is appealing the rejection, but RIM caved rather than face the potential of an injunction.

Patent lawsuits have soared over the past decade, up about 58% since 1995. The patent office is drowning in filings; one recent application is for a napkin band printed with advertising. The office is getting known as an easy grader, awarding patents too leniently, to such things as basic medical tests and "business methods" like one-click online shopping. That stifles innovation and blocks new products from the market, according to some experts. "There's a consensus in academia and the legal world that the patent system is seriously out of balance and needs reform," says economist Carl Shapiro of Berkeley's Haas School of Business.

eBay's fight against a Virginia company called MercExchange illustrates how small firms swat away at larger ones at great cost to both. In 2001 MercExchange founder Tom Woolston, a former military pilot and CIA network engineer, sued eBay, claiming that the company infringed on three patents he filed in the mid-'90s, including one that set out methods for fixed-price online auctions (the so-called Buy It Now patent). In 2003 a jury ruled in Woolston's favor and awarded $35 million in damages.

Then, while the case was winding through the appeals process, the patent office in 2005 issued "initial" rejections of all three patents. Woolston, who is appealing the rejections, says eBay's infringements and dominance of onlin auctions virtually killed off his auction site, MercExchange, and says nothing less than an injunction will satisfy him. "We want the injunction so eBay's power sellers come to our site," he maintains. You can imagine eBay's

view of that position. The case is so important that eBay has hired big-name lobbyists in Washington, such as the Ashcroft Group, a lobbying shop run by former U.S. Attorney General John Ashcroft. Juleanna Glover Weiss, an ex--press secretary for Vice President Dick Cheney, is registered as an eBay lobbyist on "patent reform."

RIM may have trumped eBay in terms of high-level access: it appears to have met with the patent office's general counsel, James Toupin, and another senior official, John Whealan. According to a document obtained through a Freedom of Information Act request and provided to TIME, RIM chairman and co-CEO Jim Balsillie was scheduled to meet with patent-office officials on Jan. 4, 2005, along with representatives from the U.S. Department of Commerce (such meetings are highly unusual). In February a Canadian government official contacted a patent-office lawyer to find out if the Canadian Patent Office should "exert an interest or pressure" on its American counterpart. That November Canada's Minister of Industry, David Emerson, wrote to U.S. Secretary of Commerce Carlos Gutierrez, urging that the patent office expedite the review of NTP's patents or at least lay out a timetable in public. "We knew nothing about these contacts and weren't given a chance to respond," says Kevin Anderson, a lawyer for NTP.

No wonder a MercExchange lawyer fumed in early March when the Buy It Now patent was reassigned to a new examiner after staff in the technology center had spent 21/2 years dealing with it. The new examiner rejected MercExchange's application after only a few days, although the shift may reflect the new way the patent office handles re-examinations in cases more than two years old, with an emphasis on speed.

Arcane as it may seem, the eBay case deals with the balance of power between patent holders and users, and corporate America is keenly interested in the verdict. Silicon Valley types from Yahoo! to Intel have lined up behind eBay, while more traditional companies such as General Electric (inventor Thomas Edison's outfit) and Procter & Gamble support MercExchange, along with the entire drug industry, whose business model hinges on patent protection.

At issue is whether judges should automatically issue injunctions against infringers, as they do now in most cases. eBay wants judges to have more discretion, which could weaken patent holders' bargaining power. "The only thing that will bring a major company to the table is that in the end they have to [negotiate]," says Nathan Myhrvold, former chief technology officer for Microsoft, who runs a patent-acquisition shop and knows a bit about how big companies wield power.

On the other side are those who argue that small-time patent holders with dodgy claims and no actual businesses are using the legal system to extract payments from firms with established operations and products--lurking like fairy-tale trolls under bridges, popping out to collect a toll. "The trolls are turning patents into lottery tickets instead of rewards for late nights in the lab," says Rob Merges, a Berkeley law professor backing eBay. Merges says semiconductors and software may be covered by hundreds of patents, each with distinct claims, yet it may take only one case of infringement for a judge to issue an injunction, compelling many companies to pay the trolls to go away. U.S. House Republican Lamar Smith, co-sponsor of a reform bill, wants to slow the litigation gravy train.

"We need a judicial system that does not reward people who file shaky claims on patents," he says.

Whatever the eBay verdict, the patent office looks overwhelmed. It received a stunning 409,532 applications in its 2005 fiscal year, up from around 126,000 in 1985. Examiners average just 19.7 hours per application. None of this is news to Jon Dudas, director of the office, who admits that his staff can't keep up. "It's not that we're taking longer," he says, "but the line just gets longer out the door." In January Dudas announced steps to streamline the process and hire more examiners.

That helps the bureaucracy, but it won't end the patent arms race. "Companies know that it's easier to get patents and that patent protection is more powerful than it was in the past," says Harvard Business School professor Josh Lerner. Microsoft alone filed 3,000 patents in 2004. Which is fine, say experts like Lerner. The problem is that companies also file patents defensively, to stymie competition. "There are large firms that used to be big innovators, but no more," he says. Those large firms, he says, aren't much different from small-time trolls.

Woolston, for his part, vows to fight eBay regardless of the Supreme Court verdict. One of his rejected patents was reinstated on appeal, he says, and he plans to sue eBay again. An eBay spokesman says the company has a workaround should Woolston get an injunction. Suffice it to say, this is one patent war that won't end soon.

With reporting by Julie Norwell/ New York, Eric Roston/ Washington

Click to Print

Find this article at:
http://www.time.com/time/magazine/article/0,9171,1179349,00.html

U.S. House of Representatives
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QUESTIONS FOR THE FINAL RECORD

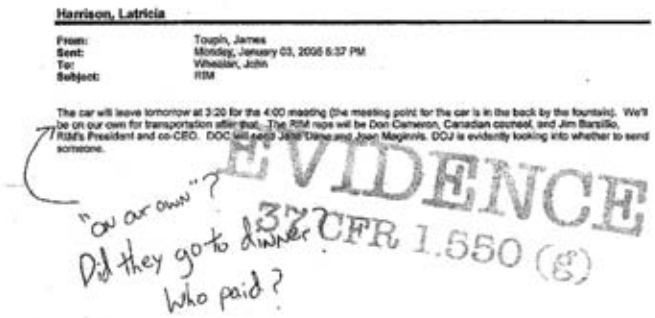
ATTACHMENT 11

Smoking Gun – E-Mail transmittal to James Toupin

Image:Smoking-Gun-Memo1.jpg

From Blackberrygate

- Image
- File history
- Links



Harrison, Latricia

From: Toupin, James
Sent: Monday, January 03, 2006 5:37 PM
To: Wheeler, John
Subject: RIM

The car will leave tomorrow at 3:20 for the 4:00 meeting (the meeting point for the car is in the back by the fountain). We'll be on our own for transportation after that. The RIM reps will be Don Cameron, Canadian counsel, and Jim Balsillie, RIM's President and co-CEO. DOC will send Jane Dana and Joan Maginnis. DOJ is evidently looking into whether to send someone.

"on our own"?
Did they go to dinner?
Who paid?

EVIDENCE
37 CFR 1.550 (8)

Smoking-Gun-Memo1.jpg (38KB, MIME type: image/jpeg)

File history

Legend: (cur) = this is the current file, (del) = delete this old version, (rev) = revert to this old version.
Click on date to see the file uploaded on that date.

- (del) (cur) 15:24, 6 June 2007 . . Sickened (Talk | contribs) . . 610×424 (38,006 bytes)

- Edit this file using an external application

  See the setup instructions for more information.

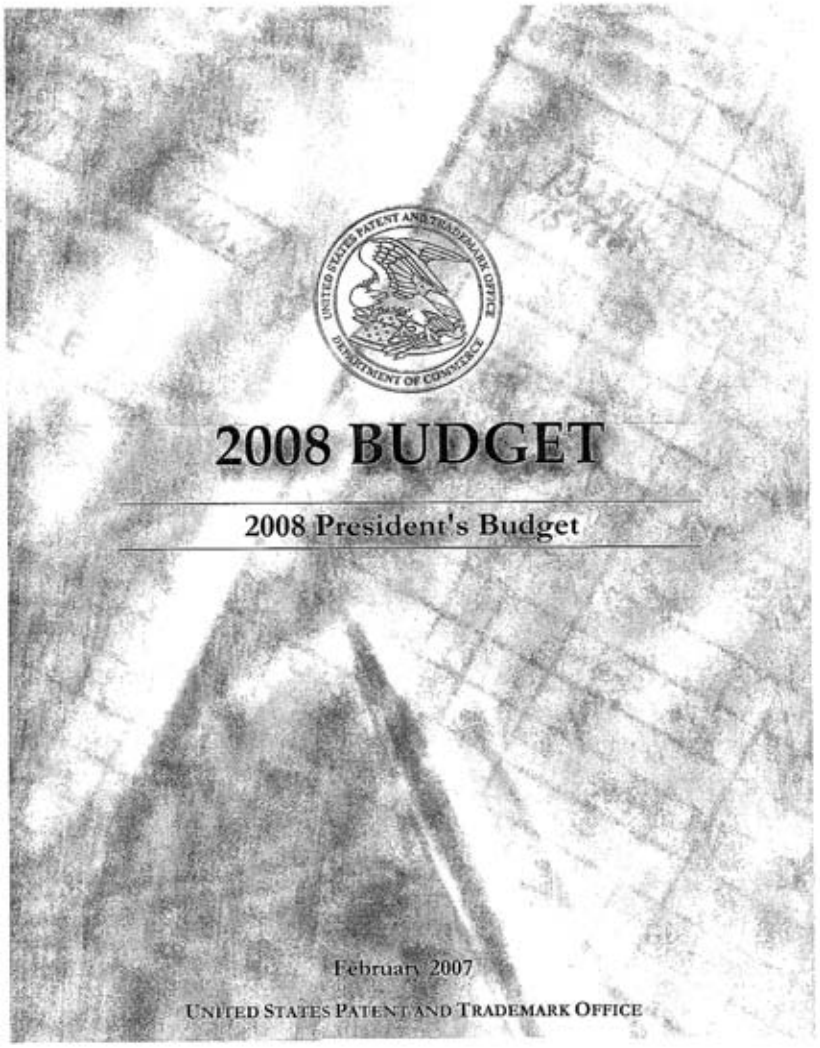
Links

U.S. House of Representatives
Committee on the Judiciary
Washington, DC 20515–6216
One Hundred Tenth Congress

QUESTIONS FOR THE FINAL RECORD

ATTACHMENT 12

2008 President's Budget


UNITED STATES PATENT AND TRADEMARK OFFICE
DEPARTMENT OF COMMERCE
2008 BUDGET
2008 President's Budget
February 2007
UNITED STATES PATENT AND TRADEMARK OFFICE

would be paid at the beginning of each year in conjunction with a four-year condition of employment agreement.

- Teams of technology center hiring coordinators and contractors with specialized human resources and recruiting skills would be formed to attract candidates for hard to fill examining positions. Their efforts would include attendance at job fairs where companies are downsizing engineering positions, as well as recruitment activities at universities and other locations.
- Recognizing that attracting the most qualified candidates for patent examiner positions is most effective through personal interaction with the potential examiners, highly skilled USPTO recruiters would educate candidates regarding IP while participating in college and regional job fairs and career fairs.

The Agency will address retention of valuable employees by providing bonus options, particularly to ensure retention of recently hired examiners with degrees in areas experiencing recruitment challenges and higher attrition rates. These examiners will be eligible for a special "retention bonus" of up to 10 percent of salary (at time of payment), for up to four years depending on the number of years of service. These payments would be tied to continuing employment agreements. Payment of an incentive bonus of up to 25 percent of salary could be offered to retain retirement eligible examiners and Patents Corps managers.

Dollars in thousands	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Amount	$15,397	$19,867	$23,114	$23,895	$24,223

Regional Offices

This initiative will explore options for establishing regional offices that would offer the same basic services as the USPTO headquarters in Alexandria. If proven feasible, these could expand the new hire candidate population by providing a worksite for potential employees who choose not to relocate to the east coast, and may also provide diverse employment pools that are not currently available. The current USPTO examiner salaries could make the Agency the employer-of-choice in many different regions of the country. A regional office concept could provide a traditional office environment for commuters as well as hoteling space for those who prefer to spend a majority of their time working from home, and allow for expansion of the examining corps without requiring additional space at the Alexandria headquarters. Having a presence in other regions of the country could also increase the opportunity for additional outreach activities and partnering with surrounding universities.

Dollars in thousands	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Amount	$214	$17,652	$5,267	$5,319	$5,372

Local Regional Offices

Establishment of local regional offices would provide examiners the option of working from locations other than their home or the Alexandria campus. This initiative proposes a pilot program of 100 participants in 2008. Assuming the pilot proves successful, 125 additional participants would be selected annually thereafter. Currently there are 14 General Services Administration (GSA) Telework centers located in popular suburban areas in the greater Washington Metropolitan area. Each of these centers provides office space with furniture, telephone service, computers, printers, and other typical office equipment. Space may be rented on a monthly basis and is accessible 24-hours a day, seven days a week.

Dollars in thousands	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Amount	$679	$1,528	$2,377	$3,226	$4,075

UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

Questions and Answers for the Record
United States Patent and Trademark Office Oversight Hearing
Before the Committee on the Judiciary
Subcommittee on Courts, the Internet, and Intellectual Property
February 27, 2008

Questions Submitted by Chairman Berman

1. Accurate projection of the number of patent applications that the USPTO will receive in coming years is critical to planning and resource allocation decisions being made today. Please describe in detail the methods the USPTO uses to project the number of future patent applications. What economic and legal factors, including anticipated rule changes, does the USPTO assume in developing its patent application projections? What kind of computer models and other tools do you employ to make such projections?

Answer: The USPTO uses quantitative methods, from straightforward time-series to very sophisticated forecasting models, along with qualitative methods, such as applicant surveys, discussions with the patent community, and collaboration with other patent offices to forecast patent application filings.

The forecasting models used by the USPTO extrapolate historical trends and utilize relevant indicators and factors including research and development (R&D) expenditures, gross domestic product (GDP) spending and venture capital (VC) investments. Correlations to the U.S. economic growth, as well as the global economy, are made with these indicators to include spending on technological innovation activities and investments leading to the commercialization of new products as indicators of projected patent applications to be filed at the USPTO. The USPTO uses software such as Statistical Analysis Software (SAS), Statistical and Forecast Pro to produce dozens of forecasts.

Nearly 50 percent of U.S. patent applications are filed by residents of foreign countries. The USPTO has partnered with the European Patent Office (EPO) and the Japan Patent Office (JPO) for many years to share research, models, trends, and results of national and international patent application forecasting efforts. Recently, the Korean Intellectual Property Office (KIPO) and the Chinese State Intellectual Property Office (SIPO) have contributed to this effort.

Legislative and economic factors, such as anticipated rule changes, Congressional legislation, and adjustments to fee rates are analyzed and any assumed applicant behavior adjustments are incorporated into patent application filing projections.

A team of cross-disciplinary experts within the USPTO arrives at a consensus application growth rate projection after carefully considering all models, methods, assumptions, and related information.

2. In the USPTO's FY2008 budget document, it was projected that the number of patent applications would grow by 8% over each of the next 5 years. (See attachment 1). This projection was supported by the FY2007-2012 Strategic Plan, which stated "the strategic plan anticipates that patent application filings will continue to rise at the rate of eight percent per year, through 2012. This growth is not a surprise, nor is it new." (See attachment 2). However, in the FY2009 budget document, it was projected that patent applications would grow by only 5% per year over the next 5 years. (See attachment 3). Please explain why the projected rise in patent applications was reduced in your FY2009 budget document.

Answer: The FY2008 budget and the FY2007-2012 Strategic Plan projected patent applications would grow by 8% each year. The Congressional Budget Office's economic forecast envisioned that recent growth would moderate. The USPTO's most recent patent application growth rates were 7%, 8% and 9% for FY 2004, FY 2005 and FY 2006, respectively. With CBO projections and application filing growth in past years, patent application filings were forecast to grow 8% each year.

The economic outlook changed for the FY2009 budget. The Congressional Budget Office's economic forecast had been revised downward. As contrasted with GDP growth of near 4% in 2006, estimates were less than 3% for the near term. In addition to the assumption of future economic growth at a slowed pace, the most recent year's patent application filing growth rate had decreased to 5%. Forecasting models indicated a more conservative growth rate of 5%, which the USPTO adopted in the FY2009 budget.

3. Also the FY2009 budget document mentioned that the projected 5% application growth rate "may be affected by the Agency's rule governing continuation practice," but didn't indicate how it would be affected. (See attachment 3). Please explain what was meant by this statement. Also, if the 5% application growth rate projection took into account assumptions or expectations that no longer apply, such as the implementation of the continuation and claims rules that were recently enjoined, please provide revised growth projections.

Answer: The USPTO, using historical and projected counts of continuation applications, assumed there would be a change in applicant behavior with implementation of the continuations rule. The limitations proposed in the continuations rule were assumed to result in a 1% reduction of applications received (approximately 5,000), beginning in FY2010. Although the reduced applications total assumed was not significant, the

statement intended to inform the audience that the proposed continuations rule was an element of forecasted future year patent applications.

The FY2009 budget assumed that the continuations and claims rules would not be implemented until FY2010. The 5% application growth rate projection for FY2009 was not influenced by the continuations and claims rules. The enjoinment of the rules could slightly increase the 5% application growth rate beginning in FY 2010, but assumptions and expectations related to the U.S. economy may have a stronger influence. Revised growth rates for FY2010 and future years have not yet been determined.

4. What role, if any, did the USPTO's Patent Public Advisory Committee have in determining and reviewing the agency's patent application filing projections in the FY2008 and FY2009 budget documents?

Answer: The Patent Public Advisory Committee, in its role of reviewing the policies, goals, performance, budget, and user fees of patent operations, and advising the Agency on these matters, provided advice on the patent application filing projections in the FY2008 and FY2009 budget documents.

5. Aside from implementing the recently enjoined continuation and claims rules, describe all the possible actions the USPTO or Congress can take that would impact patent pendency and the respective impact each action would have on reducing patent pendency? What combination of these actions would be needed to reduce patent pendency of the application growth rate was held constant at 5% over the next 10 years? What combination of these actions would be needed to reduce patent pendency if the application growth rate was held constant at 8% over the next 10 years? Please provide whatever computer or mathematical models used in answering these projections.

Answer: Suggestions for Effectively Reducing the Application Backlog:

1. Applicant Quality Submissions. Improve application quality and examination efficiency by requiring applicants to conduct a minimum search of the prior art and submit a relevancy analysis of pending claims in view of the references deemed most closely related to the claimed invention by applicant before examination on the merits is begun. This basic responsibility, if applied to pending, unexamined applications would significantly improve the Office's ability to reduce the current backlog of applications.

2. Worksharing. Pilot worksharing to determine the degree of reliability the search and examination results of foreign intellectual property offices have during examination at the USPTO. Assuming the pilots regarding search results are successful, utilize the searches of foreign intellectual property offices offset with increased examination goals. Similarly, determine if the examination results are of sufficient reliability to create streamlined examination procedures for applications that claim the benefit of prior applications filed in another office. This would be implemented with sufficient quality

assurance measures that the search results of a particular office were of sufficient quality. Implementation would occur following a transparent proof of concept.

3. Increase capacity.
    a. Telework /Virtual Offices. The concept of creating new satellite offices has been thoroughly discussed at the management level after a review of consulting reports. Because of the success of Telework programs in terms of increased productivity and improved employee morale, our decision was to expand Telework opportunities as opposed to pursuing a brick and mortar satellite office concept. A preferred approach is to work with the Congress on a pilot program allowing the USPTO to waive the requirement that our teleworkers check into headquarters every week to maintain their duty station and instead allow our teleworkers the flexibility of re-locating anywhere in the United States. This would be the start of a Nationwide Workforce for the USPTO and would help us recruit new employees and retain our current workforce.
    b. Work with universities to provide a "Certificate in Patent Examination" to ease transition to patent examination. The Office would benefit by reducing its training academy obligations and should be able to offer escalated promotion and hiring bonuses to new graduates with certificates.
    c. Utilize retirees (primary or equivalent to include patent practitioners) for (1) examination on per case or flat goal basis; (2) training; (3) review of junior examiners; or (4) work as roving expert/trainer.

4. Deferred examination. [Please see also the USPTO response to Rep. Issa's question on deferred examination.] Implement in a step-wise fashion:
    a. Provide an increased notice to file missing parts time period for response within our existing regulatory and statutory authority (e.g., increase from a two month extendible period to a 14-month extendible period);
    b. Obtain statutory authority to implement an examination fee through regulations based on windows of time after filing where the greatest fee is due on filing, or within one year of filing, and lesser fees for later submissions. Note: Third parties would be able to pay such fee.
    c. Increase provisional rights associated with publication and permit a provisional applicant to request publication. Increase the time period within which a nonprovisional application must be filed to claim benefit of the provisional application filing date to five years. As a result, many inventions would not be the subject of non-provisional applications because they would be recognized as obsolete before expiration of the five year period and therefore would not require examination resources.

Anticipated impact: While it is anticipated that each of the initiatives would improve the Office's ability to reduce the backlog, it is difficult to model the degree of impact with

precision because of the incremental nature of the changes and proofs of concept that the USPTO would prudently undergo before implementation of the initiatives.

6. According to the recent GAO report titled "*Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog*," the GAO found that the USPTO cannot hire enough patent examiners to reduce patent pendency in the next five years. It seems, however, that this projection is based on estimates provided by the USPTO. The report states "According to USPTO estimates, even if the agency were able to hire 2,000 patent examiners per year in fiscal year 2007 and each of the next five years, the backlog would continue to increase by about 260,000 applications to 953,643 at the end of fiscal year 2011." (See attachment 4). Please provide all data related to these "USPTO estimates," including mathematical models, and underlying statistics and assumptions such as examiner retention and productivity. Under these same assumptions, hypothetically, how many patent examiners would have to be hired in the next five years in order to reduce the patent backlog?

Answer: The GAO is referring to a Hiring Model prepared on October 23, 2006. See attachment. The USPTO obtains continuous feedback on both hiring and other factors, which helps us refine our projections over time. For example, as noted in our response to Question 1 above, application growth is not as high as was anticipated just a couple of year ago. Lower attrition rates – which we have seen in FY 2007 and anticipate in FY 2008 and beyond – are important data. Our current modeling (involving anticipated filings and the rate of examination based on current and projected numbers of patent examiners) reflects a reduction in the backlog of pending patent applications within five years.

As a practical matter, the USPTO is interested in a combination of prudent hiring, retaining its talented examiner corps, and leveraging telework flexibilities to avoid space-crunch issues. While it is theoretically possible to hire at some pace that eventually offers a "one application per examiner" rate of examination, this is not an efficient model. Most cost models for hiring employees tend to ignore the "fully burdened" costs of hiring a new employee, which involve the real dollar, materiel, and morale impacts on other parts of an enterprise.

Hiring models are important, but exclusive reliance on modeling can lead to false choices. For that reason, we rely on feedback from the examining corps to streamline patent examination. For example, updating our patent classification system (that is, how inventions are categorized - - similar in concept to the Dewey Decimal system for library classification) increases search efficiency and accuracy. In this effort, we are also working with international partners to improve search strategies. Hiring models don't capture the organizational impacts of large-scale hiring, and for this reason should not be used in isolation as forecasting tools. Nor do hiring models compare the hiring option with efficient, necessary process-improvements. The examination process has developed over time, the Agency is beginning to undertake systematic process reviews of examination elements to identify inconsistencies, inefficiencies, unnecessary steps, or identify quality improvements. Only with that additional information can an accurate algorithm of the necessary on-board count be evaluated.

We also appreciate that it is important to factor in the cost to the following USPTO business areas as they ensure that each new employee is fully served throughout their career. The hiring process begins with collaboration between, in this case, our Patents and Chief Administrative Officer (CAO) organizations, including recruitment trips, advertising, and calling applicants, among other things. The decision to extend an offer of employment is followed by an offer letter (CAO prepares, working with Patents), answering questions (CAO primarily), security checks (CAO) and ensuring that the newly hired person will receive pay timely (Office of the Chief Financial Officer (CFO)) Once the new employee is welcomed to the USPTO, they have many choices with respect to healthcare, the Thrift Savings Plan, insurance, and other administrative items, which need to be accurately and timely processed by our CAO and CFO organizations. In addition to the general personnel processing items of pay, insurance, etc., that are common to any Federal organization, we must ensure that the new employee has the proper work-station equipment (Office of the Chief Information Officer(OCIO)), that the equipment is accounted for (CAO working with the local business unit), that the employee has a telephone and computer account (CAO and OCIO), and that the equipment is maintained (OCIO). Simply implementing the good-housekeeping practice of upgrading computer equipment takes more human time as we have more employees, and accurately tracking all equipment obviously takes on complexity as one adds people to the system.

Doubling our workforce in a short period of time has also put some strain on facilities management. Again, we have very positive employees who enthusiastically embrace the flexibilities such as telework that reduce pressure on existing facilities. However, a reality of significant hiring efforts has been doubling of employees in offices and the need to procure additional space to provide the amount of preparation necessary to ensure that our examiners – and other employees – receive the training they need. And, as our CAO and CFO offices staff-up to meet the service needs of the USPTO, there are accompanying requirements for additional space to house their expanded operations.

Integral to our hiring and retention efforts – for all employees – is assessing our systems and processes to identify and remove inefficiencies. For example, in 2005, we realized that our existing intake process for finger-printing and giving badges to new employees simply didn't scale to timely provide service for over 100 new employees arriving at 8:00 a.m. on a Monday. Our CAO team met with Patents and other business units to quickly re-tool the process by permitting new hires to stop by in advance for finger-printing and picking up paperwork, thus reducing the pressure on our Security team - - and allowing us to process without having to hire additional employees to handle the upfront influx of new patent examiners who were steadily arriving every two weeks. This constant "process re-engineering" approach is crucial to ensuring that we provide services in the most efficient, cost-effective manner possible.

Retention Efforts: While we have just discussed all the challenges attendant to hiring significant numbers of employees over a sustained period, it must be emphasized that the USPTO has achieved notable successes in patent examiner retention efforts. In addition

to simply being the right thing to do, retaining our employees is the most cost-effective way to ensure long-term stability and the ability to timely review a growing number of complex patent applications. The USPTO's FY 2007 attrition rate was 8.5% -- lower than comparable industry averages and a significant improvement over comparable past years. It is a USPTO priority to offer all employees the kind of workplace, benefits, and opportunities that will keep those employees onboard for years to come. The USPTO has implemented, and will continue to improve and expand, a variety of initiatives that support and promote its image as an "employer of choice." The initiatives include:

Telework Efforts: Telework opportunities; recruitment/retention incentives for patent examiners; special pay rate (above GS levels) and production and quality-based bonuses for patent examiners; flexible, family-friendly working schedules; a voluntary flat goal pilot program for patent examiners that offers increased bonuses and flexibility; reimbursement to patent examiners for advanced technical education and law school; increased training opportunities tailored to examiners' needs; increased and better communication with employees through management and employee training.

Other Flexibilities That Improve Retention, Morale, and Productivity: During FY 2007 the USPTO achieved productivity gains resulting from various programs, including: Hoteling program, laptop program, and flat goal pilot.

- Patent Hoteling Program -- In 2006, the USPTO implemented the Patents Hoteling Program (PHP) which maximizes examiner opportunities for telework. PHP examiners work one day per week at the Alexandria campus and work the remainder of their time from home. PHP examiners have a USPTO-issued computer, monitor and printer in their home office that allows them remote access to all USPTO automated systems and collaboration tools. Over 1,000 examiners have joined PHP, and we continue to add 500 examiners per year. Survey results indicate that 98% of participants were satisfied with the program and 87% of participants reported that the program has positively impacted their willingness to extend their years of service with the USPTO. Further, 56% stated that their productivity increased. The goal of PHP is to change the boundaries of the old workplace patterns allowing for decreased commute time, a more efficient use of office space, and even a more balanced lifestyle for our employees. This translates into increased employee productivity and satisfaction, as well as higher employee retention. We hope to create a workplace where an examiner can be successful from anywhere in the nation.

- Patent Examiner Laptop Program (PELP) -- In 2007, the USPTO issued laptop computers that allowed access to all USPTO automated systems to those examiners who wished to work from home. The voluntary program, still on-going, provides flexibility of when and where overtime work is performed. This increase in overtime work translates to an increase in the number of applications each examiner completes. 2,244 examiners were participating at the end of 2007. This initiative also allows examiners in the telework program (a pre-existing one day per week work-at-home program with no automated support) to increase the effectiveness of their work from home.

- Flat Goal Pilot -- Initiated in April of 2007, the voluntary Flat Goal Pilot Program is a test program to determine if a concept that has already generated success in the Trademark Operations will translate well into a similar production environment in Patents.

Inspired both by the Trademark Operations' success, and by the GAO's review at the time, suggesting that the USPTO re-assess some of the assumptions underlying its production goals, the USPTO undertook a one-year pilot program. The 173 examiners who volunteered for the one-year pilot (April 2007 – April 2008) are given flexibility in choosing when and how to do their work, and may earn larger, quarterly bonuses for every application examined above a particular target goal rather than earning bonuses on an annual basis. Examiners who participate are assigned a target at the beginning of each quarter rather than tracking their use of time throughout the quarters of the fiscal year. Preliminary results indicate not only an increase in production by five-percent, but also, well over 80% of participants reported an improvement in morale and satisfaction with the program as a whole. Further, 86 % of pilot participants said they worked more efficiently, and 77.7% would recommend the program to other examiners. These results may help USPTO reassess some of the assumptions underlying the examiner production goals.

7. After release of the above mentioned GAO report, the USPTO issued a press release on October 4, 2007 that stated the USPTO would "review assumptions the agency uses to establish production goals for patent examiners." (See attachment 5). Then, before the Subcommittee, Director Dudas confirmed that the USPTO has begun to study patent examiner production goals. Please provide details on the methodology of the study and personnel conducting it. What is the current progress of the study and when can Congress expect the study to be completed? To what extent is the Patent Office Professional Organization and the Patent Public Advisory Committee involved in this study?

Answer: In 2004 and 2007, the USPTO received reports from the Commerce OIG and the GAO, respectively, which made opposing recommendations about the patent examiner production system. Based largely on the percentage of organizational units that reached their targets and the percentage of examiners who received performance awards, the Commerce OIG seemed to conclude that the production goals are set too low. Based largely on a survey related to the hypothetical question why an examiner might leave, the GAO seemed to conclude that the production goals are set too high.

Neither study analyzed the specifics of the production system. More important, neither study recognized that with nearly 6,000 talented scientists and engineers, there is no "average patent examiner." The key to establishing the optimal production goals is to be sure that the system allows for maximum flexibility and maximum opportunity for each and every examiner. Examiners are intelligent and hard working. We must ensure the production system allows them to appropriately choose their level of work and bonuses.

Production beyond 95% by any examiner in FY 2007 was sufficient for a fully successful rating on production. Out of 4,172 examiners with over one year of service, only 8.1% did not meet that goal. 91.9 percent did 95% or more. 74.7 percent did 100% of goal or more. 50.5% did 110 % of goal or more. 16.9% did 120% or more of goal. 7.3 % did 130% of goal or more. From September 2007 through late November 2007, the USPTO began analyzing data that lies at the heart of the GAO's September 2007 report. On December 4, 2007, the USPTO provided an interim update on its follow-up to GAO's study to the House Committee on Oversight and Government Reform. *See Attached USPTO Letter of December 4, 2007.*

To summarize the findings included in our letter of December 4, 2007, the following are facts regarding USPTO patent examiner attrition:

- **Attrition Among Patent Examiners is Lower at the USPTO than in the Federal workforce as a whole.** The attrition rate for Patent Examiners in FY 2007 is 8.5 percent which is lower than the attrition rate for Federal workers as determined by OPM(8.9%)[1] and BLS(9.2%)[2]in the same time period.

  Interestingly, while different sources of attrition or labor turnover data differ on actual percentages, the USPTO's attrition rate compares favorably. For example, the U.S. Department of Labor's Bureau of Labor Statistics (BLS) identifies – among other statistics – the total annual percent of Federal government separations. For calendar years 2001 – 2007, the annual Federal government quit rate varied from a low of 6.0% (2004) to a high of 10.7% (2006). See http://data.bls.gov (with search in the "Job Openings and Labor Turnover Survey Statistics" (JOLTs) database for "Total Quit Rate, Government.")

  The salient point is, while the USPTO does indeed have turnover in its patent-examiner ranks - - which turnover the USPTO wants to minimize - - it is somewhat misleading to characterize the USPTO's attrition rate as out of proportion with that experienced by the Federal government as a whole, and certainly as compared with the private sector. Further, given the differences in the way statistical entities collect and characterize turnover data, it is possible to have varying independent attrition numbers apply to a single agency, such as the USPTO.

  - **Recruitment/retention bonuses have reduced attrition during the first year.** During FY 07, examiners who received recruitment/retention bonuses left the USPTO at a rate of 9.6%, less than half the historical average of 19.9%. (See chart below).

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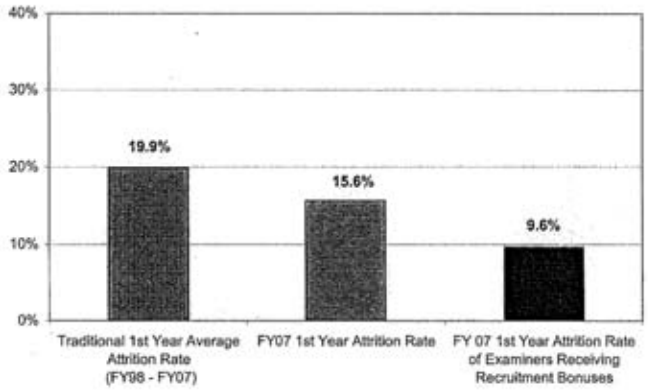
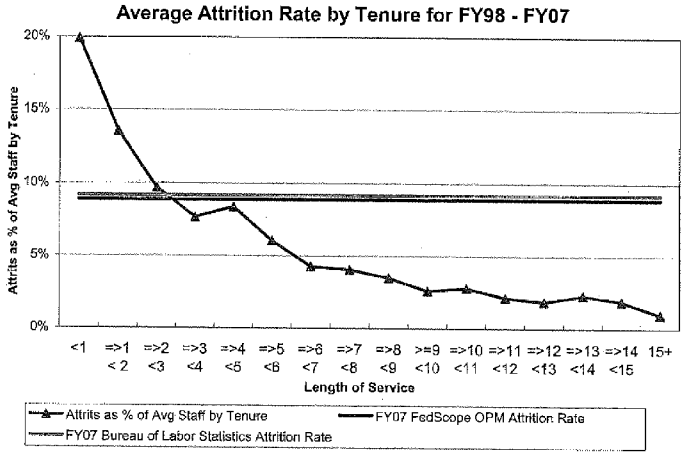
1 Data source: FedScope from the Office of Personnel Management, Civilian Personnel Data File (CPDF) which is accessed via the OPM website. The data is from the September 2007 data file which provided the entire Fiscal Year 2007 government employment and attrition statistics

2 See http://data.bls.gov

Attrition Rates of USPTO First Year Examiners



- **Beyond the first three years of service, the USPTO has low attrition.** The average attrition rate for USPTO patent examiners with 0-3 years experience is 15.5%. The average attrition rate for USPTO patent examiners with 3-30 years experience is 3.95%.



- **Attrition in the early years is substantially lower at the USPTO than at similarly situated entities.** The attrition rate of examiners with 3 or less years of service, though measurably higher than the rest of the patent corps, appears to be well below the attrition rate experienced by similarly situated entities hiring entry level college graduates in a year.[3]

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[3] Business Week, "*50 Best Places to Launch a Career*," September 18, 2006.

["***Given the country's demographics, some accommodation is inevitable. Entry-level hiring is expected to surge in 2007 by more than 17%, the fourth consecutive double-digit increase, according to the National Association of Colleges & Employers (NACE). And this could be only the beginning. By 2010, as the exodus of baby boomers from the workforce accelerates, census data suggest, two employees will be leaving for every new hire entering, and new college grads will be a precious commodity.***

If recruiting is employers' first hurdle, retention is by far the highest. Those employers who provided the data reported that more than one-third of their new hires bolted within three years. And replacing them isn't cheap. Training costs averaged nearly $10,000 a head, which can add up quickly when you're hiring more than 1,000 college grads each year, as more than one-third of the ranked employers do. The main reason young employees are heading for the exits, oddly enough, is the very thing boomers thrived on: the perpetual work day.***"]

See also, Business Week, "*Best Places to Launch a Career*," September 13, 2007 ["***Boeing Co. (BA) (No. 14) is starting to move in that direction. The aerospace giant has one of the lowest retention rates in its industry (59%), and one way it hopes to improve upon this is by teaching managers how to deliver criticism—harsh, if necessary—along with praise.***"]

- **Higher production requirements do not necessarily translate to higher attrition.** Approximately 70% of all work in FY 2007 was done by examiners with 3 or more years of experience, with an average attrition rate of 3.95%. Examiners with three or more years of experience tend to have the highest production goals. This could suggest that other factors, such as work environment and the type of work done by patent examiners, influences attrition more than production goals.

Study of Attrition Data

As noted earlier, the USPTO agrees with the GAO that hiring alone is insufficient to address the backlog of unexamined applications. In looking further, the GAO determined that production goals (the amount of work a patent examiner is required to complete in a given time period) were undermining retention efforts and leading to very high attrition. The GAO recommended that the USPTO undertake a comprehensive evaluation of the assumptions used to establish patent examiner production goals and revise those assumptions as appropriate. Implicit in the recommendation to review the assumptions underlying the production goals, was the GAO's suggestion that production goals be reduced.[4]

Because the GAO report pointed to high attrition (suggesting difficult-to-meet production goals as the root cause of high attrition), the USPTO determined that it must have accurate attrition data. The result of this initial look at attrition was the December 4, 2007, response to the House Committee on Oversight and Government Reform, detailing our methodology and findings up to that point. Keeping in mind the purpose of the study and the context of the GAO's recommendation, the USPTO believed that a rigorous analytic approach required understanding of its attrition data.

USPTO will obtain an independent review of the assumptions used to establish production goals from a professional entity with demonstrated extensive working knowledge, organizational experience, and analytical expertise assessing practices in large scale production environments to perform an assessment of the current production goal system and provide recommendations regarding process improvements.

Office of Personnel Management sent several vendors a Statement of Objectives (SOO) in April 2008 requesting a proposal/presentation. Once the presentations have been completed, a vendor will be selected to perform the assessment. The results of the assessment will be shared broadly, and with the Patent Office Professional Organization and the Patent Public Advisory Committee and request their feedback. USPTO analysis of the results will be provided to the Committee by the end of calendar year 2008.

[4] As is demonstrated later in this response, collection of more data, together with deeper analysis, suggests that lowering production standards is not the answer to examiner retention – because it is not the root cause of attrition. We have found that increasing opportunities and flexibility – in essence, creating a nicer work environment, not a less rigorous one – are the keys to both increased employee morale and higher retention.

In addition to the data and analysis, which will result from this independent study, we will include our assessment of the year-long "Flat Goal" pilot (initiated as part of early feedback from the GAO and following the success of our Trademark Operations in implementing a flat-goal system). Preliminary results indicate not only an increase in production by 5% , but also, well over 80% of participants reported an improvement in morale and satisfaction with the program as a whole. Further, 86 percent of pilot participants said they worked more efficiently, and 77.7% would recommend the program to other examiners.

8. According to the above-mentioned GAO report, 67% of patent examiners feel "that the [USPTO's] production goals are among the primary reasons they would consider leaving the USPTO." This statistic held true "regardless of their tenure". The GAO also reported the USPTO management felt that patent examiners primarily left the USPTO due to personal reasons. (See attachment 6). And, according to Director Dudas' testimony, exit interviews of employees who had been with the USPTO for 3 to 10 years showed that they left because of "supervisor issues or management issues," and that no interviewees in this category said that they left because of the nature of the work (i.e. production goals). What may account for the discrepancy between what USPTO management believes are the reasons patent examiners leave the agency and the GAO's survey results? What percentage of people who left the agency after 3 to 10 years actually participated in the exit interviews Director Dudas cited? Are there any distinguishing characteristics of these people that would set them apart from those who didn't participate in the exit interviews (i.e. disproportionately high production performance relative to peers)?

Answer: As noted, USPTO management conducts exit surveys with employees as they actually leave employment at the USPTO. Of the 125 patent examiners with between 3 and 10 years of service who left the USPTO during fiscal 2007, roughly 14% participated in the exit survey. Due to the need to ensure respondent confidentiality, individuals who participate in the survey are not required to provide their name. Therefore, it is impossible to relate exit survey responses with individual employee performance data. However, as mentioned before, the highest attrition rates tend to be for people with the lowest production goals. This suggests that production goals are not the lone influence on attrition rates.

The GAO Report asked employees who have not left, and are currently working at the USPTO the hypothetical question "if they were to leave" what would be their primary reason for leaving? While the GAO used its survey instrument to posit why employees might consider leaving, the USPTO conducts actual exit surveys with employees as they leave service. The USPTO approach is a more reliable and informative business practice compared to hypothetical inquiries.

During FY 2007, 27% of the 587 employees exiting the USPTO completed a voluntary exit survey – well above the typical exit survey rate of 17.5%. Of those completing the survey, 41% of employees with less than one year of service cited the nature of the work as the primary reason for leaving. Twenty-one percent (21%) of employees with three or less years of service cited the nature of the work as their primary reason for leaving. No

employees who left the USPTO after working here for 3 – 10 years indicated that the nature of the work was the primary reason for leaving.

Reasons for Leaving: All Respondents	% Citing as Reason for Leaving**	% Citing as #1 Reason for Leaving
Nature of Work	**59%**	**20%**
USPTO's Culture/Environment	37%	5%
Work/Life Balance	34%	13%
Personal Circumstances	33%	19%
Management	29%	12%
Career Advancement/Development	28%	7%
Career Change	20%	8%
Compensation/Benefits/	19%	5%
Retirement	9%	7%

** Because respondents may give more than one reason, percentages add up to more than 100%

Primary Reasons for Leaving by Tenure:

- < 1 Year = Nature of the work (41%)
- 1-3 Years = Personal reasons (27%)
- 3-10 Years = Management (23%)
- >10 Years = Retirement (47%)

Nature of the Work as a Primary Reason for Leaving the USPTO:

- **< 1 Year**: Attrition is the highest within the first year of employment.
- **41%** of employees that left within the first year indicated the nature of the work as their primary reason for leaving.

- **1-3 Years: 21%** cited the nature of the work as their primary reason for leaving.

- **No employees (0%)** who left the USPTO after working here for **3-10 years** indicated that the nature of work was the primary reason for leaving the USPTO.

- **Six percent (6%)** of employees with 10+ years of service indicated that the nature of the work was the primary reason for leaving the USPTO.

Employees who have been with the USPTO 3 or more years represent 49% of our staff, and complete 70% of the work. However, the "nature of the work" is not their primary reason for leaving service.

9. According to the language of the 2006 Science, State, Justice, Commerce Appropriations Act, before the USPTO can reprogram appropriated funds, it must notify the appropriations committees of both houses of Congress 15 days prior to any such reprogramming. For purposes of the Act, reprogramming includes eliminating a program, project or activity and reorganizing or renaming offices. Was the USPTO action that created the Office of Enforcement considered a reprogramming? If so, did the USPTO notify Congress pursuant to its statutory obligations? If so, please provide a copy of the notification you sent to Congress.

Answer: The USPTO action that created the Office of Enforcement was a reprogramming, and Congress was notified. A copy of the notification is attached.

10. According to the Department of Commerce's Department Administrative Order (DAO) 203-13, a reorganization includes "the establishment, consolidation, abolishment or other significant change affecting an organizational unit's status, configuration, or mission, or the authority and duties of its management and staff." The DAO goes on to say that a reorganization is generally considered a reprogramming that requires both Congressional and Department notification. Is the USPTO subject to this and other DAOs issued by the Department of Commerce? Assuming the USPTO is subject to this DAO, when the Office of Enforcement was created, was the action creating it determined to be a reorganization? If so, please provide a copy of the notification you sent to Congress.

Answer: Pursuant to the American Inventors Protection Act, (Public Law 106-113), the USPTO retains the responsibility for decisions regarding the management and administration of its operations and exercises independent control of its budget allocations and expenditures, personnel decisions and processes, procurements, and other administrative and management functions in accordance with applicable law. The USPTO has the authority to establish its own administrative orders and is not governed by DAO 203-13. In accordance with the Department of Commerce Department Organization Order (DOO) 10-14, the Under Secretary shall exercise the responsibilities relating to USPTO operations and functions including developing and issuing agency administrative orders, policies, standards and procedures for administrative functions in USPTO; the USPTO may otherwise promulgate rules relating to agency management or personnel, agency organization, agency procedures or practices, or public property, benefits, or contracts without further review.

Furthermore, Department of Commerce's DOO for USPTO 30-3, section 2.01 states, "The organizational structure of USPTO is independently established by the Under Secretary except as provided by statute, including reprogramming requirements in appropriations Acts."

The USPTO action that created the Office of Enforcement was considered a reprogramming and Congress was notified. A copy of the notification is attached.

11. In Director Dudas' testimony before the Subcommittee, he termed the action that eliminated the Office of Enforcement a "realignment." What criteria do you apply to classify an action as a "realignment" instead of a reprogramming as defined in the appropriations act or a reorganization as defined in DAO 203-13?

Answer: Every change to the USPTO organizational structure goes through a rigorous review process to determine whether the action should be considered a reorganization or realignment. In order to complete a change to the organizational structure, the requesting program office must provide the Office of the Chief Financial Officer with the following material to aid in the realignment/reorganization determination: a narrative justification, a modified Agency Organizational Order (if necessary), current and proposed organization charts, an organizational code crosswalk down to the lowest level, and an employee crosswalk.

The documents are then analyzed and compared to the criteria contained in Congressional reprogramming language provisions and USPTO guidance similar to DAO 203-13. To be classified as a reorganization in accordance with Congressional reprogramming language and our AAO, a reorganization would occur when new programs/commissions are created, or when existing programs are substantially augmented; programs, projects or activities are deleted; projects or activities have increased funding that have been denied or restricted by Congress; the physical relation of offices or employees has significantly changed; or the activity/function performed by Federal employees has been contracted out or privatized.

The changes made in the Office of External Affairs did not trigger any of the above criteria. All functions were continued and no programs, projects, or activities were deleted nor did the responsibilities, duties, authorities and mission objectives change.

12. What other actions has the USPTO taken over the last 7 years that have also been or can be described as a "realignment"? Please list these actions and provide a detailed description of the nature and justification for each so-called realignment.

Answer: The USPTO has undertaken a number of realignments over the last few years as indicated below.

Office of Corporate Planning

The Office of Corporate Planning (OCP) has enterprise-wide functional responsibilities including: strategic planning, budget formulation and performance management; budget execution; and forecasting and analysis of fee collections and Patent/Trademark workloads. Division directors are responsible for each of the functional areas to provide leadership and management, as well as technical skill and knowledge. The duties and responsibilities of the three functional areas were realigned into divisions. The first division, Budget Formulation and Performance Management, is responsible for the USPTO Strategic Plan, budget submissions, strategic initiative tracking and performance reporting, as well as Congressional inquiries. The second division, Budget Execution, is

responsible for monitoring and analyzing current year budgets, external audits and approval of Agency reorganizations and realignments. The third division, Forecasting and Analysis, is responsible for projections and examinations of Agency fee collections and key business workloads.

The realignment aligns OCP personnel to their division of responsibility, allowing OCP to concentrate on the core functions and activities of each division and the office with correct leadership and management. It also provides OCP staff the framework to strengthen their skills and provide customers more useful, thorough analysis while meeting critical deadlines. Additionally, all functions were continued and no programs, projects, or activities were deleted nor did the responsibilities, duties, authorities and mission objectives change.

Office of Finance Management Systems

This realignment elevated the Financial System Division within the Office of Finance to a "direct report" to the CFO and renamed it the Office of Financial Management Systems (FMS). Financial systems are the accelerators by which the OCFO can leverage to achieve significant results and deliver timely, accurate and useful information for decision making. OCFO systems are crosscutting in that they provide data and information not only to the Office of Finance but for the Office of Procurement, Office of Corporate Planning and the USPTO as a whole. The realignment will ensure that our systems efforts are delivering value, contributing to results and exceeding the expectations of our offices and customers. All functions were continued and no programs, projects, or activities were deleted nor did the responsibilities, duties, authorities and mission objectives change.

Trademark Law Offices

Realignment to consolidate Trademark Law Office support functions into two separate units, under Trademark Examination within the Trademark Organization. An assessment of the impact of process changes was conducted to identify potential improvements in process and efficiency. Significant changes were made in how work was performed that led to recommendations for aligning functional responsibilities to create a greater focus on managing work, assessing and reinforcing quality. The duties which were realigned to the new organizational units were:

Examination Support Workload and Production includes Examination Support Units which are responsible for verifying database accuracy regarding all data elements of applications for the registration of trademarks, enter amendments and make changes to the application record as needed, review and prepare the contents of applications for publication or registration in the weekly on-line Trademark Official Gazette.

Examination Support Quality and Training which assesses the quality of the work produced by the Examination Support Units to determine the accuracy of the changes made to the application data in the trademark database; ensures adherence to

established practice and procedures; provides information to Examination Support on the results of its review; makes recommendations for maintaining or improving the quality of Examination Support; identifies problem areas and develops training materials and conducts training to improve quality.

Office of Human Resources

A process improvement team analyzed the Office of Human Resources' (OHR) procedures in addressing pay, benefits, and compensation issues. After a thorough review of OHR procedures, it found that many of the tasks performed within the Compensation Branch (Employment Division – Trademark and Corporate), the Worklife and Benefits Branch (Workforce Relations Division) and the Quality Review Branch (Employment Division – Patents) were overlapping. The team recommended that overlapping and related functions be managed under a single division. This realignment to a Compensation and Benefits Division provided for centralized responsibility and accountability. Further, it allowed the other divisions to focus on their core business goals and objectives and improve the quality of their performance. All functions were continued and no programs, projects, or activities were deleted nor did the responsibilities, duties, authorities and mission objectives change.

13. On August 15, 2007, Barry Hudson, Chief Financial Officer for the USPTO, sent an email to top USPTO officials that stated the realignment of the Office of External Affairs "was a result of a five-year management review." (See attachment 7). In the USPTO Weekly Update dated September 10, 2007, Lois Boland, Director of the Office of Intellectual Property Policy and Enforcement, was quoted as saying that the realignment of the Office of External Affairs occurred "after a five-year management review of the programs within [External Affairs]." (See attachment 8). Please provide the Subcommittee a copy of this management review. Has the USPTO taken any other actions based on this management review? Does it plan to take any other actions based on this management review? Please provide a list of all senior USPTO officials who participated in this management review?

Answer: The August 15, 2007, realignment in the Office of External Affairs was the result of a five-year management review. The management review was an ongoing discussion of the effectiveness of the structure and organization of the office since 2002. It was not based upon, nor did it culminate in a written review or report other than a new organizational chart.

The discussions involved, at varying times, senior employees in the Office of External Affairs, External Affairs management, senior employees in the Office of the Chief Administrative Officer, the Chief Administrative Officer, the Chief Financial Officer, the Chief Information Officer, the Commissioner of Patents, the Commissioner of Trademarks, the Office of General Counsel, the Chief of Staff to the Under Secretary, the Deputy Under Secretary and the Under Secretary.

14. As evidence of greater quality, Director Dudas mentioned in his testimony that in 2000, 70% of all applications led to a patent while in the first quarter of 2007, only 44% of all applications led to a patent. How did the USPTO account in these statistics for Request for Continuing Examination (RCE) applications, continuation applications and the applications that had to be abandoned in order to file continuation applications?

Answer: 70% and 44% are the fraction of applications that were allowed by the examiner out of all applications that were either allowed or abandoned during the relevant time.

The calculation is the same for FY 2000 and for FY 2007. Applications that are abandoned include Request for Continuing Examination filings and Continued Prosecution Application (CPA, a precursor to current RCE practice) filings.

The filing of a continuation application is neither an allowance nor an abandonment.

Applications, which are the parent of a continuation application, count either as allowances or as abandonments when prosecution ends, depending on the outcome of the prosecution in the parent application. 35 U.S.C. §120 allows applicants to claim priority in a child application "filed before the patenting or abandonment of or termination of proceedings" in the parent application; it does not require abandonment of the parent application.

15. According to USPTO organizational charts for the last several years, the Administrator of the Office of External Affairs reports directly to the USPTO Director and Deputy Director. (See attachment 9). However, as I understand from Director Dudas' testimony, the Administrator's position "rests" in the Deputy Director's office. Does this mean that the Deputy Director essentially runs the Office of External Affairs? If yes, why is there still an Administrator of External Affairs position listed in USPTO organizational charts? If so, does running the Office of External Affairs interfere with the other duties of the Deputy Director?

Answer: The Office of External Affairs reports directly to the USPTO's Under Secretary and Deputy Under Secretary. Because of the significance of national and international policy and decision making authority, the Deputy Under Secretary appropriately serves also as the Administrator for External Affairs. The Office of External Affairs includes two subsidiary offices -- the Office of Intellectual Property Policy and Enforcement and the Office of Governmental Affairs -- both of which are led by SES Directors. Those directors have full responsibility for the substantive duties and day-to-day operations of their respective offices. As such, this does not interfere with other duties of the Deputy Under Secretary.

16. According to a *Time* article dated April 2, 2006, and supported by an email allegedly from James Toupin dated January 3, 2005, senior USPTO officials met with Research in Motion (RIM) CEO Jim Balsillie while a reexamination concerning patents owned by NTP and at issue in a lawsuit filed by NTP against

RIM, was before the USPTO. (See attachments 10 and 11). Did this meeting take place? What was discussed at this meeting? What is the USPTO's policy concerning ex parte communications between senior USPTO officials and parties who have an interest in the outcome of proceedings before the Office? In what other instances, if any, did senior USPTO officials engage in similar ex parte communications with parties that had an interest in the outcome of a proceeding being conducted before the Office?

Answer: Research in Motion (RIM) requested a meeting to discuss whether the United States would participate as *amicus curiae* in support of a petition for rehearing that RIM was pursuing in the Court of Appeals for the Federal Circuit. The Department of Commerce, led by then-Acting General Counsel Jane Dana, held a meeting on this subject. In attendance were Ms. Dana, Joan Maginnis, Assistant General Counsel for Finance and Litigation of the Department of Commerce, members of the Appellate staff of the Civil Division of the Department of Justice, and Mr. Toupin and John Whealan, Deputy General Counsel for Intellectual Property and Solicitor, from the USPTO. A member of the Commercial Litigation Branch of the Civil Division of the Department of Justice also participated by phone.

The subject of discussion was RIM's request that the United States support its position in the Court of Appeals for the Federal Circuit that patent infringement not be found when alleged infringement includes acts outside the United States. Citing the USPTO's policy of not discussing any aspect of a pending USPTO reexamination, Ms. Dana and all other government representatives in attendance refused to discuss or listen to statements, questions, or arguments regarding any matter pending in reexamination. The government did not make the amicus filing that RIM requested.

As stated, the USPTO's policy prohibits *ex parte* communications that directly relate to matters pending on reexaminations. This policy does not prohibit contacts with anyone with respect to matters that are not at issue in proceedings before the USPTO. Thus, for example, the USPTO officials regularly meet with patentees and members of the patent bar, even though those parties may be pursuing matters before the Office. In such conversations, consistent with the policy followed during the meeting with RIM representatives, its officials do not discuss particular matters pending before the Office.

17. The FY 2008 USPTO budget document mentioned that the USPTO was exploring the possibility of establishing regional offices that would house patent examiners. (See attachment 12). However, no mention of this effort was made in the FY 2009 USPTO budget document. Is the USPTO still looking into this possibility? Over the last three years, what resources have been dedicated to the planning and establishment of USPTO offices outside of Alexandria, Virginia? If the USPTO has concluded its evaluation of establishing satellite, back-up or other additional facilities, what were the agencies conclusions about the location, expense and general feasibility associated with establishing and operating such facilities?

Answer: In FY 2007, in response to various public comments, including inquiries from the Patent Public Advisory Committee that a more national USPTO presence would be helpful, the USPTO commissioned a feasibility study from Jones, Lang, LaSalle that evaluated establishing regional offices for patent examiners. The study made clear that the USPTO would have to invest significantly, whether any of a spectrum of options (from an independent, leased space to renting space in an existing government building) were pursued.

Given that technology now permits flexibilities such as completely independent work-at-home options, the USPTO has determined that – as a strategic matter – it is financially and strategically prudent to pursue a nationwide workforce approach, rather than build offices or lease offices throughout the United States. For this reason, we are focusing on our Patents Hoteling Program (PHP) and Telework efforts.

USPTO has had great success with the PHP where examiners work from home and come into the office one day per week. The goal for FY 2008 is to add 500 additional examiners to the over 1,000 patent examiners who began this program in 2006-2007. In light of this success, the USPTO is exploring a Nationwide Work Force (NWF) concept, to enable patent examiners to live anywhere in the continental United States, and perform all job functions and receive requisite training remotely. The USPTO is also working with the General Services Administration and Congress to enable the Agency to exercise flexibility in the travel regulations to allow for NWF.

The USPTO is pleased that H.R. 4106, the Telework Improvements Act of 2007, and S. 1000, the Telework Enhancement Act of 2007, were introduced during the 110th Congress. Both the House and Senate versions of telework legislation would ensure maximum participation in telework among the Federal workforce without diminishing employee performance or agency operations. Although some Federal agencies have made great strides with their telework efforts, more can be done to produce even greater benefits.

The USPTO fully supports Section 10 of S. 1000 that would allow GSA to approve travel expense test programs for agencies to test new and innovative methods of reimbursing travel expenses and giving employees more choices of where to live. Outside of the Washington, D.C. metropolitan area, the USPTO has teleworking employees residing in Pennsylvania, New York, Illinois, North Carolina, South Carolina, Georgia, Colorado, Texas, West Virginia, and Delaware. These employees voluntarily requested to live and telework outside the local commuting area. However, they are required to report to the office at least once per week to maintain the official duty station at USPTO headquarters.

Maintaining Washington, D.C. as the duty station for these teleworkers allows the USPTO to avoid placing them on travel status, which would entitle them to reimbursement for their travel expenses and also to travel during official working hours. A GSA approved pilot program would allow employees to maintain their homes as their official duty stations and only commute when their job requires them to do so.

USPTO believes that having travel discretion would permit more teleworkers to voluntarily locate outside the local area, assist their employees in balancing work and

personal needs, help them retain valued employees, and remove barriers to the expansion of telework programs.

The USPTO continues to review options for establishing a business continuity/disaster recovery data center in the San Antonio, Texas, area. A Request for Offers issued in 2007 failed to produce an acceptable offer within the allocated budget. Acquisition support services have been retained to assist in the ongoing effort.

18. Please provide information concerning the diversity of the USPTO's workforce. Please breakdown this information by GS-level and function within the agency (i.e., SES, Schedule C, manager, examiner, support staff, etc.)

Answer: Responsive information is contained in the attached charts. Please note that these charts provide snapshot statistics only and do not reflect either application rates or the qualified labor pool.

Questions Submitted by Representative Issa

1. Examination on Request (or, as the USPTO called it, Deferred Examination) is used in many countries such as Canada and Japan. Under such a system, applications are not examined automatically, as in the U.S., but only upon a specific Request for Examination within a set time period, say 3 years. If no request is filed within that period, the application is deemed abandoned and is never examined. From experience of other patent offices, 10% to 40% of applications are never examined under Examination on Request systems, resulting in substantial workload reduction. This is due to applicants' voluntary abandonment of obsolete applications prior to the Request for Examination deadline. Under current USPTO practice, applications that become obsolete, but receive examination by the USPTO, are the worst investment that USPTO can make because their obsolescence means that the patents are unlikely to fetch any renewal fees.

2. Why did the USPTO reject such a method that has the potential to reduce its workload and increase efficiency?

Answer: In the USPTO's original strategic plan of 2002, the agency proposed three distinct programs which collectively would have reduced the pendency of patent applications to 18 months: (1) deferred examination, (2) competitive sourcing of searches and (3) a 50% increase in fees. When the agency proposed this strategic plan to the public, there was strong and unified opposition to deferred examination from bar associations and patent user groups. In early discussions, congressional staffers advised that no proposal including deferred examination or a fifty percent increase would be acceptable.

Consequently, the agency revised its strategic plan to lower fee increases to twenty percent and removed the deferred examination proposal. That bill was introduced as H.R. 1561 on April 2, 2003. Ultimately, Congress approved the twenty percent increase

in fees and allowed a pilot for competitively sourcing searches (Division B of P.L. 108-447, December 8, 2004). However, the limitations placed on competitively sourcing searches in the legislation were too restrictive to allow for a meaningful pilot. Essentially, the combination of deferred examination, a 50% increase in fees and competitive sourcing of searches proposed by the USPTO was judged in the legislative process to be too much change to justify reducing pendency to 18 months.

However, with the 20% increase in fees, the women and men of the USPTO have done a remarkable job avoiding more dramatic increases in pendency. Record level hiring and innovative programs increasing examiner flexibility, opportunity and efficiency have led to an increase in production of 22% in the last two years alone.

Further, increasing production is not the single most efficient answer. The essence of your question was how to avoid examining applications that should not be examined—in other words—how to reduce demand that is unnecessary. Reducing unnecessary demand is critical to the efficient running of the patent system. Your question is posed at an important time. The patent allowance rate is a simple measure of what percentage of applications examined in a given year are allowed as patents. That number has been steadily dropping over the last several years—from 72% in FY 2000 to about 44% thus far this year. This means that more and more of what is applied for does not lead to a patent.

The USPTO's experience of proposing deferred examination in 2002 is instructive. The Applicant Quality Submission provision in the Committee passed version of S. 1145 is an even better way to ensure that examination resources are not wasted but are focused on inventions.

Questions Submitted by Representative Goodlatte

1. You have had great success in reducing pendency rates in the trademark section of the USPTO. Are some of the ideas that brought forth those successes applicable on the patent side as well?

Answer: Yes, in reviewing our operations and procedures to optimize examination quality and timeliness, we make evaluations of best practices that may be transferable from one business group to the other. The USPTO is piloting a voluntary flat goal program for patent examiners that builds upon the successful system in Trademarks and moves production away from an hourly-based system. Highlights of the program include awards of up to $5,000 per quarter; flexibility in how work is done; and a predetermined amount of work based on grade and docket. Under the year-long pilot (April 2007 - April 2008), examiners may earn larger, quarterly bonuses for every application examined above a particular target goal. Early indications are that participants prefer the per-application bonus as opposed to the present productivity award structure and enjoy

the flexibility of choosing when and how to do their work. The USPTO will evaluate the results of the pilot and incorporate that information into future planning.

2. The PTO has been a leader in the rollout of telecommuting opportunities for employees, and it is my understanding that those who choose to work at home are generally even more productive than those who choose to work at the PTO's headquarters. However, I have heard that additional tools may be needed to allow the expansion of the tele-work program to other areas of the country. What additional tools do you need to further unleash the benefits of the tele-work program? How can Congress help?

Answer: The USPTO has spent over 10 years perfecting its telework program, which is among the most innovative and progressive programs in the entire Federal Government. A successful telework program can result in greater employee productivity, higher levels of sustained performance, reduced traffic congestion and air pollution, and reduced real estate costs. In addition, telework provides options for individuals with disabilities, assists agencies with their recruitment and retention efforts, helps to reduce fuel expenses, and provides agencies with continuity of operations in the event of a future threat or disaster.

The USPTO wants to optimize employee flexibility and production, and increase job satisfaction. While our electronic tools are currently sufficient to support our examining and processing operations, we are always looking for ways to maximize our flexibilities. Unfortunately, current administrative rules and regulations have not kept pace with the expanding needs of a millennial workforce.

Accordingly, the USPTO is pleased that H.R. 4106, the Telework Improvements Act of 2007, and S. 1000, the Telework Enhancement Act of 2007, were introduced during the 110th Congress. Both the House and Senate versions of telework legislation would ensure maximum participation in telework among the Federal workforce without diminishing employee performance or agency operations.

The USPTO fully supports Section 10 of S. 1000 that would allow GSA to approve travel expense test programs for agencies to test new and innovative methods of reimbursing travel expenses and giving employees more choices of where to live. Outside of the Washington, D.C. metropolitan area, the USPTO has teleworking employees residing in Pennsylvania, New York, Illinois, North Carolina, South Carolina, Georgia, Colorado, Texas, West Virginia, and Delaware. These employees voluntarily requested to live and telework outside the local commuting area. However, they are required to report to the office at least once per week to maintain the official duty station at USPTO headquarters.

Maintaining Washington, D.C. as the duty station for these teleworkers allows the USPTO to avoid placing them on travel status, which would entitle them to reimbursement for their travel expenses and also to travel during official working hours.

A GSA approved pilot program would allow employees to maintain their homes as their official duty stations and only commute when their job requires them to do so.

The USPTO believes that having travel discretion would permit more teleworkers to voluntarily locate outside the local area, assist their employees in balancing work and personal needs, help them retain valued employees, and remove barriers to the expansion of telework programs. Therefore, the USPTO would fully support the House agreeing to Section 10 of S. 1000 in any future telework discussions or legislative conferences.

3. Have you seen the same kind of attrition rates among trademark examiners participating in the tele-work program that you have seen with patent examiners, and do you believe that the further rollout of tele-work opportunities across the PTO will help reduce patent examiner attrition?

Answer: Attrition among Trademark Examining Attorneys participating in the telework/hoteling program has been low since the inception of the program. For example, thus far in FY2008, the resignation rate has been 2% and the attrition rate, including resignations and promotions to other positions, has been 3%. Surveys have indicated that the Trademark telework/hoteling program has contributed to job satisfaction and employee morale. We expect that the Patent telework/hoteling program will also have a positive effect on attrition rates for Patent examiners.

4. A while back, I was told that the error rate for trademark design searches was over 50%. Is that still the case? What is the error rate today? What has been done to increase the accuracy of design code searches that do not involve words?

Answer: Beginning several years ago, in response to concerns about design code quality, the USPTO engaged in a number of efforts to improve the quality of design coding under the Vienna Classification system in the electronic database. We are unaware of any reliable data that would substantiate a 50% error rate. Within the Trademark Services Division, the work of all contracted specially trained design coders has been subject to 100% quality review. The USPTO has created new design search codes to allow for greater specificity and accuracy in identifying and coding designs and has updated all active applications and registrations affected by the new codes. In addition, the USPTO now seeks input from applicants and registrants by informing applicants of the codes applied to their design marks and by offering applicants and registrants the opportunity to submit corrections or additions to the coding through electronic mailboxes specifically designated for this purpose.

Internal review of the quality of design search coding indicates that the efforts to improve quality succeeded. A study done in 2006 indicated that 4.5% of the records reviewed contained errors relating to significant elements of a mark that would impact search ability.

Currently a new quality enhancement procedure is under development. Under the new procedure, upon acceptance of a registrant's section 8 affidavit, the registration will be

reviewed by the design coders to ensure that the correct codes have been assigned to the registration. The USPTO will then notify the registrant of any changes and will provide information about how to request additions or corrections to these codes. We anticipate a further improvement in design code quality as a result of this effort.

END

Assumptions for GAO Model

Fiscal Year	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Receipts:							
Application Growth Rate	8%	8%	8%	8%	8%	8%	8%
Examiner Hires:	1,200	2,000	2,000	2,000	2,000	2,000	2,000
Attrition rate:	13.00%	13.20%	13.30%	13.40%	13.50%	13.60%	13.60%
Overtime hours per examiner FTE	80	80	80	80	80	80	80
Production Rates:							
	Production Units per examiner per grade per fiscal year						
GS-5	24.5	24.3	24.1	24	23.9	23.8	23.7
GS-7	31.1	30.8	30.7	30.5	30.4	30.2	30.1
GS-9	47.4	46.9	46.7	46.4	46.2	46	45.7
GS-11	57.9	57.3	57	56.7	56.4	56.1	55.9
GS-12	67	66.4	66	65.7	65.4	65	64.7
GS-13	79.4	78.6	78.2	77.8	77.4	77	76.7
GS-14	89.7	88.8	88.4	88	87.5	87.1	86.6
GS-15	100.2	99.2	98.7	98.2	97.7	97.2	96.7

GAO Model Reflecting 2,000 Examiner Hires

YEAR	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
EOY STAFF	4,747	6,008	7,115	8,116	8,996	9,776	10,468
PROF W-Y	4,197	4,980	6,219	7,320	8,242	9,058	9,794
# HIRED	**1,200**	**2,000**	**2,000**	**2,000**	**2,000**	**2,000**	**2,000**
# ATTRITED	559	639	808	926	1051	1160	1255
Net Positions	641	1361	1192	1074	949	840	745
OT HOURS	330,329	376,558	419,575	457,310	486,952	513,078	549,295
# BOY NEW	**586,599**	**693,132**	**794,474**	**866,430**	**911,848**	**939,244**	**953,643**
RECEIPTS TO							
BE EXAMINED	410,817	441,463	474,385	512,335	553,322	597,588	645,395
REG PROD	285,467	312,279	370,678	431,469	487,359	541,693	594,771
TOT PROD	301,242	330,261	390,715	453,308	510,613	566,195	621,002
DISPOSALS	298,200	320,400	379,000	439,700	495,300	549,200	602,400
FIRST ACTS	304,284	340,121	402,429	466,917	525,925	583,190	639,604

UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

DEC - 4 2007

The Honorable Tom Davis
Ranking Member, Committee on Oversight
and Government Reform
House of Representatives
Washington, D.C. 20515

Dear Representative Davis:

In accordance with 31 U.S.C. 720, the Department of Commerce, through the United States Patent and Trademark Office (USPTO), provides this action plan in response to the Government Accountability Office (GAO) report *Hiring Efforts Are Not Sufficient to Reduce the Patent Application Backlog*. The GAO recommends that the USPTO undertake a comprehensive evaluation of the assumptions used to establish production goals.

GAO's Principal Findings

The GAO report draws attention to issues that are of paramount importance to the USPTO. In particular, the report highlights the fact that the problems associated with the long time to decision in patent applications cannot be solved by hiring alone. It also recognizes, as does the USPTO, that attrition of patent examiners can impair the effectiveness of the USPTO's hiring efforts.

USPTO Initial Response – "Flat Goal Pilot Program"

As noted above, the GAO recommends that the USPTO undertake a comprehensive evaluation of the assumptions used to establish production goals (for examination of patent applications. Even before the GAO published its report, the USPTO appreciated the questions and concerns raised by GAO staff during their review process. In direct response to points raised by GAO staff during their study period – which are also reflected in the GAO's final report – in April 2007 the USPTO initiated a "Flat Goal Pilot Program." The Flat Goal Pilot Program tests a new concept in how production is measured. Under the year-long pilot (April 2007-April 2008), examiners may earn larger, quarterly bonuses for every application examined above a particular target goal. Early indications are that participants prefer quarterly, as opposed to annual, bonuses. They also appear to prefer the per-application bonus as opposed to the present productivity award structure and enjoy the flexibility of choosing when and how to do their work.

After April 2008, when the USPTO has sufficient data from this year-long pilot, a full evaluation will be possible. The USPTO will then determine how the results relate to the underlying assumptions that form the basis of the pilot and incorporate that information into future planning.

Additional USPTO Action/Response

A somewhat more detailed examination of examiner attrition levels, which the brief GAO analysis did not undertake, yields a somewhat different diagnosis of the latter issue. In noting this, we emphasize our complete agreement with GAO that a strategy of hiring alone is not sufficient to reduce the patent application backlog. To reduce the backlog, we must continue to promote appropriate ways to increasing the efficiency and productivity of examination. We also agree that patent examiner attrition is an important matter deserving further analysis and attention. Patent examiners are critical to our system of protecting intellectual property and driving innovation in the United States. The USPTO has achieved notable successes in examiner retention efforts and faces challenges that the GAO study did not address. We will address some of these successes and challenges below.

Facts About Patent Examiner Attrition

The USPTO has kept attrition statistics for several decades and highly detailed statistics for the past ten fiscal years (since FY 1998). The following are five facts that have proven instructive to us in addressing attrition.

(1) **Attrition is lower at the USPTO than throughout the Federal workforce.** The USPTO's attrition rate is *lower* than the average attrition rate for Federal workers (8.5% vs. 11.2%).[1]

(2) **Beyond the first three years of service, the USPTO has nominal attrition.** The average attrition rate for USPTO patent examiners with 0-3 years experience is 15.5%. The average attrition rate for USPTO patent examiners with 3-30 years experience is 3.95%.

(3) **Attrition in the early years is substantially lower at the USPTO than at similarly situated entities.** The attrition rate of examiners with 0-3 years experience, though measurably higher than the rest of the patent corps, appears to be well below the attrition rate experienced by similarly situated entities hiring more than 1,000 engineers in a year.[2]

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1 See http://data.bls.gov/cgi-bin/dsrv

2 Business Week, "*50 Best Places to Launch a Career*," September 18, 2006.

["***Given the country's demographics, some accommodation is inevitable. Entry-level hiring is expected to surge in 2007 by more than 17%, the fourth consecutive double-digit increase, according to the National Association of Colleges & Employers (NACE). And this could be only the beginning. By 2010, as the exodus of baby boomers from the workforce accelerates, census data suggest, two employees will be leaving for every new hire entering, and new college grads will be a precious commodity.***

***If recruiting is employers' first hurdle, retention is by far the highest. Those employers who provided the data reported that more than one-third of their new hires bolted within three years. And replacing them isn't cheap. Training costs averaged nearly $10,000 a head, which can add up quickly when you're hiring more than 1,000 college grads each year, as more than one-third of the ranked

(4) **Higher production requirements do not translate to higher attrition.** Examiners with the highest production requirements have the lowest attrition rates, and the examiners with the lowest production requirements have the highest attrition rates. In fact, 70 percent of all work in FY 2007 was done by examiners with 3 or more years of experience who *exceeded* their production goals by an average of 8 percent and had an average attrition rate of 3.95 percent.

(5) **Nearly all examiners exceed production requirements. An important majority exceed it substantially.** More than 60% of all patent examiners *exceeded their production requirements by at least ten percent* in FY 2006.

These facts direct us to focus our attrition analysis on the areas where it is most problematic and to look for solutions that provide all examiners more opportunity and flexibility.

The Patent Examination Landscape

We agree with the GAO's title conclusion that hiring is not sufficient to reduce the patent application backlog. In fact, the USPTO has for years reported to other policymakers and key constituencies that hiring is necessary but not sufficient as a strategy to address the backlog. With record-breaking numbers of applications *every* year and the USPTO already hiring the equivalent of whole-number percentages of American engineering graduates, hiring alone is a poor long-term policy. The right solution includes a synergistic combination of hiring and increased efficiency in the system, possibly by leveraging work already being done by patent applicants, the public and other patent offices throughout the world. The USPTO has implemented several pilot and permanent programs, proposed rules and promoted statutory changes to effect these goals of increasing quality, reducing redundancy and increasing efficiency in the system.

The USPTO also believes sincerely in the knowledge, skills, abilities, integrity and work ethic of its employees. Any solution to address improving the patent system, particularly addressing the patent application backlog, must begin and end with an evaluation of its effect on patent examiners. This is another area where the USPTO has been particularly focused in the last several years. The USPTO's approach has been to increase opportunity and flexibility for examiners rather than to lower standards. The results of giving examiners more opportunities and increased flexibilities speak for themselves – higher morale and satisfaction, and higher productivity and efficiency.

For example, in the last two years, 1,000 patent examiners have started working almost full-time from home. According to a recent survey of these employees, 83% said their morale

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employers do.*** The main reason young employees are heading for the exits, oddly enough, is the very thing boomers thrived on: the perpetual work day.***"]

See also, Business Week, "*Best Places to Launch a Career*," September 13, 2007 ["***Boeing Co. (BA) (No. 14) is starting to move in that direction. The aerospace giant has one of the lowest retention rates in its industry (59%), and one way it hopes to improve upon this is by teaching managers how to deliver criticism—harsh, if necessary—along with praise.***"]

improved. Independent analysis demonstrates that – for these same 1,000 patent examiners, productivity increased by approximately 10%. Other examples of increasing morale and efficiency by increasing opportunity and flexibility are reviewed below.

Additional GAO Findings

Together with the GAO, we fully appreciate that the work of patent examination – and particularly the patent production requirements - is a nuanced, multi-faceted undertaking, not susceptible to easy "quick fixes." We must find a way forward that aligns perceptions with realities and results in an even higher morale, higher performing organization.

The GAO report indicates that many patent examiners work unpaid overtime to meet production goals, that many examiners leave because of those high production goals, and that the USPTO's hiring rate will not reduce the patent application backlog. The GAO report further suggests that by lowering production goals, fewer examiners would leave the USPTO, giving the USPTO more employees to combat the patent application backlog. We believe a thorough analysis of the data does not support each of those propositions. In fact, the data shows that lowering standards will increase the backlog. The data also suggests that the solution lies in finding the right combination of increased opportunities and flexibilities for examiners. While we fully agree with the conclusion to further study production goals, we came to that conclusion for different reasons than the GAO – and provide the following information in support of our conclusion.

USPTO's Attrition Analysis

The USPTO has been analyzing and addressing patent-examiner attrition with several innovative techniques since it began increasing hiring in FY2005. First, we have – by careful data capture – identified an attrition trend line.

Attrition is greatest in the first 12 months from the date of hire. Since 1998, first-year attrition has fluctuated from a high of 28.3% in FY 2000 to a low of 15.1% in FY 2003. In FY 2007, first-year attrition for patent examiners was about 15.6%. That is nearly five points, or twenty-two percent, *less* than the average first-year attrition rate of about 20%.

Second-year attrition again varies, with an average attrition rate over the past nine fiscal years of around 13.5%. Third-year attrition over the same period averages around 9.7%. After the third year, attrition rates decline, hovering around 3.95% for examiners who have been at the USPTO for 3 - 30+ years.

What Does This Information Mean?

Perhaps surprisingly, first-through-third year patent examiner attrition at the USPTO is much lower than private-sector attrition in relevant sections such as engineering, computers, and general technology.[3] To provide some perspective, for the most recent fiscal year (FY2007), overall examiner attrition was 8.5%. This attrition rate compares favorably to overall Federal

[3] See http://data.bls.gov/cgi-bin/dsrv

employee attrition which, in calendar year 2006, was 11.2%.[4] Turnover in the private sector, particularly for engineers and computer scientists (technical areas of hiring focus for the USPTO), can be even higher, tracked by the Bureau of Labor Statistics at 45.5% percent for calendar year 2006, and reflecting the tendency of engineers and computer scientists to change jobs frequently.

While our historic 20% attrition rate for first-year employees is significantly less than that seen in the relevant private sector, the USPTO does not have the same tools available to the private sector which permit spreading costs of attrition over other business lines. In other words, we refuse to view higher attrition as "cost of doing business." Further, we have been chosen by *Business Week* magazine as one of the best places in America to launch a career, and we aim to be an employer of choice who really looks at employees as family members with whom we want a long-term relationship. Camaraderie is a morale factor that should not be ignored, and turnover does not contribute to camaraderie.

Our newest examiners represent the future, and a long career of service to America. We want to retain them. Similarly, our most senior examiners represent decades of experience, and handle the most complex patent applications with facility. While we do not wish to keep them from a well-deserved retirement, every year we can encourage them to stay with the USPTO is an extra year that the public benefits from their expertise. For these reasons – higher than desired front-end attrition and general retirement attrition – we must continue to focus our retention efforts on the newest and the most senior examiners.

What We are Doing

We are concerned with attrition and our efforts reflect that concern. The USPTO has remained committed to a strong work life quality program, including:

- Flexible work schedules (available to all USPTO employees);
- Expansive teleworking programs;
- Reimbursement for advanced technical education and law school;
- Recruitment bonuses (primarily available to patent examiners);[5]
- Retention bonuses (primarily available for patent examiners);
- Special pay increase of 10% for all patent examiners;
- Part-time employment available to all employees;

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[4] Bureau of Labor Statistics (BLS) statistic for calendar year 2006, identifying the total percentage of Federal employees leaving the workforce for reasons other than retirement or performance – in other words, employees who quit.

[5] To receive a recruitment bonus, the examiner must make a four-year commitment to stay with the USPTO. The four-year commitment is based on our attrition analysis which, as mentioned earlier, demonstrates a strong historical trend toward greatly reduced attrition after three years with the USPTO. The recruitment bonus is paid in four installments – 25% up front, and progressive payouts every six months. To maintain eligibility, examiners must maintain at least "Fully Successful" performance. If they choose to leave before fulfilling their time commitment, they must return a prorated portion (e.g., if they leave after six months of service, they would owe 50% of their upfront incentive) of the recruitment bonus.

- "Flat Goal" pilot;[6]
- Lap top computers available for work away from the office;
- Increased productivity award programs for patent examiners;
- Increased training opportunities tailored to examiners' needs;
- Focused training for new examiners; and
- Movement toward a nationwide workforce.

Although our patent-examiner recruitment bonus program is only 16 months old (started July 2006), we are already seeing positive results. Among examiners who received recruitment bonuses, the first-year attrition rate was 10 %, which compares favorably to the more general first-year attrition rate of 15 % for examiners hired during this same period who did not receive the bonus. Both are well below the 10-year average of 20%. Of course, one year's worth of data is not sufficient to indicate a trend, so we are continuing to assess the impact of recruitment bonuses – and the other above-mentioned incentives -- on retention. But the early favorable results give us hope that recruitment bonuses will be a sufficient incentive to encourage patent examiners to stay with the USPTO at least three years – until a time when, given historical attrition trends, attrition drops dramatically, employees become more comfortable and stay with the USPTO for much longer periods.

Previous Recommendations Have Proven Valuable

We are targeting recruitment bonuses for maximum impact on attrition. In addition to targeting recruitment bonuses for new hires in hard-to-fill examiner positions, we also are relying on exit interviews for insight as to why people are attracted to the USPTO and why they leave. The USPTO has a formal exit interview process in place to collect quantitative as well as qualitative data on reasons for leaving the Agency. We have discovered that a variety of reasons exist for leaving the USPTO, ranging from having pursued two job offers before joining USPTO and leaving shortly thereafter to take the initial, higher-paying or more geographically desirable job, to a simple incompatibility with the task of examining patent applications.

The USPTO has also worked with the Office of Personnel Management (OPM) to establish compatibility criteria and survey applicants before they are hired, to better identify candidates suited for the job of patent examination. Currently, every potential patent examiner who receives a job offer takes our compatibility assessment. Our plan is to make that compatibility survey tool available to all interested parties, which might help potential applicants self-select so only those who believe the USPTO is the place for them take the next step and submit an application.

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6 Instituted on April 1, 2007, this one-year pilot is intended to test a new conceptual approach to production. A variation is already successfully in place in the Trademark Operations, for GS-13 and 14 examining attorneys. The Patent flat-goal pilot is voluntary and currently includes participants. In contrast to the current yearly production goals, with yearly award payouts, under the flat-goal pilot, goals are set quarterly, with quarterly award payouts.

We are reporting the flat goal (when the pilot is evaluated) under Final Inspection Report No. IPE-15722.

Impact of the Production System on Attrition

Because attrition is highest in the first three years after hiring, and quite low thereafter, we need to review carefully the premise that a production-based system of examination is – in itself – responsible for overall attrition.

We appreciate that examiner reports of working excessive overtime suggested to GAO that patent examiners' production goals are too high. We have too much collective experience to dispute the fact that some employees feel that expectations are too high, and that any given work period is too short a time in which to complete a task. We are, however, struck by the fact in Fiscal Year 2006, the most recent year for which we have complete data, more than 60% of patent examiners received a performance award for exceeding 110% of their production goal. Further, over two thirds of junior patent examiners (examiners at the GS-7 – GS-11 levels) received a timely promotion based on demonstrated performance that included production in excess of 107%. In other words, a majority of patent examiners are not struggling to maintain "fully successful" levels of performance. They are over-achieving, if you will, choosing to do more than is required of them – and, appropriately, receiving bonus money for their efforts.

There is other data suggesting that production goals are at proper levels. For example, a September 2004 Office of the Inspector General (IG) report indicated that the seven technology centers they reviewed surpassed the 100-percent production level for the five-year assessment period. In other words, on average the employees in those technology centers spent less time than their expectancy production goals to process applications.

It is clear that some patent examiners leave the USPTO because of their dissatisfaction with production goals. This does not mean production goals are too high for most examiners, for the USPTO, or for patent applicants who depend upon timely review of their applications. This is particularly true for examiners who have been at the USPTO for more than three years, where 70% of production occurs and attrition averages less than four percent.

Examining patent applications is rigorous work. The USPTO is a performance-based agency, which is not attractive to everyone. The attrition data and performance award statistics we have gathered do not compel the conclusion of a nexus between attrition and production requirements. Better initial training, having the right working environment, accessibility to senior employees who can provide guidance, and more community activities are themes for improvement that we have heard from employees in exit interviews, at town hall meetings, and at brown-bag lunches. Most patent examiners appreciate that applicants need a timely assessment of their applications – and many patent examiners are willing to work above and beyond minimum requirements to ensure that applicants are served well. At the USPTO, we are very proud of the patent examiners and, indeed, all of our employees.

Next Steps

We agree with GAO's conclusion that hiring alone will not solve the backlog of unexamined patent applications. We also agree that the assumptions underlying patent-examiner production goals merit reevaluation, particularly in light of various quality initiatives. The

USPTO will consider all of these factors as we continue to work with GAO in evaluating the underlying assumptions used to establish examiner production goals.

As we hope the information provided above makes clear, we are analyzing our attrition data carefully to determine if there is a nexus between attrition and the production system. If attrition proves to be unrelated to the production environment, we may find that initiatives designed to reduce redundancy, leverage existing work, and make applications more focused are the most meaningful ways to reduce the patent application backlog.

The USPTO's plan is to evaluate the full impact on examiner retention of the many work-life initiatives in progress. If our work-life efforts continue to lower attrition as they have in just one year, we believe we will have identified the right mix of production standards that improve our service to the public and offer employees more opportunity and satisfaction.

The USPTO will initiate the following actions as first steps in addressing the recommendation in the final report:

- Partner with the GAO to gain comprehensive, valid, and meaningful attrition data from the private sector;
- Provide GAO with regular updates on attrition/retention results and analysis;
- Pilot additional alternative(s) that are seen as having potential benefits; and
- Provide GAO with data from/analysis of the data from the "Flat Goal Pilot Program."

On behalf of the USPTO, I wish to express my thanks for the GAO's thorough review of this important issue.

Sincerely,

JON W. DUDAS
Under Secretary and Director

UNITED STATES
PATENT AND
TRADEMARK OFFICE

Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov

SEP 23 2002

The Honorable Ernest F. Hollings
Chairman, Subcommittee on Commerce, Justice,
State and the Judiciary
Committee on Appropriations
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

As you may know, my staff at the United States Patent and Trademark Office (USPTO) have briefed your Subcommittee staff regarding our recently released *21st Century Strategic Plan*. I am now writing to provide notification, consistent with Section 605 of the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, regarding the reprogramming for a number of internal reorganizations that the USPTO plans to undertake in support of the strategic plan. These organizational changes, which are part of transforming the USPTO into a more responsive intellectual property organization, will improve: (1) training and quality; (2) domestic and international intellectual property policy; and (3) information technology management.

As part of this proposed reprogramming, the USPTO is making every effort to comply with Section 605's required notification to Congress. The enclosed document describes the organizational changes in greater detail. Please contact me at (703) 305-8600 if you have any concerns or questions.

Thank you for your consideration.

Sincerely,

JAMES E. ROGAN
Under Secretary and Director

Enclosure

UNITED STATES
PATENT AND
TRADEMARK OFFICE

Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov

SEP 23 2002

The Honorable Judd Gregg
Ranking Minority Member
Subcommittee on Commerce, Justice,
State and the Judiciary
Committee on Appropriations
United States Senate
Washington, DC 20510

Dear Senator Gregg:

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SEP 23 2002

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Committee on Appropriations
House of Representatives
Washington, DC 20515

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Under Secretary and Director

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Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov

SEP 23 2002

The Honorable José R. Serrano
Ranking Minority Member
Subcommittee on Commerce, Justice, State,
the Judiciary and Related Agencies
Committee on Appropriations
House of Representatives
Washington, DC 20515

Dear Representative Serrano:

As you may know, my staff at the United States Patent and Trademark Office (USPTO) have briefed your Subcommittee staff regarding our recently released *21st Century Strategic Plan*. I am now writing to provide notification, consistent with Section 605 of the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, regarding the reprogramming for a number of internal reorganizations that the USPTO plans to undertake in support of the strategic plan. These organizational changes, which are part of transforming the USPTO into a more responsive intellectual property organization, will improve: (1) training and quality; (2) domestic and international intellectual property policy; and (3) information technology management.

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JAMES E. ROGAN
Under Secretary and Director

Enclosure

Rose, Norma

From: Katopis, Chris
Sent: Monday, September 23, 2002 2:49 PM
To: Rose, Norma
Subject: The Addresses and Titles

The Honorable Ernest F. Hollings
Chairman, Subcommittee on Commerce, Justice, State, and the Judiciary
Committee on Appropriations
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

The Honorable Judd Gregg
Ranking Minority Member
Chairman, Subcommittee on Commerce, Justice, State, and the Judiciary
Committee on Appropriations
United States Senate
Washington, DC 20510

Dear Senator Gregg:

The Honorable Frank Wolf
Chairman, Subcommittee on Commerce, Justice, State, and the Judiciary and Related Agencies
Committee on Appropriations
U. S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

The Honorable Jose' R. Serrano
Ranking Minority Member
Subcommittee on Commerce, Justice, State, and the Judiciary and Related Agencies
Committee on Appropriations
U. S. House of Representatives
Washington, DC 20515

Dear Ranking Member Serrano:

U.S. Patent and Trademark Office
Proposed Organizational Changes

Quality Assurance and Training

In order to enhance quality, move training to the front lines, and more closely align training needs to improved quality, we will reorganize a number of quality programs currently spread throughout the USPTO. Specifically, we will transfer organizations in the Office of Quality Management and Training (OQMT) into the respective Patent and Trademark organizations. The proposed reorganization will implement an improved quality assurance program. For Patents, the revised quality assurance program will be located in each technology center (TC). For Trademarks, the revised quality assurance program will be centralized into a single organization. By taking these actions, the USPTO will be able to expand the quality review of work products and improve the connection between the quality review data collection and the subsequent training needed to improve examination development.

With regard to training, we will transfer training resources in OQMT to the core program organizations. Resources currently devoted to patent and trademark work will be realigned to the respective Patent and Trademark organizations. This will allow the business units to determine the training requirements needed to maintain and enhance the quality of their products. Agency-wide training will be transferred to the Office of the Chief Financial Officer and Chief Administrative Officer (CFO/CAO).

The above-described changes will result in the elimination of the current Office of Quality and Management (OQMT). Additional staff in the OQMT organization not specifically devoted to quality or training will be transferred to the Office of the CFO/CAO where they will continue to perform specialized management studies and analyses, including periodic customer and employee surveys and data analysis.

Specific changes include the following:

FTP Transfer	Funding	From	To	For
6	$ 706,000	OQMT	Trademarks	Quality Review
24	$ 4,482,000	OQMT	Patents	Quality Review
4	$ 697,000	OQMT	Trademarks	Examiner Training
9	$ 5,184,000	OQMT	Patents	Examiner Training
9	$ 4,665,000	OQMT	CFO/CAO	PTO-wide Training
11	$ 1,604,000	OQMT	CFO/CAO	Mgmt Analysis
2	$ 243,000	OQMT	Patents	Tech Center Mgmt
1	$ 117,000	OQMT	Trademarks	Admin Staff
0	$ 1,719,000	OQMT	All	General Training
66	$19,439,000			

Congressional Relations, International Relations, and Enforcement

The current Office of Legislative and International Affairs (OLIA) is responsible for a wide range of issues pertaining to domestic and international intellectual property law, policy, and enforcement. To enable the USPTO to better address the increased demands of international negotiations, legislative changes, enforcement, and Congressional interest in a broad range of intellectual property issues, OLIA resources will be divided into three components: Congressional Relations, International Relations, and Enforcement. The new Congressional Relations and International Relations components will give the USPTO a more effective interface with Congress and our international partners on a wide range of matters related to intellectual property. The Enforcement component will focus on the USPTO's effort to protect American intellectual property interests worldwide. We will reassign two existing SES employees and abolish their current positions and advertise the third position using an existing SES position. The three offices will report to the Deputy Under Secretary of Commerce for Intellectual Property and Deputy Director of the USPTO acting in the capacity of Administrator for External Affairs.

Information Technology

The Office of the Chief Information Officer (OCIO) has developed a streamlined information technology (IT) organization, which will be better able to support changes in business needs and priorities of our strategic plan, strengthen IT practices, and achieve principles outlined in the President's Management Agenda.

A new organization will be created and responsible for the Enterprise IT Architecture Program. This will elevate and strengthen the program and ensure consistency with OMB guidelines. The new organization will focus on an enterprise IT architecture and integration with other key efforts such as IT security, e-Government, data management, customer information services, and IT operations. This will allow the USPTO to identify solutions to support business needs that are consistent with the agency's enterprise architecture, and ensure that technical design, development, implementation, operation, and maintenance support that architecture. The new office will result in a cohesive, responsive technical organization that provides a secure infrastructure with higher performing information systems and lower maintenance costs. Other divisions in the current CIO organization will be restructured and functions reorganized or realigned to ensure flexibility and adaptability to changing business needs and more responsiveness to both internal and external customers.

All changes within the restructured OCIO will be done within existing positions and staffing levels. No new/additional positions will be created.

Diversity by GS/GM Pay Plan and Grade

	AMERICAN INDIAN OR ALASKAN NATIVE			ASIAN OR PACIFIC ISLANDER			BLACK, NOT OF HISPANIC ORIGIN			HISPANIC			WHITE, NOT OF HISPANIC ORIGIN			Grand Total
Grade	FEMALE	MALE	TOTAL	FEMALE	MALE	TOTAL	FEMALE	MALE	TOTAL	FEMALE	MALE	TOTAL	FEMALE	MALE	TOTAL	
15	1	5	6	60	151	211	34	60	94	11	16	27	175	452	627	965
14	4	5	9	218	520	738	163	167	330	31	42	73	371	763	1134	2284
13				102	189	291	111	86	197	22	26	48	184	311	495	1031
12		2	2	93	171	264	116	100	216	14	21	35	162	250	412	929
11	1	2	3	88	195	283	170	95	265	12	26	38	133	312	445	1034
10							30	7	37				5	1	6	43
09	1	5	6	78	219	297	199	119	318	6	13	19	129	349	478	1118
08				1		1	45	14	59				6	2	8	68
07	2	2	4	60	153	213	384	163	547	8	11	19	97	260	357	1140
06	1		1	1		1	19	6	25				5	3	8	35
05		2	2	14	37	51	28	39	67	2	1	3	15	55	70	193
04								1	1		1	1		1	1	3
03													2		2	2
02								2	2							2
01							1		1					1	1	2
Grand Total	10	23	33	715	1635	2350	1300	859	2159	106	157	263	1284	2760	4044	8849

Data as of 04/26/2008

Diversity by Function

	AMERICAN INDIAN OR ALASKAN NATIVE			ASIAN OR PACIFIC ISLANDER			BLACK, NOT OF HISPANIC ORIGIN			HISPANIC			WHITE, NOT OF HISPANIC ORIGIN			Grand Total
Mission Critical Occupations	FEMALE	MALE	TOTAL	FEMALE	MALE	TOTAL	FEMALE	MALE	TOTAL	FEMALE	MALE	TOTAL	FEMALE	MALE	TOTAL	
Contracting				1		1	3	2	5	1	1	2	7	6	13	21
Human Resources Mgmt				4		4	33	13	46	5		5	25	13	38	93
Information Tech	1		1	48	53	101	48	54	102	2	8	10	46	123	169	383
Patent Examining	5	19	24	581	1517	2098	349	556	905	71	129	200	737	2220	2957	6183
TM Attorney	2	1	3	28	22	50	52	22	74	8	5	13	187	138	325	465
Managers	1	4	5	40	121	161	109	77	186	9	14	23	140	329	469	844
SES				1	1	2	3	1	4				15	34	49	55
Schedule C													4	2	6	6
Support Staff	1	1	2	2	2	4	77	12	89	2		2	15	2	17	114

Data as of
04/26/2008