

OVERSIGHT OF THE U.S. PATENT AND TRADEMARK OFFICE

HEARING BEFORE THE SUBCOMMITTEE ON COURTS, INTELLECTUAL PROPERTY, AND THE INTERNET OF THE COMMITTEE ON THE JUDICIARY HOUSE OF REPRESENTATIVES ONE HUNDRED FOURTEENTH CONGRESS SECOND SESSION

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OVERSIGHT OF THE U.S. PATENT AND TRADEMARK OFFICE

TUESDAY, SEPTEMBER 13, 2016

HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON COURTS, INTELLECTUAL PROPERTY,
AND THE INTERNET

COMMITTEE ON THE JUDICIARY

Washington, DC.

The Subcommittee met, pursuant to call, at 1:05 p.m., in room 2237, Rayburn House Office Building, the Honorable Darrell E. Issa (Chairman of the Subcommittee) presiding.

Present: Representatives Issa, Goodlatte, Smith, Chabot, Jordan, Chaffetz, Walters, Nadler, Chu, DelBene, and Johnson.

Staff Present: (Majority) Vishal Amin, Counsel; Zack Walz, Clerk; and (Minority) Jason Everett, Minority Counsel.

Mr. ISSA. The Subcommittee on Courts, Intellectual Property, and the Internet will come to order. Without objection, the Chair is authorized to declare a recess of the Committee at any time.

We welcome everyone here today for this hearing on the subject of oversight of the United States Patent and Trademark Office, and I would now recognize myself for a short opening statement.

In 2011, the America Invents Act, the AIA, became the most substantial reform of the United States patent law since 1836. The AIA reestablished the U.S. patent system as a global standard, and I am proud that each of us on the dais here today was part of making that a law.

As we continue to work to uphold the integrity and competitiveness of the American patent system, we have a constant challenge to realize that there are many who would like to undermine it with weak or, in fact, improperly granted patents. This is a constant challenge for the PTO.

Today, we have the administrator here, who every day has to find ways to improve patent quality while working with an expanding workforce that covers not just the historic patent office here or the new one in San Jose, but, in fact, a massive amount of examiners who are in virtually every State remotely working on the work in both patent and trademark.

It is important that we, in concert with the PTO, continue to look at whether these programs are working. That means a review of many areas, including the challenges faced by the covered methods patents program, which we certainly want to have remain in effect.

Reforming our patent system includes costly patent litigation and an economic issue, not a partisan issue, one with billions of dollars at stake and the very essence of American competitiveness at stake.

But, along with ensuring the patent litigation system is properly balanced, we must also examine the internal processes of the PTO. On July 20, 2016, the General Accountability Office issued two significant reports. The first report detailed a dramatic rise in patent litigation from 2007 to 2015 and noted, by 2015, nearly 50 percent of all defendants named in patent infringement suits were sued in none other than the Eastern District of Texas.

Therefore, one of the questions undoubtedly in today's hearing, perhaps many times, will be the venue reform question, one that is both before this Committee on a regular basis, but also one which is before the courts now in the Kraft case.

That first report made seven recommendations to the PTO concerning improving patent quality and patent clarity. The second GAO report identified ways to improve patent quality through stronger search capabilities to find all the relevant prior art and improve the PTO's monitor of examiners at work. And just a couple of weeks ago, the Commerce Inspector General issued a strong report detailing serious abuses when it comes to logging of time and attendance of patent examiners. Again, these are the examiners very often spread throughout all 50 States in remote locations where they telecommute.

The report raises serious questions about the integrity of the patent system. For innovation to flourish, Americans need to ensure that our Patent and Trademark Office is implementing procedures to guarantee high quality work from patent examiners, whether they are in the offices in Virginia or in fact spread throughout the country. If the PTO cannot guarantee sufficient oversight of its employees' timecards, how can we ensure that patent examiners aren't just rubber-stamping ideas without oversight as well?

The type of fraud and abuse detailed in the IG's report is simply unacceptable. But, when coupled with the problems that we are seeing with a continued patent backlog and with patent quality, it becomes even more pressing for these problems to resolve swiftly and effectively.

Today, I hope to hear from the Director both on the steps her agency is taking to adopt these recommendations made by the GAO and on whether any disciplinary action is being taken as a result of the fraud against the PTO and the American inventor. I look forward to getting answers to these important questions and seeing what changes the agency will implement to squash this abuse and ensure our patent examiners are doing the thoughtful work and are being reviewed positively.

Before recognizing the Chairman of the full Committee, I want to make an individual statement, and that is, we all know that a great many examiners, both here and remotely, work diligently to do their job, and today, we are talking about the exceptions and the outliers, and not a system that very often has dedicated people working extra hard to try to improve patent quality. And I want to make it clear that the GAO was not saying this was everyone, but in fact was concerned about some.

And with that, I would recognize the Chairman of the full Committee for his opening statement.

Mr. GOODLATTE. Thank you, Mr. Chairman. I appreciate your holding this hearing.

When we look at the array of agencies and departments within the Federal Government, only a certain number carry out a mission that is explicitly called for in the Constitution. The U.S. Patent and Trademark Office at the Department of Commerce is one such agency. As the PTO carries out its constitutional mission, we need to conduct appropriate oversight to ensure that our IP laws are being implemented fairly and in line with congressional intent.

Over the past several years, the PTO has been tasked with implementing the America Invents Act, which was signed into law nearly 5 years ago, on September 16, 2011. I believe that it continues to be imperative for this Committee to examine the rules and procedures that the PTO has adopted to implement this important law, in particular, the various post-grant proceedings called for in the AIA.

The AIA post-grant proceedings were designed to create a cost-effective alternative legal forum at the PTO to provide a simpler way to review questions of patentability, thus reducing the costs of frivolous litigation on job creators. These past 5 years have demonstrated how important the PTO post-grant proceedings are, particularly the inter partes review process. It is important for all patents to be subject to IPR, and maintaining a strong IPR process is paramount to ensuring strong patent quality going forward.

As the PTO continues to operate these proceedings, it is important for them to work fairly for both the patent owner and those accused of infringement. Additionally, based upon the statistics and cases being reviewed through the business method transitional program, it continues to be a success and is operating quite well. It will be important for this program to remain strong in the future.

And when it comes to the courts, we are seeing the Supreme Court hearing a significant number of patent cases. I think that is important, that the PTO has the ability to file amicus briefs in cases that could help improve the patent litigation landscape. And if there are roadblocks that prevent the PTO from filing amicus briefs in important Federal circuit cases, then that is something we should also look into.

In addition, the PTO is taking steps to improve patent quality internally with improved prior art searches and clearer guidelines. While I applaud these efforts, I also hope to hear from the Director on the additional steps that the PTO is taking to implement the recommendations made by GAO in the two reports which I requested, that were issued publicly in July.

The GAO indicates that the increase in the number of patent infringement lawsuits being filed can be directly attributed to concerns over patent quality. While the Patent and Trademark Office has taken steps to improve patent quality, the GAO found that more work is needed in this area. And when it comes to patent search technology, I would hope that the PTO is modernizing their systems to at the very least, make use of the types of search engine technologies widely available today.

I am also concerned about patent examiners who refuse patent applications multiple times, requiring the applicant to make changes to fix the application, only to then refuse the application based on entirely new reasons or prior art. Patent quality is important, but we also need to make sure that for a patent applicant, their application is reviewed consistently and that examiners are up front with applicants. It shouldn't simply be the luck of the draw when it comes to an examiner efficiently reviewing your patent application or dragging it out for years.

On the patent quality front, I strongly believe that the PTO should not simply be in the business of granting patents and leaving the mess created for the courts and Congress to fix, but rather focus on tightening the requirements for patent eligibility to reduce the overall number of weak or overly broad patents from entering the system. This includes patents on so-called incremental innovations that may unnaturally extend monopolies beyond a single patent term and hinder price competition.

There are also some patent applications that have been pending for a very long time. These pre-GATT or submarine patent applications have, in some cases, been pending for 30 or 40 years. This long pendency is not the fault of the PTO, and I appreciate that the PTO previously provided Congress with a report detailing these several hundred pending submarine patent applications.

Apart from being a drain on PTO resources, if such applications were to issue as patents today, they would be entitled to a 17-year term and would not expire until the year 2033. Moreover, because these applications have not been published, the public has no notice that the patents may issue and no opportunity to provide the PTO with prior art that could directly apply to the overly broad claims in many of these applications. And so I call on you to provide Congress with these submarine patent applications immediately.

Patent and trademark quality are key components of the PTO's overall mission, but I also want to ensure that the PTO is properly spending the fees that it collects and that its employees are acting appropriately when it comes to hiring appropriately qualified individuals. I am deeply troubled by the recent Commerce Department Inspector General report on time and attendance abuse within the PTO. The amount of wasted man-hours that could have been spent reducing the patent backlog is astounding, not to mention the millions of taxpayer dollars that were wasted paying USPTO employees for work they were not doing.

I hope to hear more from the Director on the steps being taken to ensure that patents are examined properly, consistently, and efficiently.

Intellectual property powers the engine of American innovation and creativity. It creates new jobs and helps grow our economy. And I look forward to hearing from Director Lee on these important issues. Thank you.

Mr. ISSA. I thank the Chairman.

Without objection, other Members' opening statements will be made part of the record.

And with that, we welcome our panel of one. And, Madam Director, I would ask that you please rise to take the oath.

Do you solemnly swear the testimony you are about to give will be the truth, the whole truth, and nothing but the truth?

Ms. LEE. I do.

Mr. ISSA. Please be seated.

Let the record indicate the witness has answered in the affirmative.

Secretary Lee, I will not give you the usual lecture on the red and the yellow and the green. We will take your opening statement as long as it runs. But, I would say that it also will be placed in the record in its entirety. You are the reason for this hearing. Welcome. You are recognized.

**TESTIMONY OF THE HONORABLE MICHELLE K. LEE, UNDER
SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY,
DIRECTOR OF THE U.S. PATENT AND TRADEMARK OFFICE**

Ms. LEE. Thank you. Chairman Issa, Chairman Goodlatte, and Members of the Subcommittee, thank you for this opportunity to discuss the operations, programs, and initiatives of the United States Patent and Trademark Office.

I am very proud of the work that we do to serve American innovators by helping to provide the intellectual property rights they use to raise investment capital, to build their businesses, and to bring their products and services to the marketplace.

Our mission is to deliver high quality and timely examination of patent and trademark applications and rulings from the Patent Trial and Appeal Board, to promote effective domestic and international intellectual property policy, and to provide IP information and education worldwide.

Our work is more important than ever before because of the growing importance of IP to our economy. And we have worked hard to offer an array of programs and initiatives that serve America's innovators, carried out by one of the most highly educated and talented workforces anywhere in the Federal Government.

Mr. Chairman, I am pleased to report that our business is thriving, and I believe that is a good sign for our economy. This fiscal year, we expect to receive more than 600,000 patent applications and more than 300,000 trademark applications.

On the patent side, we have reduced the patent application backlog by 28 percent since its all-time high in January of 2009, despite a 4 percent year-over-year average increase in filings, and we continue to make further progress in reducing the backlog and the pendency of applications.

Our customers and stakeholders expect us to issue quality patents. Patent quality is a top priority of mine as I lead this agency. It is why I launched the Enhanced Patent Quality Initiative. We want to ensure that we are issuing the highest quality patents possible now and well into the future. High quality patents give greater certainty to patent owners of their rights and reduce the potential for abusive litigation, permitting our companies to focus on innovation.

Based on extensive feedback we received from internal and external stakeholders, the agency is focusing its efforts on 11 specific programs designed to meaningfully strengthen the quality of our

work product, our processes, our services, and the measurement of patent quality.

In providing a quality check on issued patents, our Patent Trial and Appeal Board has done an admirable job in developing, implementing, and administering the post-grant review proceedings established pursuant to the AIA. The proceedings are functioning as intended by Congress to serve as a faster, lower-cost alternative to district court litigation in testing the validity of a patent. More than 5,300 post-grant petitions have been filed to date. That is more than three times the number we expected.

And even with that level of filings, I am pleased to say that the PTAB has a perfect track record in meeting its very strict statutory deadlines and a respectable affirmance rate at the United States Court of Appeals for the Federal Circuit.

Turning to our trademark operations, I am proud of the trademark team and their ability to maintain optimal backlog and pendency levels. Even with applications topping 300,000 a year, it takes an average of just 10.1 months to receive a final decision on a trademark application.

On the international front, the USPTO continues to play an important role in promoting high quality IP systems around the globe to the benefit of our innovators and our creators. Our 13 IP attachés on the ground are in important trade centers around the globe where they advocate for U.S. IP policy positions and help Americans navigate foreign IP regimes.

On the domestic front, I am pleased to report that all four of our regional offices are up and running in Detroit, Denver, Dallas, and San Jose, and are very much appreciated by the regional innovation communities. As envisioned by the AIA, these offices not only help us recruit and retain a highly qualified workforce of patent examiners and PTAB judges, but importantly, they provide inventors and entrepreneurs easier access to USPTO personnel and the wide range of resources we offer in support of innovation.

Finally, with respect to the DOC OIG's recent report on patent examiners' time and attendance, I want to be clear that the USPTO takes any allegation of wrongdoing in our workplace very seriously. Any hour claimed by any of our employees as worked that is not is unacceptable.

In recent years, we have invested significant time and effort on improving the overall workforce management of our operations. We have taken numerous concrete steps, including requiring new training for our employees and supervisors, updating policies, adding controls, and building tools for our supervisors.

The recommendations made by the National Academy of Public Administration and the OIG's work will help us continue to strengthen our oversight while leading the way in a telework program that is a crucial piece of our organizational and our workforce strategy.

Mr. Chairman, my written statement has more detailed information on our operations, programs, and work. Thank you.

[The prepared statement of Ms. Lee follows:]

STATEMENT OF
MICHELLE K. LEE
**UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY
AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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

“Oversight of the U.S. Patent and Trademark Office”

SEPTEMBER 13, 2016

I. Introduction

Chairman Issa, Ranking Member Nadler, and Members of the Subcommittee:

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

The USPTO advises the President, through the Secretary of Commerce, on a full range of national and international intellectual property (IP) issues, including patents, trademarks, copyright, trade secrets and enforcement. Through providing intellectual property protection, issuing policy guidance across the IP landscape, and delivering IP information and education worldwide, the USPTO plays a key role in creating a system where innovation can flourish and inventors have an easier time raising capital, building their businesses, and bringing their products and services to the marketplace.

I am proud to provide the Committee with an overview of the USPTO’s recent activities and accomplishments. Since I last testified, we have not only made progress within our core mission areas, but have also made operational advancements as well and focused significant effort on enhancing patent examination quality. We have made progress reducing overall patent pendency, reducing our inventory of unexamined applications and implementing the post-grant review proceedings established by the 2011 America Invents Act (AIA) – all of which I will discuss in greater detail.

These areas of accomplishment would not have been possible without the dedication and hard work of the USPTO’s highly educated and talented workforce. The USPTO continues to build, retain and effectively manage the workforce it needs to serve its critical stakeholder

community. And, as you know, we have put a considerable amount of time and focus in recent years on further improvements to our workforce management. This is an ongoing effort, and we appreciate and have carefully studied recent reports by the Government Accountability Office (GAO), the Department of Commerce's Office of Inspector General (OIG), and the independent National Academy of Public Administration (NAPA). These reports are valuable resources, and have helped us continue to improve patent quality and better ensure time and attendance compliance. My testimony below provides further details about USPTO's efforts in these areas.

Whether for a two-person startup or a Fortune 500 company, the USPTO's work is more important than ever to U.S. innovators. As the head of the USPTO, I am committed to ensuring that the agency promotes innovation, competitiveness, and economic growth – domestically and internationally – by delivering high-quality and timely examination of patent and trademark applications, guiding domestic and international IP policy, and delivering intellectual property resources and education.

We are very pleased that the Congress continues to provide USPTO with the authority to spend all anticipated fee collections. This provides us with the resources and flexibility needed to continue reducing the patent application backlog, shortening patent pendency, improving patent quality, enhancing patent administrative appeal and post-grant processes, fine-tuning trademark operations, engaging effectively internationally, and investing in our information technology (IT) infrastructure.

Since the enactment of the AIA, USPTO's fee setting authority has allowed the agency to more efficiently set user fees to recoup its operational costs. We look forward to working with the Committee to ensure that the USPTO maintains this authority.

The following provides an overview of some of our key programs and initiatives:

II. Patent Operations and Initiatives

Patent Pendency

The timely issuance of patents provides certainty in the market and allows businesses and innovators to make informed decisions on product and service development. The longer it takes to review a patent application, the longer it takes for the benefit of the IP protection to accrue. The USPTO recognizes the importance of continually refining and defining optimal pendency to take into consideration the external environment affecting workload inputs, the commitment made to the fee-paying public, and the need to ensure that there is a balance between workload and production capacity.

In FY 2016, we expect to receive more than 600,000 new patent applications. Our current inventory of unexamined patent applications is approximately 550,000 – a backlog that is down from more than 750,000 in 2009 (a 26.7 percent decrease) even with an average annual increase

in filings of almost 4 percent. Our goal is to reduce the inventory of unexamined patent applications to a manageable level that will allow us to achieve optimal pendency by FY 2019.

In terms of processing patent applications, our first action pendency has been reduced from 25.9 months in January 2009 to 16.1 months in July 2016 and the total pendency has fallen from 33.8 months in January 2009 to 25.6 months in July 2016. Our plan is to reduce those periods to 10.9 and 20.6 months, respectively, by FY 2019.

Patent Quality

The quality of application review is critical to ensure the value of an issued patent. Without well-defined claims, for example, the value of a patent is uncertain. Uncertainty means that there is a risk that a patent is invalid, does not cover the patentee's product, or that a competitor infringes the patent because they cannot determine its scope.

In June of this year, the GAO issued a report examining issues and making recommendations related to improving patent quality. The USPTO concurred with all of the recommendations and I am pleased to report that, as the GAO has acknowledged, we had already taken a number of steps to address the issues identified by their study, through our Enhanced Patent Quality Initiative.

Improving patent quality both in terms of ensuring that every patent issued comports with all statutory requirements and has a clear record, is a top priority for the USPTO. Through issuing high-quality patents, we enable certainty and clarity of rights which fuels investment in innovation and reduces needless litigation.

To ensure that we issue high-quality patents now and well into the future, in late 2014, we established the Enhanced Patent Quality Initiative (EPQI). EPQI seeks to institutionalize best practices and strengthen our work products, processes, services and the measurement of patent quality at all stages of the patent process.

In another important step to improve our commitment to patent quality, we established a specific division within the Patents Operation to focus exclusively on patent quality. That division is led by the agency's first Deputy Commissioner for Patent Quality. The Deputy Commissioner for Patent Quality is responsible for sustaining the high quality of the USPTO's patent examination processes and products by implementing and maintaining a comprehensive quality management system.

Through an active and long-term partnership with the public, the USPTO seeks to ensure the issuance of high quality patents and provide the best customer service possible. Based on the feedback we received from internal and external stakeholders, we have established the following quality-focused programs:

- **Pre-examination and Search Enhancement Programs** – including a pilot to provide an early, automated pre-examination search of relevant prior art in advance of the examiners own review and raising examiner awareness of available search tools.

- ***Prosecution Enhancement Programs*** – including developing best practices for examiners to enhance the clarity of the prosecution record, establishing points of contact to facilitate applicant-examiner interviews and improving existing after-final programs to reduce the number of issues that might be raised in an appeal.
- ***Post-examination Enhancement Programs*** – improving the quality of images in published design patents and identifying prior art raised in post grant proceedings relevant to related pending applications and making these references accessible to those examiners.
- ***Evaluation Enhancement Programs*** – developing consistent and transparent process and form to capture minable data about the correctness and clarity of examiners’ work products, developing enhanced metrics to measure, understand and evaluate examiners’ work products, and engaging stakeholders to identify new topics for case studies (in May 2016, we selected six topics for the pilot from 135 qualified submissions from our stakeholders).

In March 2015, the USPTO held the first-ever two-day Patent Quality Summit that gave the public the opportunity to provide their thoughts about patent quality and the most efficient prosecution and processes to ensure the issuance of the highest quality patents. In April 2016, the USPTO engaged in a productive exchange of ideas with the public on patent quality by convening an all-day Patent Quality Community Symposium. More than 2,200 participants attended in person and participated online. We will continue our outreach efforts and welcome stakeholders’ input and comments on these initiatives and any other patent quality-related issues.

Examination Guidance and Training

The USPTO is committed to providing the most current and effective training for our patent examiners. Two key initiatives that support the patent quality programs include examination guidance and training on: (1) *claim clarity*, particularly in the context of 35 U.S.C. § 112, and clarity of the prosecution record; and (2) *subject matter eligibility* under 35 U.S.C. § 101.

In response to input from our stakeholders, especially through the EPQI programs, and as mandated by the Administration’s Executive Actions on High Tech Patent Issues, we developed and delivered targeted training to assist examiners in ensuring that patent claims have clearly defined boundaries. The training has been delivered through hands-on workshops that provide opportunities for interactive discussions and have additionally focused on ensuring that the prosecution record clearly reflects the critical reasoning that led to the issuance of a patent.

In May 2016 we released our latest iteration of examiner guidance on patent subject matter eligibility.¹ This is an update to the guidance we issued in 2014 after the U.S. Supreme Court’s decisions in *Alice Corp., Myriad*, and *Mayo* and assists examiners in evaluating claims under 35 U.S.C. § 101. This latest examiner guidance includes a new set of life science examples designed to show various ways that patent claims can be drafted, and thus assist patent applicants and patent examiners in resolving subject matter eligibility issues.

¹ See: <https://www.federalregister.gov/articles/2016/05/06/2016-10724/may-2016-subject-matter-eligibility-update>

The guidance in the memorandum and subsequent training, similar to that provided on claim clarity, will lead to greater consistency throughout the patent examining corps in evaluating whether the claimed subject matter is eligible for patenting.

All training materials are available to the public on the Examination Guidance and Training Materials² page of the USPTO website. We welcome and will consider all viewpoints as we continue to refine our examination procedures.

Patents End-to-End

We continue investments in and development of our Patents End-to-End (PE2E) system which is improving the tools that support patent application examination and is replacing legacy systems currently used at USPTO. A number of examiners are already using the new tools and work continues to transition and deploy additional components to our examiners.

III. Post-Grant Review Proceedings

The AIA significantly affected the operations of the USPTO's Patent Trial and Appeal Board (PTAB). The PTAB has done admirable work in developing, implementing and administering the post-grant review proceedings intended by Congress to provide faster, lower-cost alternatives to district court litigation in challenging the validity of issued patents. Success in implementing the patent dispute resolution portions of the AIA has made the PTAB a preferred and popular tribunal for some business.

To date, more than 5,300 AIA petitions have been filed and that number is more than three times what was anticipated. Despite this higher than expected number, the PTAB has complied with all of the strict statutory deadlines. Further, the vast majority of PTAB final rulings have been affirmed by the Court of Appeals for the Federal Circuit.

We are committed to working with our stakeholders through rule-making to ensure that the PTAB proceedings are as effective and fair as possible. And, we will improve and refine these proceedings as many times as needed where there is consensus and provided it is within our Congressional mandate.

In August 2015, we published a proposed set of rule changes for our PTAB proceedings and sought public comment. After extensive public outreach, USPTO issued new final rules in March 2016 to make targeted modifications for trial practice before the PTAB, proactively addressing the concerns of its users and improving proceedings.

² See: <http://www.uspto.gov/patent/laws-and-regulations/examination-policy/examination-guidance-and-training-materials>

Specifically, the new rules:

- allow patent owners to include, with their opposition to a petition to institute a proceeding, any relevant testimonial evidence, addressing concerns that patent owners are disadvantaged by previous rules that limited the evidence that could be presented with their preliminary response to the petition;
- add a Rule 11-type certification for papers filed in a proceeding;
- clarify that the PTAB will use the claim construction standard used by district courts for patents that will expire during a proceeding and therefore, cannot be amended, while confirming the use of broadest reasonable interpretation (BRI) for all other patents; and
- replace the current page limit with a word count limit for major briefings.

PTAB End-to-End

On July 11, 2016, we launched the PTAB End-to End system (PTABE2E), which replaced certain legacy IT systems supporting AIA post-grant review proceedings (IPRs, PGRs, and CBMs). This is a significant initial milestone in a multi-year effort to invest in and develop improved IT systems to better serve external stakeholders and to facilitate internal IT support of PTAB judge core. Future expansion of PTABE2E to include AIA Derivation proceedings and to include ex parte appeals is planned for future years.

Ex Parte Appeals

The PTAB has continued to reduce the pending inventory of ex parte appeals from a high of over 26,000 in FY2012 to under 17,000 to date. This is a significant accomplishment on the part of the PTAB, providing substantial value to patent applicants seeking timely resolution of their appeal of an Examiner's final rejection.

IV. Trademark Operations & Initiatives

Trademark Pendency

The USPTO's Trademark Organization is guided by the strategic goal to optimize trademark quality and timeliness. The USPTO consistently delivers strong performance with record-low trademark pendency and high-quality results. Trademark application filings continue an upward trend and are expected to increase by approximately 5 percent by the end of this fiscal year to 300,000 trademark applications. First action pendency —the time from filing to the initial examination — has been consistently maintained within the target range to issue a first action between 2.5 and 3.5 months from filing. Disposal pendency — the time from when an application is filed until a trademark is registered or abandoned or a notice of allowance is issued for applications that are not in use—averages 9.8 months, under the 12-month target as of the end of July, and remains at historically low levels.

These results are due in part to increased electronic filing by applicants. Electronic filing and communications promote more efficient and cost-effective processing by the USPTO. In fact, more than 99 percent of applications are now filed electronically and more than 84 percent of all applications are processed electronically from filing to disposal.

Trademark Quality

Our Trademark Organization continues its success in setting and achieving high-quality standards. Trademark quality targets are consistently achieved, and the USPTO continues to sustain these high performance levels by improving training and feedback, promoting electronic filing and processing, making greater use of online tools and enhanced processes, and adopting more rigorous customer-centric measures.

Trademarks Fee Proposal

The USPTO is dedicated to serving the public in the most efficient and cost-effective manner possible. In May 2016, the USPTO proposed a new trademark fee system. This Trademark fee proposal will further USPTO strategic objectives by better aligning fees with the full cost of products and services, protecting the integrity of the register by incentivizing more timely filing or examination of applications and other filings, and more efficient resolution of appeals and trials, and promotes the efficiency of the process by incentivizing electronic filing. The Trademark Public Advisory Committee held a hearing in November 2015 on the fee proposal. A notice of proposed rulemaking (NPRM) was published in the Federal Register on May 27, 2016, with a comment period through July 11, 2016. Implementation is planned for January 2017.

Improving IT Systems

The Trademark Organization is also engaged in a multi-year effort to update its IT systems and recently established the Office of the Deputy Commissioner for Trademark Administration to support IT, finance, and strategic planning. The primary responsibilities of the Deputy are to manage the completion and transformation of the next generation of Trademark electronic systems, lead the financial management of the Trademark Organization, and guide the strategic vision of the Trademark Organization. The Deputy Commissioner for Trademark Administration is supported by two newly created senior level positions: the Information Technology Administrator and the Information Technology Legal Administrator.

Expanding Outreach

Our Trademark Organization has also significantly expanded its public outreach in the last few years by updating and expanding its basic educational materials – including translating materials into Spanish, appointing a Managing Attorney specifically for outreach to entrepreneurs, small businesses, universities and students among others, and conducting a series of events throughout the country to educate the public on trademarks. We have delivered programs in 49 states since the inception of the public outreach program.

We continue to solicit input from our stakeholder groups as well. Our executives hold regular roundtables with trademark users groups throughout the country. In fact this month, a roundtable will be held at the USPTO's Regional Office in Denver with the American Intellectual Property Lawyers Association and another one will be held at the USPTO's Regional Office in San Jose with the International Trademark Association.

As part of its outreach, the Trademark Organization team has also developed explanatory videos targeted to potential applicants who are not represented by legal counsel. These videos explaining the trademark application process and pitfalls to avoid (available on USPTO.gov) have been viewed by hundreds of thousands of Trademark owners and advocates. For example, our "basic facts" video surpassed 500,000 total views this year. We will continue to develop new videos based on input from the public.

V. Workforce Management and Telework

The USPTO takes any allegation of abuse in our workplace seriously. In recent years, we made workforce management a critical focus and have invested significant time and effort on improving our overall management – for teleworking employees and those stationed at one of our physical facilities. Our own investigation in 2012 into whistleblower allegations helped shine a light on areas where our workforce management could be improved.

Since that time, we have moved forward with a number of concrete steps – including requiring new training for employees and supervisors, updating policies, adding controls and building tools for supervisors – to enable our supervisors to engage and manage their employees more effectively. The recommendations made by NAPA and the OIG's work will help us to continue strengthening oversight while leading the way in a telework program that is a crucial piece of our organizational and workforce strategy.

We appreciate the work of the OIG in its research and preparation of its August 2016 report on patent examiners' time and attendance. The report serves as a valuable resource to further enhance the extensive measures we have taken focusing on time and attendance compliance among USPTO employees.

The Agency has also benefited from engaging NAPA, and we are pleased to note that we have already implemented a number of the recommendations on proper and accurate time and attendance accounting in the NAPA report.

Today at USPTO, supervisors receive extensive training and have a variety of tools in place to help monitor employees' work levels, regardless of where the employees are working. Consistent with recommendations made by the OIG, some of our recent efforts include:

- Focused training for all supervisors and employees on USPTO time and attendance policies;
- Implementation of a policy requiring all USPTO supervisors and full-time teleworkers to remain logged on to the USPTO's IT system during working hours; to use collaboration

tools including instant messaging and presence indicator; and to provide advance notice of intended work schedules to supervisors;

- Guidance to all supervisors to regularly utilize their IT dashboard tool to review employee-specific data to monitor their examiners' production and timeliness performance which can show early signs of changes in performance and potential time and attendance issues;
- Guidance to all supervisors to specifically monitor indicators of potential time and attendance issues, such as responsiveness to supervisory communications; inconsistent workload activity (*e.g.*, claiming 80 hours of examining time in a bi-week, but not claiming any work credits); and customer complaints;
- Issuance of a policy requiring poor performing employees and employees with time and attendance related misconduct to provide their supervisors with more specific work schedule information;
- Issuance of a policy statements on time and attendance obligations and expanded use of networking and collaboration tools;
- Launch of a program to improve supervisory mentoring of patent examiners with low or inconsistent production levels; and
- Recent Recertification of agreements with virtually all our teleworking employees.³

While the USPTO is certainly unique among Federal agencies in its ability to quantify the productivity of a majority of its employees, we continue to work toward ensuring proper and accurate accounting of all time and attendance.

To effectively manage our workload, while maintaining high-quality standards, the USPTO has grown and invested in our workforce to enable them to perform their mission to the best of their ability.

Our pioneering telework program is a critical part of these efforts. Our telework program has increased the USPTO's ability to recruit and retain highly-skilled employees with technical backgrounds throughout the country while producing substantial operational cost savings. The NAPA report clearly affirmed the strong business value and efficient operation of the agency's telework programs.

Telework has allowed us to more than double the number of patent examiners since 2005 without significantly increasing our real estate footprint. In FY2016, based on nearly 6,000 full-time teleworkers, the USPTO avoided more than \$38 million in rent as a result of its full-time telework programs. The USPTO's telework program has allowed many of our employees to continue to produce during government shutdowns, such as snow closures, or during other

³ For all teleworking employees, 99.9% have completed the recertification, the remaining .1% will do so once they return from leave.

disruptions like the recent SAFE TRACK program limiting access to the Washington Metro System. The NAPA report found that USPTO's telework programs saved the agency an average of \$7 million per year based on work conducted during closures.

VI. Domestic and International Intellectual Property Policy

The USPTO plays a leadership role in promoting strong and balanced protection and effective enforcement of IP at home and abroad. We advise Executive Branch agencies on national and international IP policy matters, negotiate global IP norms and understandings, and conduct technical assistance and capacity-building programs for foreign governments and U.S. stakeholders. An overview of key developments and activities are as follows:

Copyright Policy

The USPTO also advises the Administration and the President on Copyright policy issues. The "White Paper on Remixes, First Sale, and Statutory Damages," was released in January 2016 by the Commerce Department's Internet Policy Task Force, through the USPTO and the National Telecommunications and Information Administration (NTIA).

The White Paper makes recommendations on three important copyright topics for the Internet economy: (1) the legal framework for the creation of remixes, (2) the relevance and scope of the first sale doctrine in the digital environment, and (3) the appropriate calibration of statutory damages in the contexts of individual file sharers and secondary liability for large-scale infringement.

Only with respect to statutory damages does the report make legislative recommendations. It recommends amending the Copyright Act to provide both more guidance and greater flexibility to courts in awarding statutory damages by incorporating a list of factors to consider when determining the amount of a statutory damages award. In addition, it advises changes to remove a bar to eligibility for the Act's "innocent infringer" provision, and to lessen the risk of excessive statutory damages in the context of non-willful secondary liability for online service providers. The report also notes that some concerns raised about damages levels in cases against individuals could be alleviated if Congress were to establish a small claims tribunal with caps on damages awards.

With respect to remixes and the first sale doctrine in the digital environment, the report concludes that the evidence has not established a need for changes to the Copyright Act at this time, but it does make recommendations for the development of stakeholders best practices and guidelines to add clarity about what remixes qualify as fair use and to improve consumers' understanding of the terms of online transactions involving creative works.

Second, USPTO's copyright policy experts were instrumental in crafting the Administration's proposals for implementing legislation for two World Intellectual Property Organization treaties that were transmitted to the Senate in February 2016: the Beijing Treaty on Audiovisual

Performances and the Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired, or Otherwise Print Disabled.

The Beijing Treaty provides a modern, international framework for the rights of performers in motion pictures, television programs, and other audiovisual performances. It fills a gap in the international copyright system by extending to such performers the types of protections previously accorded to authors and to performers and producers of sound recordings. Once the Treaty is in force, if the United States joins, it will ensure that U.S. performers are appropriately protected when their audiovisual performances are enjoyed in other countries.

The purpose of the Marrakesh Treaty is to reduce the global shortage of print materials in special accessible formats for the many millions of Americans and others throughout the world who are blind, visually impaired or have other print disabilities (such as physical limitations that prevent holding a book). If the United States joins the Treaty, more English and foreign language works will become available in Braille form and comparable digital formats this population both here and abroad.

IP Attaché Program

The IP Attaché Program is an important asset that supports the USPTO's efforts to promote strong and balanced protection and effective enforcement of IP rights abroad. The attachés' fundamental role is to advocate for U.S. government IP policy positions for the benefit of U.S. stakeholders through direct advocacy with host governments; educating host government officials on IP matters, including training of judges, prosecutors, patent and trademark examiners, customs officials, police and policy makers; assisting U.S. stakeholders with IP concerns in the host country or region; and building grass roots support for U.S. policy objectives by conducting public awareness programs on intellectual property.

USPTO currently has thirteen IP attaché positions in ten countries around the world: in Rio de Janeiro, Moscow, New Delhi, Beijing, Guangzhou, Shanghai, Bangkok, Mexico City, Kuwait City, Brussels, Lima, and two attachés in Geneva.

Global IP Academy

Since 2005, the USPTO Global Intellectual Property Academy (GIPA) has provided high-level IP training, capacity building programs and technical assistance to foreign judges, prosecutors, customs officials and enforcement personnel, as well as officials from copyright, trademark and patent offices from around the world. Those individuals come to the United States to learn, discuss and strategize about global IP protection and enforcement. The program's goals include fostering a better understanding of international intellectual property obligations and norms, explaining the U.S. model of protecting and enforcing intellectual property rights, and promoting discussion of intellectual property issues in a friendly and supportive environment.

GIPA provides both multilateral programs and country-specific programs as needed. GIPA also delivers training to U.S. small business owners, Government officials, and the general public.

VII. USPTO Regional Offices

The USPTO is actively working to better serve the local innovation economies through our new regional offices. All four of the USPTO's regional offices in Detroit, Dallas, Denver and San Jose are up and running. As envisioned by the America Invents Act, the offices help us recruit and retain a highly qualified workforce of patent examiners and administrative patent judges who serve on our Patent Trial and Appeal Board. These offices have made our services more easily accessible to those working outside our nation's capital. The offices also serve as hubs for our IP outreach and education efforts and provide inventors and entrepreneurs easier access to USPTO personnel and resources.

Our recruiting efforts to date have resulted in the hiring of a total of approximately 300 patent examiners and 73 administrative patent judges in the regional offices.

Regional office benefits to the public include walk-in services to obtain general IP information; work stations for searching patents and trademarks; a hearing room to host PTAB proceedings; and interview rooms to connect applicants to examiners working in the region, at headquarters or across the country.

Regional office outreach efforts have included broad-based and issue-specific IP seminars for startups, small business and independent inventors; tech-specific partnership meetings; participation in STEM education events; and working relationships with regional stakeholders including business interests and federal, state and local government officials.

As a former director of a regional office, I know the tremendous difference these offices can make in providing a range of USPTO services to innovators and entrepreneurs across the country who want firsthand engagement with our IP system.

VIII. Education and Outreach

At the highest level, the mission of the USPTO is to promote American innovation through intellectual property, across all geographic regions of our country and across all demographics. To that end, the USPTO provides educational and outreach programming for students, educators and young innovators. The USPTO's activities support Federal government-wide efforts to attract and retain K-12 students in STEM-based education to increase STEM competence and to support an internal and external stakeholder base for the USPTO. STEM is vital to innovation and economic development in the United States and the development of a future USPTO workforce.

Last September, I formally launched an “ALLinSTEM” initiative to encourage women of all ages – from girls to entrepreneurs – to pursue STEM degrees and advance in STEM careers for the benefit of our economy and society. As part of this initiative, the USPTO has engaged in a partnership with Invent Now, with whom we run an annual summer program called Camp Invention that reaches more than 100,000 kids each year including those from underprivileged backgrounds. Taught by an elite group of STEM instructors, Camp Invention programs feature lessons on STEM skills and provide an introduction to the patents and trademark systems.

The USPTO has successfully worked to build and expand strategic partnerships with other Federal agencies, non-profit organizations and school districts in order to reach the most diverse groups of students and educators. In July, the office hosted its Third Annual National Summer Teacher Institute on Innovation, STEM, and IP (NSTI). More than 50 K-12 teachers from 33 states participated in the weeklong conference offered in collaboration with Michigan State University. This program was designed to help elementary, middle and high school teachers incorporate concepts of making, inventing and IP creation and protection into classroom instruction. Since the inception of the NSTI, educators from 45 states, as well as Washington, DC and Puerto Rico, have participated in this program.

Additionally, this past spring, the USPTO was proud to announce the second installment of our Science of Innovation video series, in collaboration with the National Science Foundation and NBC Learn, the educational arm of NBC News. These short videos and corresponding lesson plans highlight women in STEM and have been integrated into middle and high school curricula. Finally, in partnership with the YMCA of the USA, the USPTO expanded its national training efforts to ten new host cities around the country to expand “Thingamajig”, a program developed by the YMCA of Metropolitan DC. These cities will create programs, seminars, and tools that connect 100,000 youth in 48 states and DC with STEM education by using with real-world problem solving.

IX. Big Data and the Cancer Moonshot

As part of the Department of Commerce’s “Open for Business” strategy, the U.S. Patent and Trademark Office developed ways to use the vast reserves of data to help solve some of the agency’s age old challenges. We built a platform to access our repository of data on innovation and research and development technology trends. We are now providing vast data sets, interactive visualizations, and a community platform for sharing and discussing this data, making it easier for innovators—from researchers to entrepreneurs to well-established companies—to mine this data, help inform them where to allocate research and development resources, and provide them with a much more detailed view of the competitive landscape than previously available. This access to extensive patent data also provides current information on the competitive landscape. This data will not only bring more intelligence to technology trends, but when government data silos are broken down with easily digested, open data, it also has the opportunity to bring powerful advancements that could greatly improve people’s health and quality of lives across the globe.

The USPTO is also collaborating with the Cancer Moonshot Task Force, a coalition of government agencies, to advance efforts to use data to spur advances in the treatment of cancer. The Moonshot Task Force's goal is to use the data to inform public policy, and to make that data available to other interested groups so they can use it to best invest in the areas that are showing the most promise. By streamlining the patent process for technologies that show promise, government and research entities can make more precise investments in the areas the data illuminates. These ideas are just scratching the surface of the prospects of how this data can change the world.

X. Conclusion

We are proud of our accomplishments in reducing patent pendency and backlog, focusing on improved patent quality, maintaining excellent trademark operations, expanding STEM and inventor educational outreach and otherwise promoting intellectual property protection on the domestic and international levels.

We appreciate the Committee's continued support of the goals, priorities, operations and employees of the USPTO. We look forward to working with you to promote the strong and balanced protection of intellectual property rights both home and abroad for our country's innovators.

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Mr. ISSA. Thank you.

I would note that there is a delay on many of the Ranking Members from being here, and it is unavoidable, and they will join us as soon as possible.

I would like to now go out of order and recognize the Chairman of the full Committee for his questions. The gentleman from Virginia is recognized.

Mr. GOODLATTE. Well, thank you, Mr. Chairman.

And, Secretary Lee, thank you again for joining us today.

My first question relates to the GAO and Commerce Inspector General reports that provide avenues for ways to improve the patent application review process. I am very concerned with what is being done to ensure that patent applicants are having their applications reviewed fairly and consistently.

What happens if an applicant, through the luck of the draw, got the short straw and had one of those poor-performing or derelict patent examiners reviewing their application?

Ms. LEE. Well, thank you very much, Chairman Goodlatte, for the opportunity to answer that question.

Let me just say that our examiners come in and they are trained from the day they walk in on all the patent eligibility requirements. They are trained for 4 months, they come with their technical degrees, oftentimes advanced, and their job is to understand the statutory requirements for patentability. So we work very hard to make sure that they are applying that consistently and accurately across the examination corps.

We have reviewed processes, we have a quality tracker, we have annual reviews, and, in fact, quality constitutes an equal portion of their performance review as production. It is 35 percent for quality and 35 percent for production, so for a total of 70 percent.

In short, we expect a quality product and a quality examination from our examiners, and we work hard to train them. And with our master review form that we are soon to roll out, it is going to measure every one of the statutory requirements in detail, including clarity, and we are going to be gathering three to five times more data points, which then we can fold back and more precisely train and improve for consistency across the corps.

Mr. GOODLATTE. I completely agree that most patent examiners are well trained, well educated, and dedicated to their work. But, we do find there are some who engage in a shell game of refusing the application, requiring multiple changes to fix the application, only to refuse the application again on entirely arbitrary reasons, which has the effect of dragging out the process for years on end. And that is just not what I think you intend or what the law intends in terms of how long it might take somebody to get patent protection.

Ms. LEE. That is right. And pursuant to our compact prosecution practices and procedures, we require our examiners to identify every statutory basis for rejection for each and every claim that they are examining up front and early, because that is the only fair way. We then provide that to the applicant, the applicant has the ability to respond, and the prosecution proceeds accordingly.

But, it is not fair to withhold rejections. For every one of the claims that is before the examiner, every one of the statutory rejec-

tions, they are instructed to identify all the bases for rejection so that the applicant can respond. It is not meant to be hiding the ball or delaying the provision of those sorts of references that we find.

Mr. GOODLATTE. Thank you.

On the issue of patent quality, I want to ask you about the EpiPen patents. I understand that Epinephrine is not under patent protection but the delivery vehicle is and has been under some sort of patent protection going back to the 1960's and 1970's. Apart from a lot of marketing, I believe the current EpiPen only enjoys a patent on the safety cap on the needle.

I am curious as to whether such an incremental innovation, clearly based on previously issued patents and prior art going back nearly half a century, truly meets the standards for patentability, including obviousness. When prior patents have expired and you have a modest addition like the EpiPen safety cap, then we are not talking about the light bulb here.

Has the PTO looked into this patent or has an IPR challenge been filed? Is there anything that can be done to promote competition in this marketplace when we have seen the dramatic increases in the cost of this important safety device?

Ms. LEE. Yes. Well, thank you very much for that question. And let me just start by saying that patents are a key driver of investment and innovation. And any number of factors, I know this from the private sector and my experience in the private sector, they are any number of reasons that go into affecting the price of a piece of patented technology or a product or service.

And what I would say is, in this case I am not aware of any challenge that has been brought against the feature that you describe. However, our Patent Trial and Appeal Board proceedings are available to all, and if there are folks who think that the patent should not have issued, it would be considered before our Patent Trial and Appeal Board, and we would look at the facts of the case, the arguments presented, and the prior art cited to determine whether or not that patent should remain.

Mr. GOODLATTE. Because I think that case shows just how important the PTO post-grant proceedings are, particularly the inter partes review process. It is important for all patents to be subject to IPR, and maintaining this program is paramount to ensuring strong patent quality going forward.

Mr. Chairman, thank you.

Mr. ISSA. I thank the Chairman.

I will now go through my round of questioning.

Director, the case in the Federal circuit, *TC Heartland v. Kraft*, that is a big thing, isn't it?

Ms. LEE. It pertains to a very important issue, which is the issue of venue.

Mr. ISSA. And with 50 percent of all patents going through the Eastern District of Texas, although this case, oddly enough, is an Indiana versus Delaware case, this could decide very much the re-allocation of suits to be more broadly throughout the country, couldn't it?

Ms. LEE. It has implications on venue, yes.

Mr. ISSA. And in your past work in the private sector, venue means a great deal, doesn't it, especially as to cost to somebody

brought to a court well outside of where their engineers and their corporate headquarters are. Is that correct?

Ms. LEE. That is right.

Mr. ISSA. And this was decided initially by a three-judge panel. Are you prepared to ask for a full en banc in that case or to weigh in with an amicus?

Ms. LEE. So we are considering all of those issues, and of course we work together with our colleagues in the Department of Justice and the solicitor's office and so forth before we take any kind of amicus positions on behalf of the U.S. Government. But, for any key critical intellectual property issue, and this is certainly one of them, we would certainly be taking it into consideration.

Mr. ISSA. Okay. We have already established, this is a big deal. It really is affecting it. When will we know whether or not the Justice Department is giving you a green light to make those filings?

Ms. LEE. I would have to check where we are in the process, but we have had conversations on this topic.

Mr. ISSA. Okay. Would you agree to keep the Chair informed of that? I obviously have a very strong personal interest because if this case cannot be resolved fully—or even if it is—it could affect whether or not legislation goes forward here. And from my understanding, the Fed circuit pretty much said in the three-judge panel: We will let Congress handle it.

Now, I have no problem with them saying that, but we do need finality before we would take a three-judge panel.

So for us it is a big deal, and if you would just keep us informed. And is it possible for you to share any of the draft thoughts you have on this case with us? I would appreciate it if you could do that also.

Ms. LEE. We would be glad to follow up and share with you as much as we can.

Mr. ISSA. I appreciate that.

At previous hearings going back a long way, there was a challenge to looking at telecommuting or telework workers. Many of those included observations that some were not actually working during the time they said they were working, and efforts were made to try to verify whether somebody was giving you sort of their 8 hours for 8 hours.

Can you briefly tell us what you believe you have been able to accomplish in ensuring that people that are at work are at work?

Ms. LEE. Yes. Well, thank you very much for the opportunity to address that very important issue. And let me just start by saying that my team and I do not tolerate any time and attendance abuse. Any hour that is claimed as work that is not worked is unacceptable. It is not fair to the American public, and it is not fair to the vast majority of our hard-working employees.

So what I will say is, since the time we last spoke, my team and I have undertaken a number of initiatives to enhance our workforce management, processes, and procedures, including during that 15-month period during which the OIG conducted its study. We retained the National Academy of Public Administration, a respected third-party independent auditor to come into our operations in 2014. They were at the USPTO for months looking at our teleworking program and our workforce management procedures.

They issued a report in July of 2015 largely affirming that the USPTO has controls in place to manage its workforce and concluded that it is unlikely that time and attendance abuse is widespread and that it is not unique to teleworkers.

That said, they made 23 recommendations for improvement. The USPTO has implemented or taken actions to respond to all 23 of the recommendations.

Our supervisors also have tools to manage their employees, and I would like to share with you a very specific example to give you an idea of the tools they have. They have got this online dashboard, and every supervisory patent examiner has the ability to see for every one of his or her employees every piece of work product that lands on his or her desk, when she picks it up, how long it is taking to resolve the matter, whether it is ahead of schedule, green; whether it is approaching the deadline, yellow; or whether it is past its due date or expected time, red.

So it is in a heat map-like format for every one of their employees for every piece of work product at a glance, and that is whether the employee is working in our Alexandria campus or teleworking full or part time or working in one of our regional offices, including in some of your home districts. So we have very accurate and very helpful tools for them to manage and get a sense of what their workforce is doing.

Keep in mind that our examiners also have measurable and quantifiable job requirements on production, quality, and timeliness. Also, in February of 2015, the USPTO implemented a policy requiring all supervisors and full-time teleworkers to remain logged into the USPTO during work hours; also to use collaboration tools such as instant messaging or the chat function and presence indicator, which indicates green or red as to whether or not you are available; also to provide work schedules to their supervisors in advance.

We have provided guidance to supervisors on how to monitor indicators of time and attendance abuse, including responsiveness to supervisory communications, inconsistent workload activity—if they are submitting work inconsistently, that could oftentimes be an early sign of time and attendance abuse—and customer complaints.

Recently, we have retrained all our supervisors and all our employees on time and attendance policies and gotten 99 percent of our teleworkers to take a refresher course on their teleworking obligations and to recertify their teleworking obligations. And as to that 0.01 percent, we are going to get them when they return from leave.

Furthermore, we have made trainings annual, not just a one-and-done, and they are on topics such as how to effectively manage a workforce, including time and attendance oversight guidance, including a publication of an agency-wide telework management handbook on how to manage in a telework environment, including expectations and how to record time.

And also, and importantly, I have made clear to every one of the employees at the USPTO that time and attendance abuse is not tolerated and that we will take any and all actions when we find violations.

So the combination of all those efforts, Mr. Chairman, I think provides for us the controls and oversight we need to ensure that our employees are meeting their performance obligations and their telework obligations and are really giving you all the confidence that you deserve and the American public deserves on our operations.

Mr. ISSA. And with the 19 seconds remaining in my time, I am going to ask you what could be a simple question and a difficult answer. Would you welcome legislation that would put an absolute time limit on pending patents that in the opening statement were called submarine? In other words, Congress mandating that we bring to a conclusion patents which were applied for before I entered Congress.

Ms. LEE. Yes. Thank you very much for that question. It is a good question.

With regard to those pre-GATT applications, I can't speak too much about them because a number of them are subject to litigation, but what I will say is many of them have numerous claims. And they are complicated issues, and the applicant involved has been—we have been involved in resolving them.

So I think it would be hard to—well, it would be hard to have an absolute time limit, but I want to let you know that we are working on it. We have got a dedicated team of 14 full-time patent examiners focused on those issues. With regard to a certain category of the pre-GATT applications that are not the subject—not belonging to one particular applicant, we have reduced the number of pre-GATT applications by 80 percent, from 100 to 20.

So what I would say is, if you would, please allow the agency to do its work. We know it is a priority. It is a concern I share with you. We need to move those patent applications along, and we are taking all the steps we need to move those along.

Mr. ISSA. Thank you.

The gentlelady from Washington.

Ms. DELBENE. Thank you, Mr. Chair.

And thank you, Secretary Lee, for being with us today and for all of your time.

While the Innovation Act, H.R. 9, has stalled right now, patent reform remains as important as ever, and I hope it is something that we are able to resume very soon.

I am particularly interested in seeing venue reform, and I wondered if you would agree that forum shopping has distorted the landscape of patent litigation in many ways, and do you think there needs to be reform to prevent patent trolls from abusive forum shopping?

Ms. LEE. Thank you very much, Congressman, for that question. And as I testified before the House, I think it is probably a little over a year ago, what I said in that testimony still holds true now, which is I think that any opportunity to reduce the opportunities and advantages of forum shopping would be advantageous and we should consider.

So I know there are various pieces of legislation that are pending that have been introduced. The Administration has not yet taken a position on any specific piece of legislation.

But, really having litigants adjudicate their patent disputes in courts where they have meaningful ties makes a lot of sense, and this should be one of a number of proposals that we consider as we look to strengthen our already very strong patent system.

Ms. DELBENE. What type of impact do you think reform would have on the broader landscape, and particularly on market forces that drive patent legislation today?

Ms. LEE. Are you talking about venue reform or are you talking about broader reform?

Ms. DELBENE. Venue reform, in particular.

Ms. LEE. Well, I think as to venue reform, if you eliminate the opportunity for gamesmanship, that has advantages at every stage of litigation. So I know a number of the proposals in the previous pieces of legislation that were introduced dealt with discovery and dealt with summary judgments and attorney's fees.

But, if there are no opportunities for gamesmanship, basically you end up in a court and you have a court that is equitably deciding all of these issues, that influences the management of the case throughout the entire case, from the summary judgment stage to the discovery stage to the damages award fee stage, and is again, I think, one of the things amongst others that we should consider in terms of avenues to potentially strengthen our already strong intellectual property system.

Ms. DELBENE. Thank you. I also would like to urge your continued work on the inter parte, the IPR review process. Clearly, the process has not been without some controversies and difficulties. I wonder if you could talk to us a little bit about what you have been doing to ensure patent quality through the IPR process while also ensuring that the process isn't abused.

Ms. LEE. Yes. Thank you very much for that question.

The Patent Trial and Appeal Board proceedings are a critical piece for ensuring that we have quality patents in our system. I have launched an Enhanced Patent Quality Initiative, which is meant to focus on making sure that the USPTO issues top quality patents before it leaves our office.

But, as to the patents that are already in the system, the Patent Trial and Appeal Board, as Congress intended, as you all intended, was meant to be a quality check. Are there patents in the system which under today's law should not be? And if so, the public has the opportunity to bring that back to the agency with a panel of three technically trained judges who are steeped in patent law to consider whether or not certain claims should remain or whether or not they should be invalidated in light of the arguments presented, the prior art references cited, and so forth.

So it is serving, as Congress intended, as a means to providing a faster, lower-cost alternative to district court litigation in terms of testing the validity of the patent. We have about 269 judges on board, many of them come from our regional offices, a super talented team. And we are making sure that these proceedings are as effective and fair as possible by continuing to revise the procedures as we get input from our stakeholders and from the people who use the proceedings.

We have issued new rules, fine-tuning the rules governing the Patent Trial and Appeal Board, and I continue to say that I remain

open to any and all additional changes that the public, in a consensus-like manner, tells us we need to make, provided it is within the statutory mandates of Congress.

Ms. DELBENE. You mentioned the Enhanced Patent Quality Initiative, and I want to applaud you and the PTO for launching that. And the GAO's findings indicate there is more work needed to be done to ensure the quality of patent applications that are approved.

Can you give us an idea of how you measure quality and how you look at that? Because those metrics are going to be important to understanding whether the program is successful or not.

Ms. LEE. Yeah, of course.

So let me just step back a moment and address the GAO quality report. I want to thank the GAO for their work on this issue that I care very deeply about, which is patent quality.

The GAO made seven recommendations on enhancing patent quality, and we agreed with all seven of them. In fact, even before the GAO report published, the PTO already began working on issues addressed in all seven of the recommendations. In some cases, we have been working on these initiatives for a year or more. And we appreciate the GAO's acknowledgment of our good work in this area.

Now, we recognize we have more work to do, and the USPTO is fully committed to continued leadership and enhancement in this critical area.

On your question about measuring patent quality, one of the key prongs in our Enhanced Patent Quality Initiative is to improve the way in which we are measuring patent quality. And we held a patent symposium and we got input, and one of the key issues we discussed is, look, there were 2,200 attendees, how can we improve the way in which we are measuring patent quality?

And we got a lot of feedback. They made some suggestions about how they wanted the way that we used to measure patent quality modified. And that is what we have done. We have taken that input to heart. We are modifying the ways in which we measure the patent quality. For the most part, they like the seven sub-components that fed up to our quality composite. We are going to keep those, and we are going to look for any additional factors that are good measures of patent quality.

Also, we are working on a master review form which measures for every statutory requirement for patentability how did the examiner do on each of those, including on clarity of the record. And that will be a very powerful tool, and we have gotten extensive stakeholder public input on that, and it will generate three to five times more data when we are electronically recording all those data points so that we can then go back and precisely train certain art units, certain technology centers, because we will have statistically significant data, to be much more precise on our trainings and areas for improvement.

Ms. DELBENE. Thank you.

I yield back, Mr. Chair.

Mr. ISSA. Thank you.

I now ask unanimous consent that letters addressed on the subject of this Committee from the Consumer Technology Association be placed in the record. Without objection, so ordered.

And another one from the Internet Association be placed in the record. And again, without objection, so ordered.
[The information referred to follows:]

Consumer Technology Association™

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703-907-7600
CTA.tech

September 12, 2016

The Honorable Bob Goodlatte
Chairman, Judiciary Committee
United States House of Representatives
2309 Rayburn House Office Building
Washington, DC 20512

The Honorable John Conyers
Ranking Member, Judiciary Committee
United States House of Representatives
2426 Rayburn House Office Building
Washington, DC 20512

The Honorable Darrell Issa
Chairman, Subcommittee on Courts,
Intellectual Property, and the Internet
United States House of Representatives
2269 Rayburn House Office Building
Washington, DC 20515

The Honorable Jerry Nadler
Ranking Member, Subcommittee on Courts,
Intellectual Property, and the Internet
United States House of Representatives
2109 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Goodlatte, Ranking Member Conyers, Subcommittee Chairman Issa and Subcommittee Ranking Member Nadler,

On behalf of the Consumer Technology Association (CTA)™ and our more than 2,200 member companies – 80 percent of whom are small businesses and startups – I would like to thank you for your attention to improving our patent system. As you know, patent trolls drain \$1.5 billion a week from our nation's economy through baseless threats and bogus lawsuits, often based on overly broad patents. Every day we allow this extortion, more American jobs are lost, more innovative startups are shut down and more resources are needlessly siphoned away from R&D.

In your questions to the Director of the U.S. Patent and Trademark Office, Michelle Lee, at the subcommittee hearing on September, 13th, I encourage you to focus on the USPTO's role in improving patent quality and deterring patent extortion. CTA's member companies include many of the nations' largest patent holders and many of the most frequent targets of patent trolls. These companies, which create tens of thousands of jobs, rely on a strong patent system that incentivizes innovation and discourages empty threats.



As highlighted in two recent reports by the Government Accountability Office (GAO), GAO-16-490 and GAO-16-479, the USPTO could implement several reforms to better serve American innovators. Most notably, the USPTO currently lacks a clear and consistent definition of patent quality. It is, therefore, unable to measure patent examiners' success based on quality metrics. Assessing patent examiners based on the quality of patents issued, rather than simply the volume of patents granted, would be a significant step in the right direction. This would help to ensure that inventions are properly protected and overly broad patents – the sort favored by those who intend to use patents only for legal threats – cease to be issued.

The GAO reports include a number of other laudable recommendations, including requirements that patent applications meet certain clarity guidelines, investigating whether patent examiners need additional time to adequately review applications, strengthening audits to ensure that examiners are issuing quality patents and improving tools available for examiners in prior art searches. CTA and our member companies are very appreciative of the patent quality initiatives the USPTO has already implemented under Director Lee, and we encourage the Judiciary Committee to continue to work with her to implement the recommendations included in both GAO reports.

Enacting reforms at the USPTO to improve patent quality would be a welcome step toward deterring patent trolls. Unfortunately, administrative reforms at the USPTO alone cannot end this extortion. Only Congress has the authority to implement the legal reforms necessary to end patent trolling. Congress should work to swiftly pass legislation that includes heightened pleading standards, reasonable discovery limitations, clear fee recovery guidelines, customer stay protections and venue reform.

Thank you again for your commitment to strengthening America's patent system. CTA looks forward working with you to ensure our companies can focus on developing the next great invention instead of wasting time and resources in court.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Shapiro". The signature is fluid and cursive, with the first name "Gary" and last name "Shapiro" clearly distinguishable.

Gary Shapiro
President and CEO



Internet Association

September 12, 2016

The Honorable Darrell Issa
Chairman
Subcommittee on Courts, Intellectual Property and the Internet
Committee on the Judiciary
U.S. House of Representatives
Washington, D.C. 20515

The Honorable Jerrold Nadler
Ranking Member
Subcommittee on Courts, Intellectual Property and the Internet
Committee on the Judiciary
U.S. House of Representatives
Washington, D.C. 20515

RE: Statement for the Record on "Oversight of the U.S. Patent and Trademark Office."

Dear Chairman Issa, Ranking Member Nadler, and Members of the Subcommittee:

The Internet Association commends you for holding the September 13, 2016 hearing on "Oversight of the U.S. Patent and Trademark Office (USPTO)." Congress has a vital role to play in providing the USPTO with both the resources and guidance necessary to fulfill its mission. This hearing is a timely opportunity to examine the impact of recent administrative and policy changes aimed at improving USPTO functions, as well as future steps that will be essential to high patent quality.

The Internet Association works to advance policies that foster innovation, promote economic growth, and empower people through the free and open internet.¹ The internet creates unprecedented benefits for society, and as the voice of the world's leading internet companies, we ensure stakeholders understand these benefits. Our members experience the U.S. patent system both as owners of intellectual property and as parties subject to abusive patent troll litigation. Ensuring high quality patents is indispensable to ensuring that the patent troll business model is made less tenable over time.

The damage done by trolls does not start with litigation. Access to a cheap supply of vague, overly broad, low quality patents in our system provides trolls the ammunition they need to engage in abusive litigation against productive businesses.

There is no single action that would eliminate low-quality patents and the harm they bring to our innovation economy. Vigorous post-grant review, patent litigation reform, and continued efforts to seek to increase the efficiency of the patent review system are all key components of fostering a system that produces higher quality patents. Specifically, this includes bringing more clarity to patents and their

¹ The Internet Association's members include Airbnb, Amazon, Coinbase, DoorDash, Dropbox, eBay, Etsy, Expedia, Facebook, FanDuel, Google, Groupon, Handy, IAC, Intuit, LinkedIn, Lyft, Monster Worldwide, Netflix, Pandora, PayPal, Pinterest, Practice Fusion, Rackspace, reddit, Salesforce.com, Snapchat, Spotify, SurveyMonkey, Ten-X, TransferWise, TripAdvisor, Turo, Twitter, Uber Technologies, Inc., Yahoo!, Yelp, Zenefits, and Zynga.



Internet Association

prosecution record, as well as the Office's willingness to reevaluate its patent quality metrics. For today's timely hearing, the Internet Association wishes to highlight the work being done at USPTO, and several key challenges that remain.

The Enhancing Patent Quality Initiative

The USPTO launched the Enhanced Patent Quality Initiative in spring 2015, which focused on identifying policies and processes at the USPTO that would improve patent quality.² Under Director Michelle Lee's leadership, the EPQI marked important milestones in advancing an inclusive and robust dialogue about the state of the patent quality system and potential for improvements.

Moving forward, it will be essential for the USPTO to implement changes that provide better quality assessment from the early stages of prosecution. In particular, the Internet Association urges the USPTO to fully implement the Post Grant Outcome program to ensure that patent examiners are aware of and able to leverage information from any challenges to patents that have related patent applications pending at the USPTO. In addition, it is critical for the USPTO to focus on reforms that encourage clearer patent claims, such as including definitions of patent claim terms in the written record for patent applications so that the public is aware of what the terms mean. Finally, USPTO should vigorously demand algorithms in computer-implemented patent claims, so that software patents don't claim all ways of achieving a result or function and avoid other problems associated with preemption.

The Internet Association is encouraged by the work done by EPQI, and encourages the next Administration to continue the important work started at the USPTO.

Government Accountability Office Reports

As the USPTO works to implement identified areas for quality improvement under the EPQI, two reports recently released by the GAO highlight systemic issues in patent examination that fail to create quality-focused incentives that must also be addressed. In the first report, "Patent Office Should Define Quality, Reassess Incentives, and Improve Clarity," the GAO examined recent patent litigation trends and explored opportunities for further improving patent quality at USPTO.³ The report recognizes the continued problem of patent quality in fueling litigation, observing that "low quality patents are more likely to be asserted in patent infringement lawsuits because, according to some economists, the less clear the claim boundaries are, the more likely that others will infringe the patent or will continue to infringe when confronted by the patent owner."⁴ In order to stem the flow of low quality patents, the GAO examined processes for patent examination at the USPTO, and found numerous challenges to quality enhancement.

The USPTO's current metrics for patent examiners is based on a count system that rewards production over quality, failing to establish incentives for high-quality work that may be more time consuming. For

² See Enhanced Patent Quality Initiative, U.S. Patent and Trademark Office, available at <http://www.uspto.gov/patent/initiatives/enhanced-patent-quality-initiative-0>.

³ U.S. Gov't Accountability Office, GAO-16-490, Patent Office Should Define Quality, Reassess Incentives, and Improve Clarity (2016).

⁴ Id. 11.



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complex claims, such as those in software, patent examiners may require additional time to research unclear or broad claims in order to produce a higher quality patent. In its study, the GAO found that 90% of examiners encountered broadly worded patent applications, with the vast majority of examiners struggling to thoroughly examine the claim.⁵ The report notes that 70% of patent examiners faced serious time constraints.⁶ The combination of inadequate time constraints and rigid metrics that fail to incentivize quality work will continue to produce low-quality patents that harm our innovation economy.

The USPTO must consider an alternative approach to the current metrics system that (1) incentivizes high-quality patents and (2) alleviates the rigid time constraints that are contributing to lower quality patent examination. While ensuring that patent backlogs do not stymie inventors nationwide, efficiency must not come at the cost of effective patent review, which is necessary for a world-class patent system that leads to both current and future innovation.

The GAO also notes that USPTO lacks a consistent definition for patent quality. Without goals and indicators for quality measurement, the USPTO will be unable to determine whether policies and procedures aimed at higher quality patents are effective.⁷ Clear, consistent guidance on quality standards are necessary in order to both incentivize and monitor quality measurement at USPTO. While challenges exist in creating and monitoring quality, it is paramount that USPTO begin to explore potential solutions that will lead to long-term improvements in patent quality.

In addition to recommendations for the USPTO's work, the first GAO report also highlights the continued proliferation of opportunistic patent trolls in our courts, notably in the Eastern District of Texas (EDTX). The report notes that while in 2007, only 20% of cases took place in EDTX, by 2015 nearly half of all patent infringement litigation occurred there.⁸ The result is a de facto patent district court – a patent district court established without the express approval of Congress and because of the perceived advantages provided to patent plaintiffs there. Local rules disadvantaging one party, disproportional win rates, unreasonable damage awards, and expansive, inequitable discovery practices attract trolls to East Texas, where their embedded business model is thriving as a form of legalized extortion. Common sense reform that ensures judicial districts have jurisdiction over patent infringement lawsuits are narrowed to only those that have a material connection to the alleged infringement enjoys widespread support amongst stakeholders. The Internet Association commends this Committee for unanimous passage of venue reform language to H.R. 9, the Innovation Act, and strongly supports efforts to curb this abusive practice.

In its second report, "Patent Office Should Strengthen Search Capabilities and Better Monitor Examiners' Work," the GAO found that additional tools, training, and resources may be necessary for patent examiners, notably in prior art searches.⁹ In addition to examining the technical capabilities necessary for thorough work, the report recommends strengthening reviews of examiners' work and establishing identifiable indicators of the quality of the work performed.¹⁰ Combined with the first report, it is critical that the USPTO (1) establish quality indicators that both examiners and supervisors need to perform

⁵ Id. 34.

⁶ Id. 26.

⁷ Id. 37.

⁸ Id. 16.

⁹ U.S. Gov't Accountability Office, GAO-16-479, Patent Office Should Strengthen Search Capabilities and Better Monitor Examiners' Work (2016).

¹⁰ Id. 56.



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thorough examination of claims (2) regularly monitor and assess the work of patent examiners to ensure that quality controls are working. Better oversight of examiners' work is necessary to assess the work being done and whether quality indicators are being accounted for, and whether spending more time on applications to ensure thorough examinations or conducting appropriate prior art searches is necessary.

Report of the Inspector General

In addition to the recent GAO reports, the Department of Commerce Inspector General (IG) released an August 2016 report focused on time and attendance abuse of patent examiners.¹¹ Specifically, the report found that among over 8,000 surveyed patent examiners, there were over 130,000 unsubstantiated hours resulting in millions of dollars of unaccounted for work.¹² The IG notes that this abuse impacts the ability of the USPTO to reduce the backlog of patent applications and account for efficiencies during examination. A number of misaligned incentives and production goals may contribute to the abuse, the IG report notes.¹³ The Internet Association also recognizes that abuse of time and attendance records will have a direct and detrimental effect on patent quality. We must foster a system that rewards the quality of work rather than simply production itself. Better examiner metrics and oversight will contribute to accountability for both time and quality, improving the overall patent system.

Conclusion

Low quality patents can stifle our economy and harm the public by fueling needless litigation and creating uncertainty for inventors and business owners, detracting from opportunities for further innovation. A multifaceted problem such as low quality patents and the trolls they fuel requires a multifaceted solution. Congress and USPTO have made strides to eliminate low quality patents and the harm they produce, yet more work remains to be done. The recent GAO report and the experience of our member companies highlight the continued need to reevaluate the factors contributing to low quality patents and implement and monitor quality-based changes, both through and beyond the EPQI.

The Internet Association looks forward to continuing a working dialogue with both USPTO and Congress to achieve our shared goals of a high quality patent system that encourages innovation.

Respectfully Submitted,

Gina G. Woodworth
Senior Vice President, Public Policy & Government Affairs

CC: The Honorable Bob Goodlatte, Chairman, Committee on the Judiciary
The Honorable John Conyers, Ranking Member, Committee on the Judiciary

¹¹ U.S. Department of Commerce, Office of the Inspector General, Analysis of Patent Examiners' Time and Attendance (2016).

¹² Id. 2.

¹³ Id. 21-23.

Mr. ISSA. We now go to Chairman of the full Committee, Mr. Goodlatte, for his questioning. Oh, I am sorry, you are right, I did go to you.

Mr. Smith.

Mr. SMITH. Thank you, Mr. Chairman.

Director Lee, thank you for your testimony today, and I appreciated your response to the earlier question about how your post-grant rules are working, and I know you are still sort of waiting for that to shake out.

I wanted to ask you more broadly, and you spoke broadly, and I would like to ask you to be more specific as to what other improvements you feel are needed for the America Invents Act. And by the way, I won't take any suggestions personally.

Ms. LEE. Well, let me see. I mean, a lot of good was achieved out of the AIA, thanks to your leadership and the leadership of many in this room, including the establishment of the regional offices. I can't tell you what a success that has been for our agency and our innovation community.

The change from the "first to invent" for the "first to file" was a necessary step for the harmonization, and of course the AIA Patent Trial and Appeal Board proceedings are providing the faster, lower-cost alternative to district court litigation.

Mr. SMITH. What improvements or changes would you like to see? Within reason.

Ms. LEE. On the Patent Trial and Appeal Board proceedings front, those are complicated proceedings, and the USPTO did a very good job of taking a first crack at implementing those proceedings, all sorts of procedural determinations, fleshing out and filling in some of the details that we needed to do when we implemented them that were not included in the statute.

And over time we got experience with these proceedings, we got a lot of input from our stakeholders. And one of the first things that I did in my job as head of the agency, even before I was sworn in as Director of the USPTO, was to engage in a multiple-city listening tour to find out how we could improve those proceedings, to make sure that they were as effective and fair as possible. And we got a lot of input.

Mr. SMITH. So an ongoing process.

Ms. LEE. It is an ongoing process. And with our rulemaking and with our taking into account the input that we get from the users of our system, I think we can continue to strengthen them.

Mr. SMITH. You mentioned a couple of areas, and that is good to hear.

Let me jump to an entirely different subject, and that is the ability of our innovators, the ability of our inventors to protect their patents in foreign courts. I think they oftentimes have problems. If so, what can we do about it?

Ms. LEE. Yes. So we spend a good part of our time and resources making sure that American innovators encounter a level playing field when they want to ship and sell their products overseas. It is in America's interest that we ship as many products and services overseas as possible.

And so what we have is we now have, I mentioned our IP attaché program in my opening statement, we have 13 IP attachés across

the globe. And these IP attachés are associated with the U.S. embassies oftentimes, and they help American innovators navigate the intellectual property regime in various foreign countries.

These IP attachés also work with policymakers to help craft legislation containing values and IP values that we share to make sure that there are appropriate protections, remedies, and consequences for violation infringement.

All to make sure that American innovators again are confident that when they ship or sell their products overseas, they encounter a level playing field.

Mr. SMITH. Okay. I have one more question, and then I would like to yield the balance of my time to the Chairman of the full Committee, Mr. Goodlatte.

My last question is this. You face this delicate balance between trying to process patent applications both quickly and thoroughly. You had the GAO report where 70 percent of the patent examiners said they wished they had more time.

What reforms do you envision in the near future being made to enable you to reduce the backlog, which you have done so well, I think you said 78 percent, but to continue to reduce the backlog and process patent applications, but doing so in a very thorough way? What reforms that have not yet been implemented do you anticipate? Very briefly.

Ms. LEE. Thank you very much. We are already looking at—and this is before the GAO report came out and before the IG report came out—across our examination corps, are we allocating the correct amount of time, the proper amount of time for our examiners to do this very challenging job?

Mr. SMITH. So you are thinking about increasing the time allotted?

Ms. LEE. I think we need to remain open. In some instances, more time; in some instances, less. What we need to do is make sure that we are giving the appropriate amount of time to accomplish this very challenging task.

Mr. SMITH. Thank you, Director Lee.

I yield the rest of my time to Mr. Goodlatte.

Mr. GOODLATTE. I thank the gentleman for yielding.

I just want to follow up on that general area. The IG has apparently found that some of your employees have quite a bit of extra time, because they are simply collecting a paycheck without actually working. The last time you were here, I believe you told us that you have zero tolerance for this type of behavior, which I very much appreciate.

In the aggregate, accounting for employee privacy, how many examiners at the PTO have you or your staff identified as delinquent either in the Patent Division or Trademarks, and have you taken any disciplinary action as of this date with any such employees?

Ms. LEE. Yes. So we have taken action for time and attendance abuse, and that ranges anything from counseling, to a letter of reprimand in the employee's file, to suspension, to termination, and repayment of moneys paid for hours worked that were not worked.

I know during the period during which the OIG conducted his investigation, from August of 2014 to November of 2015, we have al-

ready taken action against a number of the employees identified in that group.

So we can and we will continue to take all appropriate actions anytime we find time and attendance abuse.

Mr. GOODLATTE. Thank you very much.

Mr. ISSA. Thank you, Mr. Chairman.

We now go to the gentleman from Georgia, Mr. Johnson.

Mr. JOHNSON. Thank you, Mr. Chairman and Ranking Member, for holding this important hearing.

And I thank the witness today for her testimony, which is quite valuable.

Today's hearing is a testament to your leadership and focuses upon issues that are protected by our Constitution and fundamental to the ability of American companies and inventors to remain competitive in the global marketplace. Under you, Secretary Lee, I want to commend you for the improvements that you and your team have made to the Patent and Trademark Office. The PTO was ranked as the best place to work in the Federal Government in 2013, and you have diligently worked to not only cut costs in this post-sequestration environment, but also to improve internal processes so that the patent backlog can be addressed.

Despite these improvements, however, there are still some concerns overshadowing the Patent Office's success that deal with patent quality and diversity. The PTO was once criticized and faced litigation for alleged discriminatory practices in its hiring and promotion of patent examiners, especially against African American women. How has the telework program increased the USPTO's ability to recruit and retain high-skilled examiners from diverse backgrounds?

Ms. LEE. Thank you very much, Congressman, for that question. And I have the privilege of serving as the first woman head of the United States Patent and Trademark Office in our country's history, and it is a tremendous honor and privilege. And one of my very big initiatives is to make sure that we are recruiting and retaining the top technical talent that we can get, the top talent across the board, technical and nontechnical, across all demographics.

And we have mentoring programs. I have the Office of Equal Employment Opportunity director reporting directly to me, providing me with information on our programs to retain our very critical talent and to recruit very diverse talent.

It is an issue that I care very deeply about not only within the PTO. And I might add that within the PTO, we have more women executives than, dare I say, the average in the private sector, and we are looking to recruit and retain more candidates of diverse backgrounds into every level of the Patent and Trademark Office.

And externally, outside the Patent and Trademark Office, one of the issues that I found when I asked the question is that about 15 percent of the U.S.-based inventors that were listed on patents were women, and we would like to see more. And we would like to see individuals from diverse backgrounds taking advantage of programs that we create, like Camp Invention, where we bring elementary school-age kids to the camp.

It is a 1-week summer enrichment program. They learn a little bit about making, designing, building, prototyping, a little bit about intellectual property. And we give special scholarships, working with Invent Now as our partner in this, to kids from underprivileged backgrounds. Why? Because we can't afford to leave behind any inventor or any potential future entrepreneur. It is that important to our country's future success.

Mr. JOHNSON. What is the name of that program?

Ms. LEE. It is Camp Invention. And actually that is just one of the many initiatives we have to encourage all of our citizens to be excited about invention. I would like nothing more than for all of our children across all demographics, across all geographic regions of this great country of ours, to want to grow up to be inventors and to want to be entrepreneurs.

So I can get you a whole long list of issues that we are very proud of, but there is a lot more work to be done in terms of expanding the diversity both in terms of our inventor and applicant base, but also within the agency itself.

Mr. JOHNSON. All right. That will be great. I look forward to my fellow Members of the Congressional Black Caucus being able to know about Camp Invention and participate in it.

As mentioned in the 2016 GAO report on patent examiners, has the USPTO conducted an overall analysis of its examiners, of their skill, of their technical competency, to identify potential gaps in technical skills? And if so, what steps have you taken to address these gaps?

Ms. LEE. So we have taken steps to identify gaps in the skill sets of our examiners. What we do is when we make new hiring decisions, we tend to try to fill the gaps that we have. And also, with our existing employee base, we have worked very hard to continue to provide them technical and legal training, as the case law develops and changes, which it inevitably does, and importantly, as technology changes.

We have a program where we pay for our examiners to go back to get technical education in new areas of the technology so that they are examining and they know how to examine at the state-of-the-art level in these whole range of new technology areas that we are all hearing so much about.

Also, we have a patent examiner training program where we work with the private sector and academics where they volunteer to provide time, and they come to the Patent and Trademark Office or they come to our regional offices and they give a lecture on their area of expertise. And we can then televise that across all of our examination corps so that everybody who is examining in that area has the benefit of that educational training. It is provided for free and makes perfect sense. These people are in the industry. They have the state-of-the-art knowledge and expertise. The technology changes quickly.

So we train and keep our examiners at the top level of technical expertise through any number of these initiatives, and we are always looking to do more, and the public has helped us keep them up to date on the technologies, and we are very appreciative of that.

Mr. JOHNSON. Thank you.

And, Mr. Chairman, I yield back

Mr. ISSA. Thank you, Mr. Johnson.

We now go to the gentleman from Ohio for his round of questioning

Mr. CHABOT. Thank you, Mr. Chairman.

Madam Director, this past June, the GAO found that primary examiners have the least amount of time to examine patent applications, and therefore these applications often undergo the least amount of supervisory review.

What oversight measures has your office taken to ensure that each application undergoes a thorough examination, regardless of whether the examiner is a primary or a junior examiner?

Ms. LEE. Thank you very much for that question, Congressman.

It is interesting, I have got the GAO report that tells me that some 70 percent of our examiners volunteer and have uncompensated overtime in order to meet their minimum production requirements. And I have the IG report which is telling me that due to technological efficiencies, that the examination job has been so easy that we should consider reducing the time.

Clearly, the issue of the adequate amount of time for our examiners is an important issue, and I had mentioned that even before the publication of the GAO report and the OIG report, at the PTO we are undergoing a comprehensive study about the amount of time that each of our examiners has for tasks that they need to perform. And it is not fair to our examiners if they are volunteering time. On the other hand, it is not fair to the public if the tasks are too easy and we are giving too much time.

So it is my job and my team's job to find the appropriate amount of time for each of the tasks, and that is what we are committed to do.

Mr. CHABOT. Thank you.

It is my understanding that examiners have minimum production goals based on time allotted for the number of office actions that they have to complete, and examiners may earn bonus for exceeding the minimum production goals. What are the minimum production goals, and what criteria do you use to determine the time allotment?

Ms. LEE. Yeah. Thank you very much, Congressman.

The production goals vary, depending upon the seniority of the examiner. Clearly, the more junior examiners who are getting up to speed on the state of the art and are not as experienced are going to have lower production requirements.

I would be glad to have my office follow up with you at each of the various levels what their production requirements are. But remember, it is not just production, it is also the quality. And we expect all of our examiners, and all of our examiners are trained to produce a quality product. So quality is a prerequisite for all of our activities.

Mr. CHABOT. Thank you.

Approximately, you have, what, over 8,000 examiners? Is that what you said?

Ms. LEE. I think we are up to 8,500, but I can get you the precise number.

Mr. CHABOT. Okay.

Ms. LEE. It is a substantial body of examiners.

Mr. CHABOT. I know at one point a fair number, the number I had, was about half worked out of their homes. Is that still the case?

Ms. LEE. That may be true full-time or part-time, some combination. But I can, again, get you those numbers.

Mr. CHABOT. Obviously, if they are in their homes, there can be an issue of supervisory concerns that one might have. Are there any extra measures that you take if they are working out of their home, for example?

Ms. LEE. Yeah. So let me just point back to the National Academy of Public Administration report. They did an extensive study of our telework program, and they found that time and attendance abuse was not widespread and that it was not unique to teleworkers and that we had substantially the controls in place necessary to manage our workforce.

I would be glad to share with you the programs that we have and the tools that we have. I mentioned the online dashboard. I think you were here when I explained the online dashboard. That is a very powerful tool to know exactly what your employees are doing, the work product they deliver, and when they deliver it.

Mr. CHABOT. I know at one point that there were some significant problems with the folks at home. I am wondering, have you seen improvement in that area?

Ms. LEE. So the National Academy of Public Administration looked at this issue and found that there was no real difference between those working at home, in terms of misconduct and productivity, versus those in the office.

That said, we do have controls in place. We train our supervisors to monitor for varying levels of submission of work product. We require a number of our employees to—well, all our full-time teleworkers and all of our supervisors to log into the USPTO network during working hours, to participate and use collaboration tools, such as the instant messaging and the chat functions. And we train our supervisors on teleworking workforce management, how to approve hours, how to spot abuses or potential abuses as they may arise.

Mr. CHABOT. What is the current pay range that your patent examiners have?

Ms. LEE. Pay range?

Mr. CHABOT. Yeah. From what to what?

Ms. LEE. I would be guessing. So my guess is—

Mr. CHABOT. You don't have to guess.

Ms. LEE. Okay. Thank you.

Mr. CHABOT. If you can get that to us, I would appreciate it.

Ms. LEE. Okay. I would be glad to follow up with you.

Mr. CHABOT. And then finally, are you familiar with the terms “end loading” and “mortgaging”?

Ms. LEE. Yes, I am.

Mr. CHABOT. Would you explain what those—and I have only got a half a minute here—but could you explain briefly what those are and the problems that those can potentially cause?

Ms. LEE. Sure. Absolutely.

So end loading is where an examiner submits a large chunk of work near the deadline, not evenly but right near the deadline. That is not misconduct. That has implications on quality because the supervisor then has a whole bunch of work and a short amount of time to review it.

And to address the end-loading issue, the agency has implemented the Consistent Credit Initiative, which incentivizes our employees to submit the work product over a smoother period of time, and it allows us to identify bunching up of delivery of work product.

And mortgaging is where you are submitting work that is incomplete for credit, and that constitutes misconduct. And we take action when we find mortgaging activities occurring.

Mr. CHABOT. Thank you. My time has expired.

Mr. ISSA. I thank the gentleman.

I would announce for everyone that we are going to take the Ranking Member of the Subcommittee and then we are going to break for two votes and return immediately.

Is it four?

I apologize, four votes, and then return immediately following the last vote.

With that, the gentleman from New York is recognized.

Mr. NADLER. Thank you, Mr. Chairman.

First of all, let me ask unanimous consent to submit my earlier statement for the record.

Mr. ISSA. Without objection, so ordered.

[The prepared statement of Mr. Nadler follows:]

**Statement of Hon. Jerrold Nadler
Committee on the Judiciary
Subcommittee on Courts, Intellectual Property, and the
Internet**

Hearing on Oversight of the U.S. Patent and Trademark Office

**Tuesday, September 13, 2016
1:00 p.m., 2237 Rayburn House Office Building**

Mr. Chairman, a strong patent system fosters innovation, and can spur tremendous economic growth by enabling inventors to protect and exploit their creations. Today, we are holding an oversight hearing on the U.S. Patent and Trademark Office, which is responsible for administering this vital system.

It is appropriate that we hold an oversight hearing this week, since this Friday marks the five-year anniversary of the Leahy-Smith America Invents Act, the most significant overhaul of the patent system in a generation. I look forward to hearing from our witness, Michelle Lee, the Director of the USPTO, about how the patent system has adjusted to the post-AIA world, and what further reforms may be necessary.

One issue that has been left unresolved in recent years is the problem of abusive patent litigation, which stifles innovation by using the litigation system to extort settlements from innocent defendants. I was a cosponsor of H.R. 9, the "Innovation Act," which attempted to address this problem, and I was pleased that it was reported out of the Judiciary Committee on a strong, bipartisan vote. However, this legislation has been unsuccessful in reaching the House Floor and similar legislation has failed to advance in the Senate as well. I am interested in hearing the Director's thoughts on the appropriate path forward for reforms to the patent litigation system so that we may address this continuing problem.

In addition to considering the many important policy matters facing the USPTO today, we also have the opportunity to examine the management of the office itself. Much attention has been given, in recent weeks, to a Department of Commerce Inspector General report that alleged abuse of the USPTO time and attendance policies by the

agency's employees. In particular, the IG reported that patent examiners claimed to have worked a significant number of hours that the IG could not document ever having been worked.

The IG report grabbed headlines with raw data that sounds quite troubling—hundreds of thousands of unsupported hours, which could have been used to process thousands of applications, costing the agency millions of dollars in salary for work that hadn't been completed.

However, it is not clear that these claims of systemic abuse can withstand scrutiny. Certainly, in an organization with 8,400 patent examiners, there are bound to be a few bad apples. But a closer look at the IG report reveals a very different story.

To begin with, even if everything the IG alleges is true, it would amount to less than 2% of all the hours worked over the 15-month period that the IG investigated this issue. In fact, the IG acknowledges that after the USPTO instituted certain reforms to its telework policy, six

months into the study, the percentage of unsupported hours dropped to just 1.6%, an efficiency rate that most employers would boast about. But, the IG buried this fact in a footnote deep in the report.

② Critics of the report have also questioned its methodology, which is unlikely to have identified all the hours that patent examiners worked. The IG constructed a “digital footprint” for each examiner including ID badge swipes into the building, in-office workstation records, records for when teleworkers logged in to the system remotely, and the USPTO’s internal system for tracking patent applications. These records were then matched with the hours that examiners claimed to have worked.

Relying purely on this digital footprint, however, cannot account for hours that an examiner may have worked offline. The agency also does not track when employees leave the building, only when they enter, since ID badge data is used for security purposes, not time and attendance. It is also possible that some employees reported the correct number of hours that they worked, but they reported having worked

them on a different day. This may have been a violation of the USPTO's time and attendance policies, but it hardly amounts to fraud.

To be sure, if any employees are misreporting their time and attendance, the USPTO must address that problem immediately. I hope Director Lee will tell us what controls are already in place to combat such abuse, and what steps the USPTO is taking to respond to the IG report.

But I also hope that this report does not lose sight of the bigger picture. Over the last five years, the backlog of unexamined applications has shrunk significantly, and patent quality has been steadily increasing, though challenges certainly remain on both of those fronts. Whatever hours the patent examiners have been putting in have clearly yielded strong results.

I look forward to hearing from our witness about all of these issues and what Congress can do to help continue to move the USPTO and our patent system forward.

Thank you. I yield back the balance of my time.

Mr. NADLER. Thank you.

Ms. Lee, with reference to the IG report alleging time and attendance abuse, which I think has been referenced before, critics of the report have questioned its methodology, which allegedly is unlikely to have identified all the hours that patent examiners worked.

The IG constructed a digital footprint for each examiner, including ID badge swipes into the building, in-office workstation records, records for when teleworkers logged into the system remotely, and the USPTO's internal system for tracking patent applications. These records were then matched with the hours that examiners claimed to have worked.

Relying purely on this digital footprint, however, I would think cannot account for hours that an examiner may have worked off-line. The agency also does not track when employees leave the building, only when they enter, since ID badge data is used for security purposes, not time and attendance.

Given these problems with the methodology, do you think that the IG report may have underreported the amount of time that they were spending the time working?

Ms. LEE. Thank you very much, Congressman, for the question.

And let me just say that any hour claimed as work that is not worked is unacceptable. And we do thank the OIG for their report, and that report will play an important resource and will be an important tool for the USPTO in our ongoing commitment to further strengthen our workforce management practices.

Mr. NADLER. Let me just ask, do you think that given what I just said, the IG report may, in fact, have understated—may have overstated the problem, the amount of time not really worked?

Ms. LEE. It is possible.

Mr. NADLER. Thank you.

My second question is, assuming that they didn't overstate it, in the IG report, what percentage of all the hours the IG reviewed were unsupported?

Ms. LEE. Two percent of all the claimed hours by an examiner that lacked a digital footprint were unsupported.

Mr. NADLER. So the total number of unsupported hours was 2 percent in violation of the USPTO's time and attendance policies, assuming that they didn't underreport?

Ms. LEE. So let me just be clear. The IG looked at all the—some 14.7 million hours. They found some 289,000 hours that lacked a digital footprint, and that constitutes 2 percent of the total hours claimed.

However, in the period, the last 9 months of the study, that 2 percent number dropped down to 1.6 percent, and that was after the USPTO launched some new policies and controls in February of 2015. That number dropped down to 1.6 percent.

Mr. NADLER. I would think that most employers would think 1.6 percent is not too bad.

Let me just say that I hope that the report does not lose sight of the bigger picture. Over the last 5 years, the backlog of unexamined applications has shrunk significantly, whether only 98 or 98.5 percent of the time was spent properly. In that time, the backlog of unexamined applications has shrunk significantly and

patent quality has been steadily increasing, although we can improve both. But, the fact is those two things are true, and I congratulate you and the office for those.

And I thank you. And I yield back the balance of my time.

Mr. ISSA. The gentleman yields back.

And as promised, we will take a recess until as quick as we can come back after the last vote, probably be about 30 minutes. We stand in recess.

[Recess.]

Mr. ISSA. As promised, the Committee will come back to order.

Director, as you know, it is good to be Chairman, because any extra time flows to the Chair.

I have a line of questioning I would like to beg your indulgence on, and this goes to the core of patentability.

We deal every day with patents disproportionately. We are almost always talking about utility patents, 20-year term, subject to how long they take to get processed. But, there are other patents, including design patents. And over the years, there have been proposals for other patents of shorter duration, including one related to auto body parts, dress design, and so on.

Let me ask you a series of questions in hopes that your expertise, in combination with future work, could give us some insight. I just want to have these questions on the record.

In the biological and pharmaceutical industries, and even medical devices, when there are serious questions which we do not know the answer to, by definition, aren't we in a discovery process of the unknown?

Ms. LEE. Yes.

Mr. ISSA. And if the discovery of the unknown is by definition an invention, then any time there is a creation of a product that is a useful advance in the sciences, it enjoys the possibility of patent protection, wouldn't it?

Ms. LEE. That is right. New, useful, and nonobvious. Those are the requirements.

Mr. ISSA. So let me run you through a hypothetical question. Let's just say that this is a medical device. It has never been around before—or it is been around before. So we have this device. What we don't know is, is it safe and is it effective.

If those are unknowns and the very act of discovering whether something, which is not known to be safe and effective, becomes known to be safe and effective, isn't that potentially, subject to the definition of Congress, a patentable discovery?

Ms. LEE. So something that has existed in the past, not known to be safe or useful, but then discovered to be safe and useful.

Mr. ISSA. Right. Let's just take, for example, a hypothetical: Aspirin. We know a chemical compound. Do we know that it is safe and effective for reducing heart disease if taken in a certain way?

Ms. LEE. So your question is?

Mr. ISSA. My question is—and this is a hypothetical question, but it leads to a whole question of inherent patentability if defined by Congress—if, in fact, Congress were to choose to view the question of the unknown is something safe and effective, and that safe and effectiveness requires clinical trials and statistical analysis and ultimately proof that something has a level of effectiveness, is that

a useful advance in science? The answer, of course, is yes. And then the hypothetical is, why wouldn't that potentially be the subject of a new or innovative type of patent?

Ms. LEE. So if it exists in nature and there is no additional work necessary to create it or to achieve it, then under the current law it is not eligible for patent protection.

Mr. ISSA. Let's go through patentability for a moment. If somebody has a product, let's say opium, and they go through the process of preparing and using it in a different way, have they not many, many times received patents on various combinations of opiates?

Ms. LEE. They may have.

Mr. ISSA. So it is not a question of is a substance or anything known, it is a question of is there a new advancement in the science. And I am taking you through—and I am happy to yield when somebody else comes in—I am taking you through this because we have a challenge that you are very familiar with.

In the world of IPR, we have a vast industry who, although objections to patent after the fact in non-inter parte but ex parte, have been around a long time, and patents have been reduced or eliminated countless times by ex parte motions taken up by the PTO and ultimately found, because of some 102, 103, some prior art, usually not to be patentable.

The industry has come to us time and time again and said: We have this odd situation. We have the invention, which we rely on in order to make the investment, and the investment is not an investment in just development, it is an investment in a massive search of clinical science to determine two fundamental things, safety and efficacy. And efficacy is an unknown.

So I ask you, again, in this long-term exchange, if efficacy is an unknown for any substance, and efficacy for a dosage in combination with something is discovered, separate from the other many things that are in patentability, don't we have a fundamental of an advancement in science that we are inducing that, in fact, Congress, in concert with the President, could choose to write patent law that would allow that to be patentable without being inconsistent with our Founders' instructions to us?

Ms. LEE. You can choose to write laws on whatever you would like and with input from stakeholders, of course, I imagine, influencing that development, but it is not inconsistent with that which exists currently.

Mr. ISSA. I ask this because it is going to be, if you and I do our jobs well, it is going to be over a period of time harder and harder for people to know whether or not they have an investable new technology. Well, you can't wait until your patent is granted to begin the process of developing useful medicines and medical devices. And so we have a challenge, you and I, which is our mandate is not to give people exclusivity for a period of time. Our mandate is to promote these advancements in science.

So I leave you with that. I will go to the gentlelady from California. I started with it and I leave you with it, because I believe that as we end this Congress, this is the kind of thinking that we need to look at if we want to take that next step in the promotion of useful sciences.

Yes, ma'am.

Ms. LEE. So if you would, Mr. Chairman, if you would allow us, let me think about that further and the issues that you raised, and let us get back to you and myself get back to you on that very interesting topic. It is an interesting issue.

Mr. ISSA. I look forward to it. Thank you.

The gentlelady from California, Mrs. Walters.

Mrs. WALTERS. Thank you, Mr. Chairman.

Director Lee, the correlation between strong intellectual property systems and innovative economies cannot be denied. Moreover, less developed economies benefit greatly from those innovations over time.

Unfortunately, maintaining strong intellectual property rights continues to be a contentious issue at the United Nations. And recent efforts at the U.N., particularly the U.N. High-Level Panel on Access to Medicines, seem to be dedicated to preventing the adoption of stronger global laws needed to protect creators and innovators overseas.

That panel also seems resolved to circumvent the minimum standards that have already been agreed to at the WTO, which could undermine the United States IP system that is responsible for our own innovative success.

Can you please tell me how the Administration has responded to the U.N. High-Level Panel on Access to Medicines and what the plan is to ensure the U.N. serves to reinforce rather than challenge sound IP policies?

Ms. LEE. Thank you very much, Congresswoman, for that question.

And let me just start by saying that the USPTO supports expanding access to medicines, but it is important to consider really all aspects of this complex issue. And the U.N. High-Level Panel on Access to Medicines raised some serious concerns for us, particularly because of the process followed in appointing the panel and also because of the narrow focus and the biased mandate of the panel.

Let me give you an example. There is an unjustified assumption of IP policy incoherence between the rights of inventors, trade rules, human rights laws, and public health.

The Administration responded to the establishment of this panel and expressed concerns. We worked with an interagency group to formulate our response. And they have not yet come out with a report, but when they do, we will review it carefully and, of course, take appropriate steps.

So to answer your questions about what are we doing generally in the U.N. to make sure that we are promoting intellectual property rights and the importance of them, we routinely work with our peers in the United States Government to ensure that the U.N. serves to reinforce sound IP policies that promote the interest of innovators as well as consumers.

And I know, myself, I oftentimes engage on a bilateral basis with other countries who share our IP values precisely to achieve some of these goals.

Mrs. WALTERS. Thank you.

Mr. ISSA. I thank the gentlelady.

I do believe we have Members coming back, so I inquire what your schedule is like. How much longer do you have to be with us?

Ms. LEE. As long as you need me.

Mr. ISSA. I love that kind of talk.

Let's go back. You asked for more time on the submarine patents. The question, I guess, I have is, how much more time do you think we really need? When do you think, in your crystal ball, we would get past these legacy applications that now go back pre-1997?

Ms. LEE. So thank you very much for that question. And let me get back to you on the precise amount of time. I would have to check. There are a whole bunch of cases pending. They are all in various stages.

But, as to what Congress can help us do with regard to these pre-GATT applications, I know Congress has asked us repeatedly for information to publish the applications and so forth. And one can publish these applications only under one of two ways. One is by act of Congress, and secondly is by a showing of special circumstances.

And the Committee had requested that we publish these applications. I will say that a pre-GATT applicant sued the USPTO challenging our determination of special circumstances. And although the Federal circuit found that the PTO did not abuse its discretion in finding special circumstances in that case, based upon the prior lawsuit and in light of the Federal circuit guidance, we decided we would best spend our energy and resources, and, quite frankly, the resources of the Department of Justice and the court system, by pushing forward those applications.

But, there is something that Congress can do. I know you considered legislation in the past.

Mr. ISSA. We have a perfect draft of it, I believe.

Ms. LEE. So we would be delighted to work with you to support any legislation you might propose on that front.

Mr. ISSA. Well, I will take you up on that offer because I do think that if we put that place marker going into the next Congress, it might cause everyone to realize it is now time.

Let's talk about your search tools. There was quite a bit of discussion earlier about the various individuals who may have or may not have given you their full due.

I told you we would be having people coming back.

Do you believe that we need to continue to make a substantial investment—you need to make a substantial investment—in better tools to search more broadly and effectively for existing art? And if so, is that a unique requirement that you don't share with Commerce? It is kind of a two-part question there, is that requirement significant, do you think you have it? And does anyone else in Commerce share it to where it really is a joint project?

Ms. LEE. Thank you very much for that question.

One of the key prongs of our Enhanced Patent Quality Initiative is to get the most relevant prior art before our examiners as early as possible. And the key to getting relevant prior art can be improving our search tools. So the agency is absolutely focused on this.

And one of the initiatives in the Enhanced Patent Quality Initiative is—I mean, I come from the world of artificial intelligence, I know that technology has evolved significantly in the past 10 years. And should not the agency be looking at these technological developments to see if the computer can automatically generate some relevant search results to identify relevant prior art so that by the time it comes to the examiner, they have a place to start?

Now, we are just exploring this. It is pretty early on. It is something that we have discussed in our conversations with the stakeholders. Any and all tools that we have to get the best prior art before our examiners as early as possible will lead to a high-quality patent.

And one other initiative that we have—I mean, we have many initiatives, but we have this initiative called the Global Dossier program. And I am very proud about this because it makes a lot of sense. It has a fancy name, but it is a fancy name for a very simple concept.

And basically what we have done is we have worked with the five top patent offices across the globe—the United States Patent Office, the European Patent Office, Japanese, Korea, and China—and the file histories of their applications are now available online in a single portal that the entire public and our patent examiners can access.

So if I am a patent examiner examining a patent in the United States, one of the first things I might choose to do is go online to this portal and see what my peer examiners found in a related application. Doesn't mean I am not going to do my own search. Of course, I will. But, having the benefit of that so that when I pick up the application and when I do a search, I have got some pretty good references.

And keep in mind that a patent's validity depends upon all the prior art on this globe regardless of the language. So most of our examiners are primarily English language, English is their main language of proficiency, but the prior art references, if you are litigating a patent, they are going to comb the corners of the Earth. They are going to look for that Japanese reference. They are going to look for the German patent reference. And those could be invalidating references.

So for us to issue the very best quality patent possible, it helps that we take advantage of the native language expertise of examiners across the globe, have access to that, and take that into consideration before we issue a patent.

So that is not a search tool, so to speak, but it is taking advantage of search work that has been done by other patent offices across the globe and taking advantage of it. So that is another example of how we are getting prior art before our examiners as early as possible.

Mr. ISSA. And I might characterize that then as an active search rather than a passive search when you have other entities that may be able to illuminate you beyond that which you would find in a static search.

Ms. LEE. And also, I mean, I can go on, through our Patent Trial Appeal Board proceedings. The stakes are high in those cases. It is a litigation. A lot of money is spent by counsel to identify the

prior art. And you know what, if there is a pending related application that is still in our examination corps, why shouldn't that examiner have the benefit of all the hard work and effort that outside counsel has spent in terms of looking for those invalidating prior art references on a related application?

And through our Enhanced Patent Quality Initiative and consistent with the GAO report on patent quality, we have launched a pilot program to do exactly that. We should be taking advantage of those references that we find in PTAB litigation and in a related application and fold that back so we issue better quality patents.

Mr. ISSA. I look forward to seeing that part.

The gentlelady from California, Ms. Chu.

Ms. CHU. Well, first, thank you, Chairman Issa, for keeping this hearing open. I truly appreciate it.

Well, Director Lee, did OIG investigators conduct interviews with staff about reporting hours and timekeeping practices? Do you think that a more extensive investigation, including employee interviews and observations of employee behavior, would have resulted in different conclusions?

Ms. LEE. I don't believe they conducted interviews. What they did was they looked at hours claimed by the examiners and identified those hours that were claimed that lacked a digital footprint through computer network log-in, log-out data, through badge-in security data. It did not take into account, for example, the fact that some of our examiners just may work offline. They may print out a prior art reference and choose to read it.

Also, there may have been simple misrecordings of hours. If an examiner works very hard Monday through Thursday, more than the 8-hour day, and doesn't work Friday, but yet records 8 hours Monday through Friday, that could be a misrecording of hours. And I am not saying that misrecording is not problematic. It is certainly a problem and that is something that we are going to fix. But, is that fraud? Was that service denied to the United States Patent and Trademark Office? No, it is not.

Let me just say that if we find any time and attendance abuse, any hour claimed as work that has not been worked, we will take all appropriate action.

Ms. CHU. And we want to ensure that examiners are working at optimum levels to avoid increasing the backlog of unexamined patent applications. During this period in which OIG conducted its investigation of patent examiner time and attendance, did the backlog for pending patent applications increase or decrease?

Ms. LEE. Thank you very much for that question, Congresswoman. In fact, I looked up the answer to that question myself as I was reviewing the report, and I actually have for you the precise statistics.

During that 15-month period from August of 2014 to November of 2015, that was the period of the OIG investigation, the USPTO was delivering results. The backlog of unexamined patent applications was reduced from 616,000 to 557,000, a decrease of almost 10 percent, the first-action pendencies were reduced from 18.9 months to 16.8 months, and the total pendency was reduced from 27.5 months to 26.4 months, all while our filings were increasing on an average rate of about 4.5 percent.

So we were delivering results to our stakeholders. Now, the question is, might we have delivered 2 percent or 1.6 percent more? And my job is to find out if we could have, and if we could have, to do so.

Ms. CHU. Well, that is certainly good news.

And with regard to the telework program, are there any cost savings associated with it?

Ms. LEE. There are a lot of cost savings. As an executive and as a leader of the organization, I can't tell you how valuable the telework program has been for us and the success of the agency. I come from the tech sector. I know how scarce really talented technical talent is to get. It helps us recruit and retain top national talent across the country.

It also helps us maintain productivity. We all in Washington had to deal with the Metro slowdown or shutdown. Guess what? During that period of time, because of our telework program, our employees continued to remain productive.

Also, if you will remember, during the winter of 2015, we had a rather rough winter. There were a number of government closings. And I looked up the statistics, and on average during the winter snow days of 2015 December, the average patent examiner maintained close to 92 percent production rate. The average trademark examiner was more productive when they were teleworking than when they were in office, 106 percent production rate. And the Patent Trial and Appeal Board judges met every one of their strict statutory deadlines.

So on average, the PTO issued 4,000 more patents per year, decreasing our backlog, because we worked during government shutdowns. Those are our conclusions, our facts, but the NAPA report too found that the telework program saves the USPTO \$7 million per year by working during the shutdowns, and that doesn't count the savings in real estate on average. In 2015, we saved \$38.3 million per year.

All of that said, it is very valuable for our stakeholders, very valuable for the agency. It is my job to make sure that you all and the American public have the confidence that you deserve in our operations, in the accountability of all that we do, and we are committed to doing so.

Ms. CHU. Well, that is a very good point about the cost savings. And I appreciate that you do have this telework program. I am assuming that there are some improvements in terms of the reporting that you would make?

Ms. LEE. In terms of the—I am sorry?

Ms. CHU. Are there any improvements that you would make with the telework program?

Ms. LEE. Yes. We have made a lot, and we will continue to make any additional improvements as is necessary after we review the data very carefully. I am glad to go through those. We went through them earlier in the hearing, but I am glad to run through them.

We have implemented or taken action that responds to all 23 of the recommendations from the National Academy of Public Administration. They came in in 2014, they looked at our entire telework program, they looked at our workforce management procedures.

They concluded that it was unlikely that time and attendance abuse is widespread and that it is not unique to teleworkers. They also concluded or affirmed that the USPTO has controls in place to manage its workforce.

Also, I described an online dashboard, and I would like to share that with you because we think it is a very powerful tool to managing our employees. And basically what it is, for every one of our patent supervisors, for every one of the employees he or she supervises, in real time continuously he or she can see all the pieces of work product that are on that examiner's plate—when that examiner picks it up, are they ahead of schedule in addressing it, are they on time, are they late.

And it is in a heat map-like format, in green if you are ahead of schedule, yellow if you are kind of approaching the deadline, and red if you are running late.

So it is continuously updated for all of your employees that you are supervising. Whether they are located in Alexandria, whether they are located or teleworking part time or full time, or whether they are located in one of the regional offices, that is an at-a-glance view of what your workforce is doing.

So we think that is a very powerful and a very effective management tool, not to mention the fact that our examiners have clearly very quantifiable and measurable production requirements, timeliness requirements, and quality requirements.

And in February of 2015, we implemented new policies for all supervisors and all full-time teleworkers requiring them to log into the PTO network during working hours; requiring them to use collaboration tools, like the instant messaging chat function; requiring them to use presence indicator to indicate whether they are available or they are in a meeting or on the phone or even there; providing schedules to supervisors in advance; and providing a lot of guidance to our supervisors on how to manage or monitor indicators of potential time and attendance abuse, such as responsiveness to supervisory communications, such as inconsistent workload.

If an examiner is submitting work inconsistently, that can often-times be an early sign of time and attendance abuse. And we have a Consistent Credit Initiative which is meant to identify early on and to help kind of smooth out the submission of work product. And of course if there are customer complaints, that will also be assigned.

So we have a whole bunch of tools, a lot of training that we were doing. And if we need to do more as a result of the very helpful work from the Office of Inspector General, we are committed to doing more.

Ms. CHU. Thank you.

I yield back.

Mr. ISSA. Thank you.

I want to go through a couple of questions. We had sent you a letter, had a letter exchange on the shared services proposal. Would you agree that under the current law in which we do not allow a diversion of any of your funds anywhere else in government, that that is equally true, that there can be no allowance of a diversion of funds even within Commerce?

Ms. LEE. That is right. Let me just step back for a moment on the issue of shared services. The goal is to consolidate common mission support functions like HR, IT, procurement, and financial services. And I applaud Secretary Pritzker for her focus on wanting to make the Department of Commerce even more efficient. I share that goal with respect to the operations of the USPTO.

I am always looking for better quality service at a lower price, whether that comes through a shared services initiative, whether that comes through another government service provider, or whether I procure it myself. I am open to all options.

And so far the USPTO has not received any new services under the shared services initiative. And we are keenly aware. We are always looking out for the interest of—we are not taxpayer funded. We are fee funded. And we are very cognizant of the money that we spend. We recognize that you oversee our actions, our stakeholders oversee our actions, and we are very prudent in the way we spend those dollars.

Mr. ISSA. And there is a gentleman in the room who specifically oversees those actions for efficiency and effectiveness, and that is the Chairman of the Oversight Committee, Mr. Chaffetz, who I now recognize.

Mr. CHAFFETZ. I thank the Chairman. Appreciate it.

Director, thanks so much for being here and the work that you are doing.

You oversee some, what, 8,000-plus employees? What is the total universe of employees?

Ms. LEE. The number is actually 13,000.

Mr. CHAFFETZ. Thirteen thousand.

Ms. LEE. So trademarks, Patent Trial Appeal Board, patents, and a whole talented team of administrative support.

Mr. CHAFFETZ. So tell me about the software and hardware that you are doing. What is the worst—I mean, I worry about the Federal employees who are using system software and hardware that is really quite outdated. How good or bad is it? What is the worst situation that you are aware of in the Patent and Trademark Office?

Ms. LEE. So I can't speak to other bureaus and departments?

Mr. CHAFFETZ. No, just yours.

Ms. LEE. At the USPTO, my sense is that we do have very state-of-the-art technology. If you think about it, in order for us to support a telework environment, your networks, your computer systems have to be pretty modern.

Mr. CHAFFETZ. So what software, what operating systems are you using?

Ms. LEE. I believe we are using Microsoft Office.

Mr. CHAFFETZ. Do you know what version?

Ms. LEE. I would have to get back to you on that.

Mr. CHAFFETZ. What do you have at your desk?

Ms. LEE. I don't know what version of operating system I have. I know it works.

Mr. CHAFFETZ. You know it works.

Do you have DOS operating systems still at the Patent Office?

Ms. LEE. I would have to look into that. I don't know the answer to that question. I do know that we have some legacy systems that

we are in the process of transitioning to, newer systems, and that is a priority of ours. And thanks to the more stable fees that we have got, the ability—

Mr. CHAFFETZ. Well, so this transition is a curious one. That is why I ask pretty much every agency I run across as to how dilapidated, outdated their systems are, because I do think the transition in dealing—right now we spend some \$80 billion a year as the Federal Government on IT and it doesn't work. Across the board, we spend about 75 percent of that on these legacy systems that cost both dollars and people and investment to try to keep something above board.

And I guess what I would ask, if you are not able to do it off the top of your head, is to just provide to us a sense of who is using what software systems, maybe from worst to best, because last time I looked, there was some new stuff, but there was really a real problem with the software and hardware that you are using in the Patent Office.

Ms. LEE. So my wonderful staff here has just informed me that we use the state of the art. We have Windows 7.

And as to the legacy system, that is a priority of mine.

Mr. CHAFFETZ. You really think that Windows 7 is the state of the art?

Ms. LEE. That is what my staff tells me.

Mr. CHAFFETZ. Yeah, well, your staff needs to—

Mr. ISSA. Don't push your luck, though. I think the House would be lucky to be all on Windows 7.

Mr. CHAFFETZ. I am not suggesting that the House is on the top of it either. Don't be following us.

Ms. LEE. But, to answer your question, Congressman, moving off of our legacy systems, my sense is that it is a very small part of our operations. I mean, we have had the ability now over the most recent several years to set our own fees working with Congress. We have been able to get access to all fees. I can't tell you what a difference that has made in terms of being able to update our IT systems. And a focus, a key priority is moving off of the legacy systems.

Mr. CHAFFETZ. Since you have been there, any data breaches that you are aware of?

Ms. LEE. Well, I know the entire U.S. Government suffered the personnel data breach.

Mr. CHAFFETZ. I am asking about yours.

Ms. LEE. None that I am aware of.

Mr. CHAFFETZ. All right. Well, again, I have got like 1 minute left. I really would appreciate sort of an analysis for the 13,000 people and the array of software. You may have some people using Windows 7. You may have 10. You may have some people on an Apple system. I don't know.

And I would like, I am not looking for mounds of data, just a summary of how many people are using which operating systems and an analysis of the range of hardware, if you will.

Ms. LEE. So my team would be—we will follow up with your staff, and we would be glad to get to you the information you have requested.

Mr. CHAFFETZ. Fair enough. I thank you. And I know that Chairman Issa is very keenly aware of this as well. So please, if we could work together on this, I would appreciate it.

Thank you. Yield back.

Mr. ISSA. I thank the gentleman. Before he leaves, I am going to ask one question that is pertinent to his Committee.

In the last Congress we dealt with the District of Columbia, which had its own funds and yet was forced to shut down. And with great fanfare, that was corrected to where the use of its own funds would allow the District of Columbia to continue on during a government shutdown.

Now, you mentioned government shutdowns, but you were talking about bad weather shutdowns. You were not talking about a lapse in the funding of the government.

Ms. LEE. Yeah, that is right. When the rest of the United States Government shut down due to snow or what have you, we continued to remain operational. I will say that because we have an operating reserve, we were able to continue operating during sequestration.

And, again, the combination of being able to set our own fees and working with Congress to get access to all of our fees has made a tremendous difference in the operations. We have a reserve, right, so that we have some funds to keep the lights on.

Mr. ISSA. The question though for you, Director, was if the government does an actual shutdown and only essential personnel are allowed to remain at work, you do have to send your examiners home under current law. Is that correct? I am getting a head shake of no. I want to make sure—

Ms. LEE. I am sorry, one more time. If the—one more time.

Mr. ISSA. If there is a lapse in the funding of the government, and it happened last Congress, did you send your people home or were you able to continue working?

Ms. LEE. We were able to continue working because we have an operating reserve, and we can pay the salaries for a period of time.

Mr. ISSA. So how long before the Antideficiency Act would have kicked in on you, if you know?

Ms. LEE. What is the Antideficiency Act?

Mr. ISSA. That is the act that forces the government to shut down.

Ms. LEE. Okay.

Mr. ISSA. Without appropriations, you are not allowed to spend money that hasn't—

Ms. LEE. I see. I would have to get back to you on that, to answer that question.

Mr. ISSA. Okay. I would appreciate it. I just want to make sure that to the extent that we exceed any possible anticipated date sometime in the future—we have done it for the District of Columbia where they could go on for months, if necessary. And I certainly do not want to see examiners stop, because you can never catch up. And as you know and I know, we always pay the Federal workforce, so they always get paid for that which they did not do. And in this case, it really is a challenge because you can't catch that back up.

Ms. LEE. Well, and keep in mind too, we are a fee-funded agency. So if they are not working, we are not also getting revenue. So it is a double whammy for us.

Mr. ISSA. Very good. Very true. Although those renewals would still tick over.

One more area that I am particularly concerned about is—and I will just ask it the way the question is and then I will do a follow-up—our country is utilizing compulsory license to sidestep patents and trademark secrets in key areas of science and technology. And we are talking hypothetically about maybe Brazil and India, for example.

Ms. LEE. So on the issue of compulsory licensing, we appreciate a country's desire to protect public health and to make medicines available to folks who need it. But, that has got to be balanced against the desire to incentivize innovation. And you will get no incentive to innovate if you are not giving for a limited period of time some period of exclusivity so that the inventor or the creator of a patented product or technology can recoup the benefits of those efforts.

So on the area of compulsory licensing, we continue to monitor the country's application of the compulsory licensing laws. We monitor it closely. And we would just say that voluntary licensing is always preferable in the first instance.

Mr. ISSA. One more follow-up, one more question. At a previous hearing we talked about China not—if you will, dealing in, if you will, bad faith trademark registration. Has there been progress made in negotiating that?

Ms. LEE. It is an issue, in terms of trademark misappropriation or trademark squatting in China, it is an issue that we are very aware of, we hear a lot from, from American companies. I raised it in my bilateral discussions with my counterparts in China. And we have conducted workshops in China precisely to discuss this issue. So we look to make improvements.

And I will say that China is undergoing some pretty massive changes in their entire intellectual property system, including patents, trademarks, trade secrets, and copyrights. And the USPTO is providing input on their legislative proposals.

So we are working together very closely. We want them to get the right laws on the books. And we continue to provide a lot of educational sessions so that we hope that they share our IP values.

Mr. ISSA. Well, we have certainly seen Taiwan go from a country that did not share our values to a country that has made substantial progress. So let's hope that it does occur.

In the area of tying patents—well, let me say it another way. In the United States, we tie the continued ownership of a trademark to its continued use. However, some countries are trying to tie the make, use, and sell of patents to the actual patent. We don't, the United States. What can we do to harmonize that standard so that you don't have countries essentially forcing the production in order to maintain a patent right?

Ms. LEE. That is an interesting question. We work with a lot of—

Mr. ISSA. Same two countries again, by the way, we are dealing with.

Ms. LEE. Yes. So we work a lot with our major trading partners. We work with their intellectual property offices overseas. And we are actually engaged now in an effort on substantive law harmonization. So that could very well be an issue that we raise.

I don't recall—I don't think it has been raised, but given—I think, if developments proceed further and more concretely in some of those countries, that is an issue that I think we would want to look very carefully at and elevate in terms of our discussions with them in our harmonization efforts.

Mr. ISSA. I have asked you a lot of questions. You have been very patient. I think I have given enough time for other Members to get back from the vote. So I want to close by thanking you very much.

We do have follow-up questions and some additional questions we would ask to be taken for the record, if that is okay.

Ms. LEE. Of course.

Mr. ISSA. Then we will hold the record open awaiting those answers.

In closing, Director, do you have other things you want to leave us with in the way of wants, needs, and so on? This could be—it certainly will be the last hearing before an intervening election.

Ms. LEE. Yes, thank you very much for that question, Mr. Chairman, and there is one matter for your consideration. Our fee-setting authority expires in 2018. And I cannot tell you, as head of this agency, how helpful it has been to be able to set the price of the services that we provide.

So if Congress in its wisdom could consider a renewal of that provision, I know that my successors and anybody running this agency and our stakeholders would all benefit from that.

Mr. ISSA. We will take that as one of those deadlines that we should not push to the limit but rather work on early in the next Congress.

Ms. LEE. Thank you.

Mr. ISSA. So again, we will leave the record open for questions from individuals who were not able to ask them here today and the questions the Committee will be delivering.

And with that, we stand adjourned.

[Whereupon, at 3:25 p.m., the Subcommittee was adjourned.]

A P P E N D I X

MATERIAL SUBMITTED FOR THE HEARING RECORD

**Response to Questions for the Record from the Honorable Michelle K. Lee,
Under Secretary of Commerce for Intellectual Property, Director of the
U.S. Patent and Trademark Office**

**Responses to Questions for the Record for
Michelle K. Lee**

Under Secretary of Commerce for Intellectual Property and
Director of the U.S. Patent and Trademark Office

Subcommittee on Courts, Intellectual Property and the Internet
Committee on the Judiciary, U.S. House of Representatives

*September 13, 2016, Hearing on "Oversight of the U.S. Patent and Trademark Office"
Submitted November 4, 2016*

Questions from Representative Lamar Smith

1. It is my understanding that patent examiners can be reprimanded for failure to reject a patent application when warranted under statute and applicable regulations (e.g., failure to make a Section 112 rejection if merited). However, is the contrary also true? Are the merits of patent examiners' rejections reviewed to ensure patent quality and that there is proper basis?

Response: The quality of application review is critical to ensure the value of any issued patent. And, improving patent quality is a top priority for the USPTO.

During work product reviews, the Office reviews the correctness of both patent examiners' allowances and rejections of patent claims. Correct decision making, whether for allowances or rejections of claims, is an element in every patent examiner's Performance Appraisal Plan. Supervisors work with examiners to take appropriate corrective action, when necessary, as a means of ensuring patent quality. In addition to this focus on correctness, USPTO's Enhanced Patent Quality Initiative (EPQI) has also explored ways the Agency can help ensure a clearer record of the rationale used by the examiner as the basis for any rejection and allowance.

2. How many patent examiners have been reprimanded in each of the last seven years?

Response: Supervisors at USPTO take many actions annually, as necessary, to improve quality in the course of managing their examiners. While USPTO does not maintain a yearly, total count of the number of patent examiners who have been specifically reprimanded for incorrect allowance or rejection determinations, what I can report is that, supervisors took more than 50 performance actions based on quality-related grounds in FY 2016.

Supervisory corrective action can range from an oral warning or a requirement for targeted training to a formal performance action. The Agency manages examiner performance by ensuring compliance with law and examination policy through the examiner performance appraisal plan, under which an examiner with repeated quality deficiencies will be coached and mentored and potentially removed if his or her unacceptable performance continues. Any departure from full compliance with applicable law is properly addressed in a manner consistent with the nature of the subject action or inaction.

3. What standards have the Patent and Trademark Office (PTO) put in place to ensure consistent application of case law precedent and PTO guidelines across the different technology centers and within the art units? What protocols has the PTO instituted for resolving inconsistencies when they arise?

Response: USPTO has taken a number of steps to ensure consistent application of case law precedent and USPTO guidelines.

First, the Performance Appraisal Plan for patent examiners contains a critical element --“Quality” -- that addresses the application of case law and USPTO guidelines. Supervisors look closely at inconsistent application of the USPTO guidelines (which reflects the most recent case law), and may impose corrective action on employees, when appropriate, ranging from an oral or written suggestion, observation, or requirement for targeted training, to a formal entry in an employee’s personnel file.

Second, the USPTO has developed and implemented an array of training programs and guidance materials to enable our patent examiners to properly apply current statutory law and relevant court decisions. For example, to ensure that examiners understand and can best comply with the current law, USPTO promptly develops and issues to examiners specific guidance following major pronouncements by the courts on patentability-related issues.

Finally, USPTO has instituted a number of programs to ensure quality review. As mentioned above, our current efforts through USPTO’s Enhance Patent Quality Initiative (EQPI) have allowed the Agency to further engage USPTO stakeholders to focus on additional improvements to achieve greater accuracy, clarity, and consistency in patent examination and prosecution. Another important component of USPTO’s current efforts is the Clarity and Correctness Data Capture (CCDC) program. The goal of the CCDC is an improved data capture system to enable all reviewers of finished work products to consistently document and access quality review data in one place. By entering the results of these reviews into a single database, the USPTO will ultimately capture three to five times more data as a single data set than we have previously captured. With this larger data set, we will be able to identify trends at a more granular level, and in doing so, we will be poised to provide training and other educational opportunities to examiners, in order to achieve greater transparency in examination and prosecution.

As part of this effort, the USPTO is standardizing reviews of finished work products through the use of a single review form, called the “Master Review Form” (MRF). Reviewers in the Office of Patent Quality Assurance (OPQA) and supervisors in our technology centers are already using this form. The MRF places a much greater emphasis on assessing the clarity of an examiner’s reasoning in a rejection compared to past review forms, while maintaining our historic focus on addressing the correctness of an examiner’s action. In addition, the MRF provides reviewers with a greater ability to flag instances of high quality or best practices during their reviews to allow the USPTO to acknowledge these high-performing examiners as well as to provide a set of readily identifiable examples of high quality work that can be used for training purposes. Further, the MRF is a “smart,” software-based form, so reviewers see only those sections of the form that are pertinent to the review that they are doing, which allows reviewers to be more efficient when recording the results of their reviews.

4. Do any of the PTO pilot programs involve design patents and the Design Group? If not, has the PTO thought about incorporating them into future programs?

Response: Yes, design patent examiners are, and will continue to be, active participants in relevant quality-focused training and other quality-related programs and initiatives.

Whenever pilots are developed and implemented within USPTO’s patent operations relevant to examination of utility applications, relevancy to design examination is also considered. Factors that determine the design group’s inclusion include whether the issue of the pilot is relevant to design patents, whether the statutory provisions have been consistently applied by examiners, and current needs of the design patent group as determined by the Design Technology Center Director. For example, USPTO utility pilot programs that are relevant to the design group include the After Final Consideration Pilot 2.0 and the Telework Enhancement Act Pilot Program.

Questions from Representative Doug Collins

1. Ms. Lee: Thank you for your service over the last several years. As you know, America's patent system is very important to me. We not only need to have the right policies in place to spur innovation, but we also must have a patent office that performs at the highest level.

I would like to follow up on some questions that I asked your colleague at the 2014 joint hearing that this Committee held with the Oversight and Government Reform Committee. During that hearing I asked Ms. Focarino about the problem of patent examiners who "End Load."

As you know, "end loading" occurs when patent examiners wait until the last few days of the quarter to turn in a majority of their work. Obviously, "end loading" is not per se wrong. Some people might have very legitimate reasons for working this way. At the same time, however, abuse of end loading can be caused by examiners who are taking advantage of the system or are having other issues with their performance. There is no doubt in these cases that end loading will negatively affect patent quality. Has the Patent Office done anything to address the problem of End Loading? If you have, what results have you seen?

Response: The USPTO has taken specific actions to address the issue of "end loading" by patent examiners. As noted in the question, submitting more work towards the end of a quarter may occur for legitimate reasons. But, it may also be an indicator of lower quality examination or the ability of an examiner to manage his or her workload.

In 2015, the USPTO implemented the Consistent Credit Initiative (CCI) across the entire patents operation to provide supervisors with additional tools to monitor this conduct. Under this initiative, an examiner's production is monitored on a biweekly basis and, if the production falls below an established threshold during a specific time period, the supervisor is directed to contact the examiner and provide counseling if needed. Should evidence of end loading reoccur, the situation is elevated to the second line supervisor, the Technology Center Director, for appropriate counseling of the examiner and action, as necessary. While we are looking to quantify the results of the CCI, we believe it has had a positive impact.

2. Director Lee, do you agree that low quality patents that make unclear and overly broad claims over technologies make it difficult and expensive for companies to determine whether or not their products infringe those patents?

Do you also agree that the low quality patents and the legal uncertainty that they cause undermine innovation by diverting valuable resources-including both financial and employee resources-away from research and commercialization and toward litigation?

Response: Uncertainty regarding the scope of patent claims can result in increased litigation costs, which may cause organizations to divert resources from research and commercialization efforts. For this reason, it is critically important that the USPTO minimize such uncertainty by issuing patents that are both correct and clear. That is why I launched the Enhanced Patent Quality Initiative (EQPI) to improve the accuracy, clarity and consistency of patents issued by the USPTO. The initiative is one of the most comprehensive efforts in recent memory focusing on all ways to enhance the quality of the work products provided at every stage of the patent process. That includes both the quality of issued patents and the quality of all work products during the filing, examination, and issuance process.

Patents that are both correct and clear enable potential users of patented technologies to make informed decisions on how to avoid infringement, whether to seek a license, and/or when to settle or litigate a patent

dispute. They also benefit patent owners by providing greater certainty and clarity of notice on the boundaries of their patent rights.

3. A Department of Commerce Inspector General Report noted that "8,067 covered examiners claimed 137,622 hours of work associated with computer-related examiner activity that was not supported by relevant evidence." That's 8,000 examiners out of nearly 10,000 examiners, so a clear majority.

The IG also found that in one period 415 examiners faked more than 10% of their hours. And those examiners were paid \$7.8 million in bonuses. 56 of those examiners were not working three days out of every two weeks. How can that have happened?

How many examiners were paid full salaries but didn't work their full 40 hour work week multiple weeks while you have been the Director?

Response: The USPTO takes very seriously any time claimed by an employee that was not worked. It is important to clarify that the OIG investigation did not focus on individual employees, nor did the report conclude that any examiners "faked" their hours. Instead, the report found that, based on a comparative analysis of large computer record data sets, approximately 400 examiners covered by the analysis had 10 percent or more hours claimed that were unsupported by a digital footprint constructed by the OIG. With respect to the population of more than 8,400 patent examiners during a 15-month period, the OIG concluded that there was a lack of a digital footprint in approximately 2 percent of the total hours claimed by the patent examiners during the period -- a percentage that declined to 1.6 percent during the course of the OIG review following the introduction of new USPTO controls.

There are various reasons why an examiner's digital footprint might not match up exactly with their time and attendance records. Those include: imprecise time-keeping, working offline reviewing prior art, or perhaps, in some cases, abuse. The OIG report specifically acknowledged that a digital footprint may be lacking when people are working online and the data simply is not captured due to an IT problem, or when examiners are working offline. The USPTO is committed to, and is in the process of, analyzing the data and conclusions offered by the OIG, and, if needed, improving the measures we have already implemented for proper accounting of time and attendance.

With respect to the payment of bonuses, patent examiner performance bonuses are given based on actual work performed. Employees who receive bonuses have completed the work product necessary to qualify for the bonus and must have achieved the performance level of at least fully successful to even qualify for a bonus. However, our analysis will seek to determine the root cause for the lack of a digital footprint as identified by the OIG, and we will take all appropriate steps after completing our review.

4. According to a GAO report, "GAO estimates that 70 percent of the population of examiners say they do not have enough time to complete a thorough examination given a typical workload." Did more than 30 percent of examiners receive bonuses last year? If so, doesn't that show that while you are focusing on production, you are not paying attention to the quality of the examination?

Response: Quality work product is a prerequisite for eligibility for any performance bonus. While the USPTO's bonus system rewards additional production, examiners are only eligible to receive a bonus if they are rated at least fully successful in all critical elements of their performance plan, including patent quality.

More than 30 percent of patent examiners received bonuses last year, but this does not necessarily mean that the USPTO is focusing on production over quality. Patent quality and production are weighted equally, accounting for 35 percent each of non-probationary examiners' annual performance ratings.

5. If patent examiners are working less than 40 hours a week and still meeting their production goals, or getting bonuses for exceeding their goals, doesn't that establish that either your production goals are wrong or that examiners are cutting corners and not producing quality work? Why are examiners receiving bonuses for 110%, 120%, or 130% production when no one is bothering to check their quality?

Response: Production goals are set with the average examiner in mind, but there will always be some highly efficient examiners who can exceed those goals, and other examiners who struggle to meet them. The existence of a few outliers at either end of the spectrum does not invalidate the goal for the majority of examiners.

Performing quality work is part of each examiner's mandate. In fact, quality work product is a prerequisite for eligibility for any performance bonus. While the USPTO's bonus system rewards additional production, examiners are only eligible to receive a bonus if they are rated at least fully successful in all critical elements of their performance plan, including patent quality.

Moreover, the USPTO regularly conducts reviews of work product to assess quality. For example, supervisors review the work of primary examiners as part of the annual performance reviews process. Furthermore, supervisors or primary examiners review all of the work of junior examiners. Finally, the Office of Patent Quality Assurance conducts reviews of randomly-sampled work product. These reviews help ensure that primary examiners are meeting their quality requirements.

The Agency is also in the process of further assessing the time and goal requirements across the patent examining corps. Modifying these requirements requires a very complex process and includes input from our stakeholders, our employees, and our management. For over-performing examiners, they are still required to work all hours claimed. If time and attendance abuse is discovered, the Agency will take appropriate action.

6. Are examiners charged with an error when reversed by the PTAB? If not, isn't this a tacit agency admission that the examiner did not have a basis to make the last rejection final?

Response: Patent examiners are not formally charged with an error when their rejection is reversed by the PTAB. A reversal by PTAB does not necessarily mean that the examiner committed an error.

When a rejection is appealed, the decision to move forward to the PTAB is made by a panel of examiners -- typically the examiner of record, the examiner's supervisor, and another examiner knowledgeable in the technology. This ensures that the examiner has a tenable basis for the rejection, even if that basis is not ultimately upheld by the PTAB. Under such circumstances, charging an error to the examiner is unwarranted.

Notably, there are also situations where the patent law has changed between the time the examiner made the rejection and the subsequent PTAB decision on appeal.

7. What mechanisms, if any, are in place to review the work product of primary examiners who may sign their own office actions without supervisory approval?

Response: Supervisors have always had the responsibility of reviewing a sample of their primary examiners' office actions as part of the annual performance review process. Recently, we have increased the level of review of work performed by primary examiners as part of our quality efforts. In addition, the Office of Patent Quality Assurance conducts reviews of randomly-sampled work product, which includes the work of primary examiners. These reviews help to ensure that primary examiners are meeting their quality requirements.

Questions from Representative Mimi Walters

1. The QAS position exists to randomly review examiners' work product - why can't applicants participate by directing them to applications (that have not been selected for review) they believe to contain errors?

Response: The USPTO values the views and feedback of our stakeholders, including our applicants. For example, applicants have the ability to contact an examiner's supervisor to raise concerns about the quality of the examiner's work product, and they may also contact the USPTO's Ombudsman.

In 2015, in response our Request for Comments on Enhancing Patent Quality,¹ the USPTO received public comments on a proposal to allow applicant participation. The comments we received highlighted that applicants already had ample opportunity to raise potential quality concerns.² Based on these comments, the USPTO decided not to implement the proposal. Instead, the USPTO created the Topic Submission for Case Studies program, in which applicants had the opportunity to propose topics to be the subject of an OPQA case study. This program allowed the Office's stakeholders to identify areas of concern regarding quality for further study and to more readily assess the concerns across the Agency.

2. Why are the errors determined by the QASes not indicated in the file wrapper or indicated to the applicants?

Response: The USPTO uses Office of Patent Quality Assurance (OPQA) reviews for data gathering with respect to the quality of examination work product and to ensure that any errors are identified and fixed during the examination process. The inclusion of reviews in patent file wrappers could give rise to the incorrect assumption that any resulting patent should receive a stronger presumption of validity than a patent without an OPQA review. However, when an examiner receives feedback from OPQA that an office action contains an error, in the form of either an omitted or an improper rejection, the examiner will fix the error by either issuing a new, corrected office action *sua sponte* or by modifying or withdrawing the rejections of record in a future office action, as appropriate.

3. What is the status and expected timeframe for a response from the USPTO to the Comments provided to the USPTO's Request for Comments on the Application of the Written Description Requirement to Specific Situations in Design Applications?

Response: The USPTO has reviewed and considered the comments provided to the USPTO's Request for Comments on the Application of the Written Description Requirement to Specific Situations in Design Applications. Based on the comments, the USPTO is evaluating ways to provide additional clarity to examiners and the public on the topics addressed in the Request. The USPTO anticipates publishing a Notification of its final determinations and revised guidance within the next few months.

¹ See 80 Fed. Reg. 6475, 6478 (Feb. 5, 2015), see: <https://www.gpo.gov/fdsys/pkg/FR-2015-02-05/pdf/2015-02398.pdf>

² Many comments expressed concerns, such as whether applicants' requests could be used against them later in litigation or if the presence of an Office of Patent Quality Assurance (OPQA) review could imply a greater or lesser presumption of validity.

**Prepared Statement of the Computer &
Communications Industry Association (CCIA)**



**Computer & Communications
Industry Association**
Tech Advocacy Since 1972

Before the

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

Regarding

“Oversight of the U.S. Patent and Trademark Office”

September 13, 2016

Statement of the Computer & Communications Industry Association

The Computer & Communications Industry Association (“CCIA”) is an international, nonprofit association representing a broad cross section of computer, communications and Internet industry firms employing more than 750,000 workers and generating annual revenues in excess of \$540 billion.¹ CCIA requests that this statement be included in the record of this hearing.

I. Quality Patents Matter

Patent examiners, those people who review applications and decide which patents to issue, are generally measured based on how much time they spend reviewing each application, the faster, the better. Although there is a “patent quality” component to their performance ratings, examiners’ pay and promotions are based almost entirely on their speed and efficiency.

High patent quality, however, is crucial to the proper functioning of the innovation economy. CCIA members have been consistent targets of patent assertion entities (“PAEs”)

¹ A list of CCIA members is available at <http://www.cciagnet.org/members>.

using poor quality patents. Poor quality patents take a great deal of time and money to litigate, which places enormous pressure on an accused company to settle. The result is an industry built almost entirely on patent litigation that drains about \$30 billion a year from the U.S. economy.²

Improving patent quality would greatly slow the growth of this patent litigation industry, and eventually reverse the trend. Moreover, better patent quality puts the public on clear notice of what technology requires a license and what is in the public domain. “High-quality patents enable certainty and clarity of rights, which fuels innovation and reduces needless litigation.”³

Unfortunately, the USPTO has had a mixed history when it comes to issuing high-quality patents. For example, one study found that, when validity was resolved by a court, litigated patents had at least one invalid claim about a third of the time, and patents asserted by PAEs had at least one invalid claim over half of the time.⁴

II. The USPTO Needs a Strong, Consistent and Clear Definition of Quality

The Government Accountability Office (“GAO”) recently released two reports, “Patent Office Should Define Quality, Reassess Incentives, and Improve Clarity,”⁵ and “Patent Office Should Strengthen Search Capabilities and Better Monitor Examiners’ Work,”⁶ directed at improving patent quality. CCIA hopes that the Committee will focus on the recommendations in these reports as part of its oversight of the U.S. Patent & Trademark Office (“USPTO”).

The USPTO has recognized the need to improve quality and has put in place its Enhanced Patent Quality Initiative.⁷ The USPTO has initiated a number of promising pilot

² James Bessen & Michael Meurer, *The Direct Costs from NPE Disputes*, 99 CORNELL L. REV. 387 (2014).

³ U.S. PATENT & TRADEMARK OFFICE, ENHANCED PATENT QUALITY INITIATIVE (2016), <http://www.uspto.gov/patent/initiatives/enhanced-patent-quality-initiative-0>.

⁴ Michael Risch, “A Generation of Patent Litigation,” 52 SAN DIEGO L. REV. 67, 112 (2015).

⁵ GOVERNMENT ACCOUNTABILITY OFFICE, “Patent Office Should Define Quality, Reassess Incentives, and Improve Clarity,” GAO-16-490 (June 2016), <http://www.gao.gov/products/GAO-16-490>.

⁶ GOVERNMENT ACCOUNTABILITY OFFICE, “Patent Office Should Strengthen Search Capabilities and Better Monitor Examiners’ Work,” GAO-16-479 (June 2016), <http://www.gao.gov/products/GAO-16-479>.

⁷ *Supra*, n.3.

programs and has directly focused on improving patent quality.⁸ While the USPTO is to be commended for its efforts to date, the GAO's reports make clear that there is still more work to be done.

The main problem that the GAO found is that there is no consistent definition of patent quality at the USPTO.⁹ Without such a definition, it is nearly impossible to develop standard practices to produce better patents. The USPTO's current "definition" of a quality patent is:

A quality patent is one that is correctly issued in compliance with all the requirements of Title 35 as well as the relevant case law at the time of issuance.¹⁰

This definition is unhelpful for several reasons. First, it sets the bar far too low. Mere compliance with the rules is the bare minimum that one should expect from the USPTO. Compliance with Title 35 and case law, however, fails to ensure high quality. The Inspector General of the Department of Commerce observed that:

High-quality patents are generally considered to be those whose claims clearly define and provide clear notice of their boundaries, while low-quality patents are those that contain unclear property rights, overly broad claims, or both. Increasing concerns regarding abusive patent litigation and ambiguous patents heightens the need for USPTO to ensure adequate processes are in place to promote issuing high-quality patents.¹¹

The USPTO's approach fails to ensure that patents "provide clear notice," in large part because it fails to ensure that there is a clear record. An applicant's interaction with the USPTO has consequences. If, for example, an applicant says that a term has a particular meaning and gets a patent as a result, the applicant should be held to that meaning. The Federal Circuit, however, has held that only a "clear and unmistakable" statement in the record is binding on the patent owner.¹² Accordingly, it is essential that the record be clear as to why an examiner allows a patent.

⁸ These initiatives are described in the GAO's first report, *supra*, n.5 at 12–14.

⁹ *Id.* at 21.

¹⁰ *Id.* at 50.

¹¹ U.S. DEPARTMENT OF COMMERCE, OFFICE OF INSPECTOR GENERAL, "USPTO Needs to Strengthen Patent Quality Assurance Practices," No. OIG-15-026-A, at 1 (Apr. 10, 2015).

¹² *Sandisk Corp. v. Memorex Prods.*, 415 F.3d 1278, 1287 (Fed. Cir. 2005).

The USPTO's definition, however, includes nothing about the examiner's interpretation of claim language or the examiner's reasons for allowing a patent. As a result, many patents issue with ambiguous records, leaving the public to guess at the true meaning of many claims.

Another problem with the USPTO's definition of "quality patent" is that it is far too malleable. By its own terms, it changes with the case law. This shifting definition makes it impossible to truly hold patent examiners accountable for quality. After a major patent opinion is issued, the USPTO must develop new guidelines and then promulgate that guidance. This creates a new point of failure, namely, training. If training is ineffective or does not reach all examiners, there will be inconsistent understanding of the new guidelines and, therefore, inconsistent quality.

The major problem with the USPTO's current definition is that it cannot be measured effectively. Compliance with Title 35 and relevant case law is almost entirely subjective. If every action by an examiner has to be reviewed by another human being, only a small fraction of actions can be reviewed with the USPTO's current Quality Assurance Specialists. This means that very few issued patents are receiving proper quality assurance.

Moreover, examiners have no clear performance measures with respect to quality—only very specific production goals to meet. That is, examiners have little consistent guidance as to how to ensure that they are only allowing high quality patents. And there is no way to consistently hold examiners accountable for maintaining quality.

III. Conclusion

As the GAO states,

Without a consistent definition of patent quality, USPTO is at risk of having its staff work at cross purposes to improve patent quality based on their individual definitions of patent quality. Further, without improvements to measurable goals and performance indicators, USPTO is at risk of not being able to fully measure and capture key performance data on whether the agency is meeting its strategic goal to optimize patent quality.¹³

¹³ *Supra*, n.5 at 37.

The USPTO *is* working to improve the clarity of the record for patent applications.¹⁴ Without a clear, consistent, and measurable definition of patent quality, however, it will be extremely difficult to produce the desired results: high quality, clear patents.

This Committee has an opportunity to encourage the USPTO to create such a definition. CCIA hopes that the Committee will pursue this opportunity.

¹⁴ *Supra*, n.3.