
STATEMENT OF
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AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE
COMMITTEE ON THE JUDICIARY
UNITED STATES SENATE
“Oversight of the U.S. Patent and Trademark Office”
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I. Introduction

Chairman Grassley, Ranking Member Feinstein, and Members of the Committee:

Good morning. Thank you for this opportunity to discuss the operations, programs and initiatives of the United States Patent and Trademark Office (USPTO). I am honored to be here with you today.

The USPTO’s mission is a critical one. It is directed toward fostering innovation and economic growth by providing innovators and entrepreneurs with the protection and information they need to raise capital, build their businesses and bring their products and services to the marketplace. While I have only been on this job for a couple of months, I know that with the dedication and professionalism I have already seen from the employees, we can lead the Office in a culture of excellence that serves the interests of all of its constituents and the public at large.

We are focused on enhancing the country’s innovation ecosystem and providing strong, reliable and predictable intellectual property rights. In order for the intellectual property system to function as intended, rights owners and the public alike must have confidence in the system. As I mentioned at my confirmation hearing in front of this Committee, when patent owners and the public have confidence in the patents we grant, inventors are encouraged to invent, investments are made, companies grow, jobs are created, science and technology advance. I look forward to working with the leadership and staff throughout USPTO, Secretary Ross and his team, the Committee, and our stakeholders to identify and advance policies that deliver a strong, reliable and predictable intellectual property system.

We are also very pleased that the Administration and Congress continue to provide the USPTO with the authority to spend all anticipated fee collections as estimated by the

Congressional Budget Office. 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. This also enables the USPTO to continue to build, retain and effectively manage the highly educated and talented workforce it needs to properly serve its critical stakeholder community.

Since the enactment of the 2011 American Invents Act, USPTO's fee setting authority has allowed the Office to more efficiently set user fees to recoup its operational costs in conjunction with our Public Advisory Committees and with input from the public and our stakeholders. We look forward to working with the Committee to ensure that the USPTO maintains that authority.

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

II. Patent Operations and Initiatives

Patent Pendency and Inventory

The IP system must be efficient and it should not take years to issue patents. This is especially true in some industries where technology moves very fast. The timely issuance of patents helps to provide certainty in the marketplace, and helps businesses and innovators to make informed decisions on the development and marketing of their products and services.

In FY 2018, we expect to receive more than 600,000 new patent applications. The inventory of unexamined patent applications is currently approximately 540,000 - which is down from more than 750,000 in 2009. Our goal is to continue reducing pendency until optimal pendency is achieved, at which point the unexamined inventory would be fewer than 400,000 patent applications.

In terms of processing patent applications, the average time to first Office Action (first action pendency) has been reduced from 25.9 months in January 2009 to a current level of 15.7 months and our goal is to reduce that number to less than 15 months by the end of FY 2019. Average total pendency has fallen from 33.8 months in January 2009 to a current level of 24.3 months and our goal is to reduce that number further to less than 24 months by the end of FY 2019. Of critical importance is that we examine patent applications within the statutory patent term adjustment timeframes.

Patent Quality

Reliable patent rights are key to economic growth. Providing high quality, efficient examination of patent applications will serve the American economy well. Our actions -- whether we reject a patent application or we allow a patent application -- have a real world impact on the applicants, the public, and the economy.

In general, quality patents are those that are issued in compliance with all the requirements of Title 35 of the United States Code as well as relevant case law at the time of issuance, and survive challenge down the line. Performing a complete prior art search and ensuring claims

are properly scoped are important parts of issuing quality patents that can stand up to scrutiny if challenged. In addition, any action must include sufficient detail so that applicants and the public can better determine the basis for examiner decisions.

We will continue to look for ways to improve our prior art search and quality of examination.

It is important to note that patent quality is a joint responsibility shared by both the applicant and the USPTO, and we are constantly engaging with our stakeholders on issues related to patent quality. For example, we recently identified attributes that examiners feel are integral to a patent application filing – such as clarity in the claims among other attributes – and that enhance the ability of examiners to effectively and efficiently examine an application. This information was shared with applicants and stakeholders as part of the discussion on patent quality.

A new pilot program helps examiners identify applications that would benefit from a pre-search interview, so that any confusion with issues, like claim construction, can be resolved prior to performing an initial prior art search. By resolving these points up front, the initial search could perhaps be more focused so that relevant prior art can be identified sooner and the overall pendency of the application can be minimized with potentially less need to file a request for continued examination (RCE).

The Office has also taken the initiative to increase transparency and collaboration between internal and external stakeholders by providing guidance and educational opportunities to external stakeholders. The USPTO's Stakeholder Training on Examination Practice and Procedure (STEPP) program is a 3-day course that provides external stakeholders with a better understanding of how and why an examiner makes decisions while examining a patent application. Based on the success of STEPP, we now also provide Virtual Instructor Led Training, which consist of short 2-hour courses on various patent topics. In addition, we hold monthly quality chat webinars with external stakeholders on patent quality topics with a substantial portion of the time reserved to answer questions from stakeholders and capture their feedback.

Examiner Training

Providing training and guidance to USPTO's employees is of utmost importance for supporting high-quality examination. Examiner training is provided for both newly hired and experienced examiners and may be delivered corps-wide or to specific disciplines. Legal training already completed this fiscal year has included 35 U.S.C. §101 Subject Matter Eligibility on Abstract Ideas and currently in-progress training includes a 35 U.S.C. §112(f) workshop. Training under development for delivery later this year includes training on subjects relating to 35 U.S.C. §102; 35 U.S.C. §103; 35 U.S.C. §112(a); Legal Analysis and Writing; Unity of Invention; and Examiner's Answers and Double Patenting.

The USPTO also recently started Examiner Quality Chats, in a webinar format, to cover a range of patent quality topics and we continue to partner with our stakeholders to provide technical training for examiners to enhance their subject matter expertise. The USPTO's Patent Examiner Technical Training Program (PETTP) provides opportunity for technologists, scientists, engineers, and other experts from industry and academia to voluntarily provide

technical training and expertise to patent examiners in-person or virtually from their location. The Site Experience Education (SEE) program provides an opportunity for commercial, industrial, and academic institutions, within the continental United States, to voluntarily host patent examiners for technical site visits - organizations who volunteer to host these examiner visits contribute to improving the quality of patent examination by keeping patent examiners updated on the latest technologies and innovations in their field of examination.

Patent Eligibility

Between 2010 and 2014, the Supreme Court issued a series of decisions – *Bilski*, *Mayo*, *Myriad*, and *Alice* – that significantly impacted patent eligibility law and continue to generate substantial public debate. In the wake of these decisions - as well as numerous Federal Circuit decisions applying what is now known as the Mayo-Alice framework - the USPTO provided guidance to patent examiners and the public on its understanding of these decisions, and has published its guidance in the Federal Register and sought public input and comment on that guidance. The USPTO recently issued a revision of the Manual of Patent Examining Procedure (MPEP) that incorporates the guidance on subject matter eligibility, and this MPEP revision was made available to patent examiners and the public on January 29, 2018. As we work through the patent eligibility legal landscape we will explore and develop avenues which will increase the certainty and predictability of eligibility analyses, and we will work to provide more concrete tests that guide examiners and the public toward finding the appropriate lines to draw with respect to eligible subject matter.

This is an area I believe we must address and I will continue to engage stakeholders and the public about ways to reduce the uncertainty around this critical area of patent law.

III. Patent Trial and Appeal Board

Ex Parte Appeals and AIA Trial Filings

The USPTO's Patent and Trial Appeal Board (PTAB) manages dual jurisdictions, adjudicating ex parte appeals of examiners' final rejections, and conducting AIA trial proceedings. Since 2012, when the AIA trial provisions became effective, the PTAB has received more than 8,000 trial petition filings, and has issued more than 4,000 decisions on institution and nearly 2,000 final written decisions by the statutory due dates.

As I stated during my nomination hearing, I am aware of strong opinions of various parts of the IP stakeholder community with respect to the conduct of AIA trials. For example, a recent Chamber of Commerce study noted that the post-grant proceedings at the PTAB were a factor contributing to the drop of the U.S. patent system in its annual rankings. Others, on the other hand, have strongly supported the need for these proceedings as currently structured. This is another critical area on which I plan to focus time and engage stakeholders to ensure that the Office's review in these proceedings is consistent with the intent of the AIA, and the overall goals of predictable, high quality patent rights.

We continue to assess potential improvements to the AIA trial standards and processes. Some of

the issues we are currently studying include the institution decision, claim construction, the amendment process, and the conduct of hearings.

At the same time that the PTAB began conducting AIA trials in 2012, the ex parte appeal inventory stood at more than 26,500 appeals with the average pendency of approximately 36 months. By the end of FY 2017, the PTAB successfully reduced the appeal inventory by 51% to 13,034 appeals, and reduced the average pendency by 51% to 17.8 months.

Today, mid-way through FY 2018, the PTAB has made even more progress, reducing the ex parte appeal inventory to fewer than 12,700 appeals and reducing the average pendency to 14.3 months. The PTAB has accomplished these goals in part through judge hiring and by establishing an expanded executive management team.

Issuance of Guidance

Within the last year, the PTAB issued extensive guidance providing judges, parties, and the public better direction on practice before the Board. First, the PTAB issued a new standard operating procedure that provides guidance as to the Board's processes for handling cases remanded from the Federal Circuit. Second, the PTAB designated four decisions as precedential and four decisions as informative. The precedential decisions concerned indefiniteness, assignor estoppel, factors for the PTAB to consider in deciding whether to institute follow-on petitions, and covered business method (CBM) eligibility. The informative decisions involved circumstances for petition denial based on an examiner's previous consideration of the prior art or arguments raised in the petition. Third, following the Court of Appeals for the Federal Circuit's *en banc* decision in *Aqua Products* concerning motions to amend in AIA trials, the Chief Judge issued guidance on the holding of *Aqua Products* and provided direction to judges on how to manage currently pending and future motions to amend.

The PTAB is currently in the process of revising several of its current standard operating procedures, and preparing new standard operating procedures addressing topics such as the paneling of judges to cases, expansion of panels, preparation of decisions, amicus briefing, joinder, and rehearing requests. The PTAB also is updating the AIA Trial Practice Guide to capture new rules, precedent, and Board practices that have evolved since the Guide was released initially five years ago. The PTAB further has established a process to determine areas of law in need of clarity and to identify cases that may be designated as precedential and/or informative decisions that address these areas of law. We continue to look at other potential revisions or additions to our standard operating procedures.

Ensuring the High Quality of Decisions

The PTAB strives to issue high quality and timely decisions and has taken a number of actions to enhance decisional quality. The PTAB has overhauled its legal training and now administers weekly training to ensure judges, patent attorneys, law clerks, and paralegals are knowledgeable on the latest legal and policy developments. Additionally, the PTAB regularly holds meetings with stakeholders to collect feedback. Based on the solicited feedback, I am in discussions with

the PTAB to categorize potential changes that can be implemented on short, medium, and long term schedules.

Enhancing Transparency

The PTAB is engaged in an ongoing effort to provide accurate information about *ex parte* appeals and AIA trials to enable data-driven decision making and to better educate stakeholders. As part of this effort, the PTAB publishes monthly statistics about its proceedings. Historically, published monthly data presented “petition-by-petition” and “claim-by-claim” information. However, the PTAB received public feedback that certain data displays were confusing and could be potentially misleading. For example, the “claim-by-claim” data was generated by adding claim results from each petition, which resulted in the “double counting” of some data in the “claim-by-claim” presentation. In response, the PTAB took steps to clarify and revise its data displays in consultation with members of the Patent Public Advisory Committee. Since March 2017, the PTAB has been using a revised display format. We are assessing whether further improvements are warranted.

Additionally, the PTAB continues to conduct studies into certain aspects of AIA trials in response to stakeholder’s feedback. Thus far, the PTAB has published studies on the filing of multiple petitions challenging a patent, motions to amend, expanded panels, and trial outcomes for Orange Book-listed patents. The PTAB is in the process of preparing two additional studies. The first study is researching the scope of parallel proceedings before the PTAB and patent examiners. The second study is considering the prior art and arguments raised in trials that were previously considered by the examiner during the examination of the challenged patent.

Further, the Office is working to replace PTAB’s legacy IT systems. A new system for AIA trials has already been launched, while the system *ex parte* appeals is under development and is expected to be completed within the next 15 months. The PTAB also has revamped its precedential and informative webpage to allow users to quickly identify cases of interest, and is continuing to redesign the remainder of its website to be more user-friendly.

Finally, to keep the public abreast of new developments, changes, and initiatives, the PTAB hosts monthly webinars, publishes articles, and participates in various speaking engagements.

IV. Trademark Operations & Initiatives

The USPTO registers marks (trademarks, service marks, certification marks, and collective membership marks) that meet the requirements of the Trademark Act.

The USPTO creates and maintains the federal register of trademarks that provides notice of 2.3 million marks in use and is used by applicants and our examiners to search the availability of marks for registration in the United States. Federal trademark registration is important to secure trademark owners’ rights to use their mark nationwide and to record their mark with U.S. Customs and Border Protection to prevent importation of infringing foreign goods.

Performance Goals

For more than a decade, the USPTO has met or exceeded its trademark pendency and quality targets. Since 2008, trademarks have been registered in less than 12 months on average from filing an application, with a first action issued between 2.5 and 3.5 months from filing. The USPTO and its trademark stakeholders consider these to be optimal pendency rates.

First and final action “compliance rates” (measuring examination quality) exceed 97% for the first office action. Final compliance, which reviews the decisions on the statutory bases for approval or denial of the application, exceeded 98% at the end of FY 2017.

Users are filing 99.9% of all new applications electronically. The number of trademark applications processed completely electronically has increased to more than 87%. This benefits workflow processes, data collection, and file management. The USPTO continues to engage the public to identify ways to efficiently process trademark applications with a goal of requiring all filings and communications to be electronic in early FY 2019.

Assisting Our Customers

The USPTO launched a new trademark initiative to provide a “best in class” customer experience. Improving the customer experience will be one of the driving factors in how the Trademark Organization will plan for and manage its investment in information technology and future growth. Among other things, regular stakeholder engagement has helped to ensure that the organization is addressing user needs.

Our users have asked the USPTO to do more to address fraudulent and misleading solicitations – offers that lure unsuspecting applicants and registrants into paying fees to private companies while mistakenly thinking they are paying fees required by the USPTO. The office held a joint roundtable with the Trademark Public Advisory Committee in July 2017 to address fraudulent and misleading solicitations. The roundtable was the first of its kind because it brought the USPTO, the Department of Justice (DOJ), the Federal Trade Commission, the U.S. Postal Inspection Service, the Small Business Administration, and U.S. Customs and Border Protection together with our stakeholders to discuss the issue. We are attacking this problem on three fronts. First, we have ramped up communications to educate the public on how they can better protect themselves. Second, we are working with the DOJ to provide evidence of fraudulent activity. Two USPTO attorneys will begin a year-long detail with the DOJ in 2018 to assist with investigation, research, and prosecution of those accused of sending, promoting, and distributing fraudulent solicitations. The DOJ obtained five convictions in 2017 on cases involving fraudulent trademark invoices. Third, we are leading a project on fraudulent and misleading invoices to further international cooperation on this issue among the five largest Trademark offices (the TM5).

Improving the Accuracy of the Register

The USPTO has worked with trademark stakeholders to develop a three-pronged approach for improving the accuracy and integrity of our register. The approach includes improving the

readability of the maintenance declaration that states that the mark as registered is in use in commerce (implemented); an audit of post-registration filings adding a more comprehensive legal review to substantiate continued use of registered marks (implemented); and considering the efficacy of an expedited process for cancellation proceedings at Trademark Trial and Appeal Board (TTAB) where trademark registrations are challenged when the marks are not in use or have been abandoned.

Trademark Trial and Appeal Board

USPTO's TTAB recently celebrated its 60th Anniversary. The Board serves as the administrative tribunal within the USPTO that provides timely adjudication of trademark disputes. The Board's *ex parte* appeal work involves appeals from examiner refusals to register applied-for marks. Its trial work involves deciding trademark registration disputes between two or more parties. These *inter partes* proceedings involve a plaintiff seeking to prevent registration of a pending trademark or trying to cancel an existing registration. TTAB's decisions in both *inter partes* and *ex parte* appeals proceedings can be reviewed by either a U.S. district court or the U.S. Court of Appeals for the Federal Circuit.

In FY 2017, the Board continued to fulfill its commitment to developing the law by issuing more than three dozen precedential opinions and orders, with such decisions addressing a wide variety of substantive and procedural matters. Data shows that the overall average pendency (from commencement to completion) of appeals, trial cases, and Accelerated Case Resolution trial cases have declined during the past five years. It is significant to note that FY 2017 was the fifth consecutive year that the TTAB has reduced overall average pendency in appeal cases.

Managing Investments in Information Technology – TMNG

The USPTO is dependent on its 35 legacy IT systems for managing trademark work and serving our customers. The Office has an ongoing next generation IT project (TMNG) to replace legacy systems. We are continuing to assess TMNG and other IT enhancements.

Managing Growth and Maintaining Pendency and Quality

Trademark application filings historically have averaged increases on an annual basis between 6% and 8% year over year during the last 33 years, with only 4 years of negative growth over that period. Application filings for FY 2017 increased by 12% to 594,107 classes. While our forecast for FY 2018 is an 8.7% filing increase, so far this fiscal year, our filings have actually increased more than 15% compared to the same period in FY 2017.

Forecasts indicate that annual increases are expected to average 10% during the next eight years – to more than double the current level. A big driver in the increase has been the significant rise in filings from China which now represent nearly 10% of total new applications. At the end of FY 2017, filings from China had increased by nearly 1,000% from FY 2013. If these trends continue, filings from China by 2023 are expected to represent at least 32% of total U.S. trademark filings.

Managing this level of growth requires a significant increase in hiring to maintain high quality, timely examination and registration. In the past five years, Trademarks has hired and trained 232 new Examining Attorneys. If current trends continue during the next five years, we expect to grow the Trademark examining corps from more than 580 currently to more than 900.

V. Additional Domestic and International Intellectual Property Policy

The USPTO plays a leading role in promoting strong and balanced protection and effective enforcement of IP at home and abroad. In particular, we “advise the President, through the Secretary of Commerce, on national and certain international intellectual property policy issues,” and advise “Federal departments and agencies on matters of intellectual property in the United States and intellectual property protection in other countries.” Among other things, we advocate for global IP norms and understandings, and we conduct technical assistance and capacity-building programs for foreign governments and U.S. stakeholders. *See generally* 35 U.S.C. 2(b).

Some key developments and activities related to international and other (non-patent or trademark) policy issues are as follows:

International Harmonization of Patent Law

The AIA made significant steps toward aligning the U.S. patent system with those of many of our major trading partners. Among the key changes the AIA introduced in this regard were to move our system from “first-to-invent” to “first-inventor-to-file.” The switch to “first-inventor-to-file” brought our system into greater accord with Japan, Europe and other key markets. Various differences, however, remain. Since the enactment of the AIA, the USPTO has been working with our stakeholders and with counterpart offices around the world to assess what steps, if any, towards greater harmonization of substantive patent law are advisable.

Patent Prosecution Highway

The Patent Prosecution Highway, or PPH, is a cooperative initiative that facilitates the timely entry of innovative U.S. products into foreign markets. The USPTO has led the global efforts to promote the cooperative framework, which has benefitted thousands of U.S. inventors. Under the initiative, an applicant receiving a favorable patent ruling in one office may request that another participating office expedite the examination of a counterpart patent application. The timely determinations facilitated by the PPH provide greater legal certainty to American businesses and inventors across various international markets.

Technical Assistance to Support Trade Negotiations

USPTO provides expert technical advice on IP protection and enforcement in connection with negotiations of trade agreements and to monitor the implementation of existing trade agreements. For example, we have assisted the U.S. Trade Representative (USTR) in developing the IP chapter in the renegotiation of the North American Free Trade Agreement (NAFTA). The USPTO also assisted the Department of Commerce and the USTR in examining the IP aspects of trade agreement compliance.

Protection of Industrial Designs Abroad

The importance of industrial design protection has risen considerably in recent years, fueled by growing needs of innovators not only to create new products, but also to differentiate them from competitors and, in an increasingly interconnected world, to improve user experiences. And, industrial design application filings across the world have increased, fueling a need for greater convergence and consistency in this area.

The USPTO is playing a leading role in the international efforts to ensure designers are able to protect their product designs in a robust and cost effective manner in key markets globally through its work at the ID5 Industrial Design Forum – an incubator for sharing best practices among the five largest design offices from the China, European Union, Republic of Korea, Japan and the United States.

In 2015, the United States officially became a member of the Hague Agreement, which like similar systems for invention patents and trademarks, provides a cost effective and streamlined mechanism for pursuing international protection of new designs for products in virtually every industry. Since May 2015, U.S. companies and designers have been able to use the Hague System to file a single application that results in design protection in key designated international markets across the globe. And, the value of the Hague System to U.S. industry will continue to increase as soon as this year as additional trading partners such as Canada, China, Israel, Mexico and the United Kingdom become members, adding to the list of almost 70 already participating countries.

Copyright Policy

The USPTO also advises the Administration and the President on international and domestic copyright policy issues.

Internationally, the USPTO leads the U.S. delegation to the World Intellectual Property Organization (WIPO) Standing Committee on Copyright and Related Rights (SCCR). The USPTO also played a leadership role at the WIPO diplomatic conferences that adopted the Marrakesh Treaty on Blind and Visually Impaired Persons and the Beijing Treaty on Audiovisual Performances, and in preparing the ratification and implementation packages for those two treaties, which are currently before Congress. We have continued to provide technical assistance as the Senate moves to ratify and implement the Marrakesh Treaty in the near future. On these and other matters, we collaborate with the Copyright Office and others in the Administration.

The USPTO has also taken a leading role for the Administration in analyzing and engaging on the technical aspects of copyright-related initiatives that are part of the European Union's Digital Single Market (DSM) initiative, which is aimed at achieving a single borderless, online marketplace within the EU.

Domestically, the USPTO, in partnership with the National Telecommunications and Information Administration at the Department of Commerce, is following up on two important papers on copyright policy: a 2013 Green Paper on Copyright Policy, Creativity and Innovation in the Digital Economy, and a 2016 White Paper on Remixes, First Sale, and Statutory Damages.

We have convened an ongoing series of public meetings on facilitating the development of the online licensing environment for copyrighted works and are also engaging in informal outreach to stakeholders.

The Administration continues to review a number of bills pending in Congress to amend the Copyright Act that would, among other things, reform the complicated laws governing music licensing. We have met with stakeholders and, working with the Copyright Office and others in the Administration, stand ready to assist this Committee as it considers this legislation.

China-Related Activities

The China Team of the USPTO's Office of Policy and International Affairs along with IP attachés on the ground in China who are located in Beijing, Guangzhou, and Shanghai, brings extensive knowledge of and experience with China's intellectual property (IP) system. Along with IP attachés, the USPTO Mission in China has five local attorneys who specialize in Chinese IP law.

As U.S. companies seek to do more business in China, it is increasingly important that the Administration works to improve the IP environment and address the significant challenges they face.

Rights holders have expressed a range of concerns about the IP landscape in China, including misappropriation of trademarks, infringement of patents, excessive government involvement in licensing transactions, and theft of trade secrets. Consumers are fearful of potentially harmful counterfeit products, many of which originate from China. The USPTO has responded by presenting a series of China IP Roadshows, which inform rights holders about the care and protection of their intellectual property in China, and the solutions available to them. In 2017, we presented this program in twelve cities, including Boston, Dallas, Detroit, Indianapolis, Chicago, Salt Lake City, and Portland, Oregon. In 2018, we are planning again to visit a range of venues, including, Nashville, Des Moines, Louisville, Austin, New Orleans, and New York City. We have featured addresses from Members of Congress and municipal leaders at our China IP Roadshows.

Trade Secrets

The Defend Trade Secrets Act of 2016 (DTSA) established a federal private civil cause of action for the misappropriation of a trade secret. Its aim is to provide businesses with a uniform, reliable, and predictable way to protect their valuable trade secrets anywhere in the country. In light of this new law, and the growing domestic and international attention to trade secrets, the USPTO held a public symposium in 2017 on recent developments in the areas. Speakers included experts from academia, private legal practice, international organizations, and industry.

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 U.S. IP policy positions for the benefit of U.S. stakeholders through direct advocacy with governments in the host region; educating government officials on

IP matters, including 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. These positions are based in Rio de Janeiro, New Delhi, Beijing, Guangzhou, Shanghai, Bangkok, Mexico City, Kuwait City, Brussels, Lima, Geneva and Kyiv. Most of these attachés cover a broader region.

USPTO is pleased that the IP Attachés have proven to be effective advocates for U.S. intellectual property in overseas markets. We pledge to work with interagency partners to ensure their contributions continue to serve and advance American interests.

Global IP Academy

For more than a decade, the USPTO Global Intellectual Property Academy (GIPA) has provided high-level IP training, capacity building programs and technical assistance to foreign policy makers and enforcement personnel, as well as officials from IP offices 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 cutting-edge issues.

GIPA provides both multilateral programs and country-specific programs as needed. GIPA also delivers training to U.S. small and medium-sized businesses, U.S. enforcement officials, and the general public.

VI. Telework and Workforce Management

Telework

To effectively manage its workload, while maintaining high-quality standards, the USPTO has adopted workforce strategies where employees stay productive and connected regardless of where they are located. The USPTO has been a leader within the federal space of creating a nation-wide workforce and in adopting and effectively implementing telework strategies.

The USPTO telework program provides cost savings by reducing the need for additional office space, enhancing recruitment and retention, fostering greater efficiency in production and management, enhancing the resiliency of the USPTO during continuity events, and providing opportunities for expanded work flexibility. Telework has also allowed the USPTO to more than double the number of employees since 2005 without significantly increasing its real estate footprint. In FY 2017, for example, based on nearly 5,363 full-time teleworkers, the USPTO avoided more than \$46 million in rent as a result of its full-time telework programs.

The USPTO's telework program has also allowed many of our employees to continue to work during weather-related government shutdowns. The National Academy of Public Administration found that USPTO's telework programs saved the Office an average of \$7 million per year based on work conducted during closures.

The 2010 Telework Enhancement Act allowed the USPTO to initiate a pilot program, the Telework Enhancement Act Pilot Program (TEAPP), which permitted employees to change their duty stations to their alternate worksite in the city in which they work, thus relieving them of a regular reporting requirement to USPTO headquarters, in exchange for an agreement that they would pay their own travel costs for a limited number of mandatory trips back to the USPTO campus for training and engagement. The authority for TEAPP expired at the end of last year and a bill pending in front of the Senate (H.R. 4171) would provide an extension which we support. Should TEAPP not be extended, the USPTO would incur additional travel costs, calculated to be approximately \$3.5 million over three years. While the Office plans to continue to allow current TEAPP participants to remain at their duty stations, the additional costs could be a factor in determining the speed and scope of future program expansion. The USPTO would very much like to see this extension enacted.

Workforce Management

In recent years, we have made workforce management a critical focus and have invested significant time and effort on improving our overall management of time and attendance compliance – for teleworking employees and those stationed at one of our physical facilities.

The USPTO takes any allegation of time and attendance abuse in our workplace seriously. To that end, the USPTO recently rolled out its new Policy on Time and Attendance Tools, Communication, and Collaboration. This policy requires all employees to use USPTO-provided collaboration tools, post their work schedule information, and log-in to the Office network while teleworking. As part of the rollout of this policy, the USPTO has also reactivated its badge out requirement for employees to leave secure areas. At the same time, the USPTO has deployed its Record Sharing Platform (RSP) so that employees can see their badge-in/out and log-in/out records to assist with preparing their timesheets. Together, these changes seek to enhance collaboration and strengthen time and attendance controls.

These changes directly respond to recommendations made in various recent reports, including the August 2016 Report from the Department of Commerce OIG, *Analysis of Patent Examiners Time and Attendance*. We believe they provide the appropriate measures to improve timekeeping, collaboration, and communication; and to increase the potential for earlier detection of time and attendance issues.

The USPTO also takes seriously any misuse of government funding, and will take appropriate action upon finding any such misuse. A recently completed Inspector General Report about the misuse of the Office's taxi voucher program by a former senior staffer in the previous Administration, has resulted in the collection of restitution in the amount of just under \$4,100. No misuse of government funds by anyone, including political appointees on my staff, will be tolerated.

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 are up and running in Detroit, Dallas, Denver and San Jose. Among other things, these offices help the USPTO recruit and retain a highly qualified workforce of patent examiners and administrative patent judges. These offices have made our services more easily accessible to those working outside of 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.

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 science, technology, engineering and math (STEM) education events; and working relationships with regional stakeholders including business interests and federal, state and local government officials.

VIII. Education and Outreach

The USPTO is committed to encouraging and supporting future generations of inventors and entrepreneurs in communities across the nation to play an active role in America's innovation economy. A key focus is to highlight the greatness of American inventors and the benefits that their inventions bring to society within a uniquely American Constitutional IP framework. We also support government-wide efforts to attract and retain students in STEM-based education, especially as it relates to intellectual property. In part, the USPTO does this through its in-house Office of Education and Outreach (OEO) and through support of third party non-profits and educational organizations that are aligned with this goal.

The OEO has successfully worked to build and expand strategic partnerships with other Federal agencies, non-profit organizations, school districts and universities in order to reach diverse groups of K-12 students and educators. In July 2017, the office hosted its Fourth Annual National Summer Teacher Institute on Innovation, STEM, and Intellectual Property (NSTI) in Denver and will be collaborating with the University of South Florida in 2018 on this program. To date, 200 educators, from 47 states, have gone through this rigorous training and have created a national network of teachers across the U.S. and beyond who are sharing information on intellectual property and the work of the USPTO with their students, colleagues, and their districts.

The USPTO is partnering with the University of Iowa and the Jacobson Institute for Youth Entrepreneurship, a division of the John Pappajohn Entrepreneurial Center at the University of Iowa to produce in-person and online materials and workshops for K-12 teachers and school administrators on a national basis. The materials are designed to make connections between

student engagement in innovation and entrepreneurship and the creation and protection of intellectual property. The partnership will target those areas of the country where students have had limited exposure to invention education.

Through its signature partnership with the non-profit National Inventors Hall of Fame (NIHF), furthermore, the USPTO supports a menu of education and outreach programs reaching students and teachers across the nation. NIHF's educational programs are inspired by the stories of the nation's greatest inventors, and many of the living Hall of Fame inductees participate in teaching STEM and entrepreneurial skills to students of all ages. The USPTO cofounded NIHF in 1973, and the Hall of Fame honors the individuals who conceived, patented, and advanced the greatest technological achievements in the nation. In partnership with the Hall of Fame, we run a series of STEM and IP based summer camps and afterschool programs that reach more than 120,000 students each year, from pre-Kindergarten through high school, in 1,300 school districts across all 50 states plus Washington, DC and Puerto Rico.

NIHF's flagship national program supported by the USPTO is Camp Invention, which is taught by an elite group of 10,000 STEM instructors plus 90,000 interns at the high school and college level. The teachers receive training in STEM and intellectual property, an introduction to the patents and trademark systems that teachers take back and use in their own classrooms.

At the collegiate level, the USPTO and NIHF host the Collegiate Inventors Competition. This annual competition brings teams of graduate and undergraduate inventors to meet and discuss innovation and intellectual property with Hall of Fame inductees and USPTO experts. Since these educational programs started in 1990, the USPTO and the National Inventors Hall of Fame have reached 140,000 teachers and 1.4 million students nationwide.

Additionally, as administrators of the National Medal of Technology and Innovation, awarded by the President of the United States, the USPTO partners with the National Science & Technology Medals Foundation to recognize inventor excellence and to inspire future generations to become inventors. In 2017, the USPTO supported the foundation's newest program—"An Evening With..."—that brings medal laureates to college campuses around the country. The program makes a personal connection between college students, at the undergraduate and graduate levels, with leading innovators and thinkers who have all been recognized by the White House as our nation's greatest leaders in technology and innovation.

IX. IT Modernization

The USPTO continues to invest in the modernization of its information technology and retiring its legacy systems. These new information technology tools are built on a modern, flexible, and more stable web-based infrastructure leveraging cloud-based hosting. This allows us to leverage the latest technological advances and supports a distributed national teleworking workforce. Recent modernization successes include a new Patent docket management tool; an external Trademark status retrieval capability; a new Patents Trial and Appeal Board tool for external petition submissions and internal workflow; a trademark electronic Official Gazette for published, cancelled and renewed registrations; and new externally facing tools known as MyUSPTO and Financial Manager.

Recent legacy retirements include Patents electronic docket navigator (eDAN); the PTAB's Review Processing System (PRPS); Trademark's Document Retrieval (TDR) and Application and Registration Retrieval (TARR).

I am also focused on continuing to improve our information technology systems to better support patent examination and other parts of the office. Big Data capabilities, data analytics and artificial intelligence can improve overall performance, as well as fuel data-driven decision and policy making.

X. Enterprise Services

With respect to the Department of Commerce's Enterprise Services (ES) program, Secretary Ross is currently reviewing USPTO's participation in a broader portfolio of Enterprise Services. Secretary Ross recognizes the importance of patents and trademarks to the U.S. economy and is committed to ensuring that USPTO is effective and efficient in carrying out its mission.

The USPTO currently obtains and provides some common-need purchases through vehicles available to the entire Department, such as software licenses, networking equipment, and office supplies. Additionally, Enterprise Services manages a contract for the entire Department, including USPTO, to obtain computer support for two human resources management services, which the Office continues to use.

Secretary Ross has made it clear that for the USPTO to participate more fully, the USPTO would have to see the quality of its services either maintained at their current levels or, better still, improved. Secretary Ross and I will continue to work with the Department to ensure that USPTO user fees are used to further its mission of supporting American intellectual property.

XI. Conclusion

Chairman Grassley, Ranking Member Feinstein, and all members of the Senate Judiciary Committee, we appreciate your 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 at home and abroad.

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