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UNITED STATES PATENT AND TRADEMARK OFFICE

United States Patent and Trademark Office **SUMMARY OF PERFORMANCE** & **FINANCIAL** INFORMATION

FINANCIAL AND RELATED HIGHLIGHTS				
(Dollars in Thousands)	% Change 2021 over 2020		the Year Ended ember 30, 2021	 the Year Ended ember 30, 2020
Fund Balance with Treasury	1.9%	\$	2,790,547	\$ 2,739,700
Property, Plant, and Equipment, Net	5.3%		355,843	337,983
Other Assets	(24.0%)		44,124	58,089
Total Assets	1.7%	\$	3,190,514	\$ 3,135,772
Advances from Others and Deferred Revenue	21.0%	\$	1,250,318	\$ 1,033,073
Accounts Payable	34.4%		141,467	105,256
Accrued Payroll, Benefits, and Leave	5.1%		359,837	342,475
Other Liabilities	(13.4%)		147,586	170,447
Total Liabilities	15.0%	\$	1,899,208	\$ 1,651,251
Net Position	(13.0%)		1,291,306	1,484,521
Total Liabilities and Net Position	1.7%	\$	3,190,514	\$ 3,135,772
Total Earned Revenue	(7.5%)	\$	3,384,463	\$ 3,657,051
Total Program Cost	0.1%		(3,627,437)	(3,622,969)
Net (Cost)/Income from Operations	(812.9%)	\$	(242,974)	\$ 34,082
Budgetary Resources Available for Spending	3.5%	\$	4,406,096	\$ 4,257,572
Total Collections, Net	(71.5%)	\$	(75,641)	\$ (265,205)
Federal Personnel	0.3%		12,963	12,928
On-Time Payments to Vendors	-%		99%	99%

PERFORMANCE HIGHLIGHTS			
Performance Measures	FY21 Target	FY21 Actual	Performance Results*
Total PTA Compliance - Mailed Actions	84%	83%	Red
Total PTA Compliance - Remaining Inventory	86%	86%	Green
Trademark Average First Action Pendency (months)	4.5	6.3	Red
Trademark Average Total Pendency (months)	12.0	11.2	Green
Trademark First Action Compliance Rate	95.5%	96.3%	Green
Trademark Final Compliance Rate	97.0%	98.7%	Green
Exceptional Office Action	50.0%	54.1%	Green
Percentage of prioritized countries for which intellectual property (IP) country teams have made progress on at least 3 of the 4 performance criteria: a. Institutional improvements of IP office administration for advancing IP rights; b. Institutional improvements of IP enforcement entities; c. Improvements in IP laws and regulations; d. Establishment of government-to-government cooperative mechanisms	66%	100%	Green
Number of people, including Foreign Government Officials and U.S. Stakeholders, trained on best practices to protect and enforce IP	5,000	17,841	Green

* The performance result of a given measure is either met (100% or greater of target), or not met (99.9% or below of target).

Message from Andrew Hirshfeld, Performing the Functions and Duties of the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office

Despite the continuing impacts of the global pandemic, the United States Patent and Trademark Office (USPTO) was extremely busy and productive during fiscal year (FY) 2021. Patent application filings at the USPTO remained strong, finishing the year on an upward trajectory. Meanwhile, trademark application filings experienced an unprecedented surge in FY 2021, driven in part by the growth of e-commerce and the desire among more Americans to develop new products and start new companies.

Patent application filings exceeded 650,000, and trademark application filings for all classes surpassed 943,000, a record high. The vast majority of our 12,963 employees continued to work remotely through our secure, high-speed networks, and they were able to interact with more than 1.1 million clients and customers over the course of the fiscal year.

On September 16, 2021, the USPTO celebrated the 10th anniversary of the Leahy-Smith America Invents Act (AIA) of 2011. The AIA made several important changes to U.S. patent law, including implementing a first-to-file system for determining a patent's priority date and establishing the Patent Trial and Appeal Board (PTAB) to hear post-issuance challenges to patents as a more affordable and streamlined alternative to district court patent litigation. The anniversary of the AIA also celebrates the establishment of the USPTO's regional offices, which have been instrumental in providing our customers and the public with essential, innovation-related services. The expert staff at these offices help regions across the country upgrade their intellectual property (IP) infrastructure, and they spread the benefits of innovation to communities located far from USPTO headquarters and the technology hubs in the country.

In FY 2021, we made additional strides in patent timeliness. Our customer satisfaction ratings regarding patent quality have never been higher, thanks to the dedication and training of our staff, the continuous evaluation and optimization of our operations, and the introduction of groundbreaking information technology (IT) to assist in every aspect of examination. This year, we continued a decade-long trend of improvement in patent application pendency and started tracking it by measuring Patent Term Adjustment (PTA), our overall adherence to statutorily defined time frames. This tracking method provides a more refined description of pendency that measures the USPTO's consistency in meeting these time frames, an indication not provided by traditional pendency metrics. We met these time frames in 83% of all office actions mailed in FY 2021 and maintained an average total pendency of 23.3 months, consistent with last fiscal year. Average first action pendency, a traditional pendency metric, increased by over 2 months since last fiscal year, due in large part to side effects of the COVID-19 pandemic on the agency, such as the provision of additional leave flexibilities to our employees for COVID-19 related situations and a decline in the use of overtime. As we continue to focus on PTA timeframes, we will ensure that the oldest applications are addressed, which we anticipate will negatively affect average first action pendency during FY 2022. We are also evaluating whether further adjustments to examination time may benefit patent quality, and these adjustments may also increase average first action pendency.



Andrew Hirshfeld

THE USPTO MISSION

Fostering innovation, competitiveness, and iob growth in the United States by conducting high-quality and timely Patent and Trademark examination and review proceedings in order to produce reliable and predictable intellectual property rights, guiding intellectual property policy and improving intellectual property rights protection, and delivering intellectual property information and education worldwide.

The USPTO responded quickly and proactively to the June 21, 2021, U.S. Supreme Court decision in the United States v. Arthrex, Inc. case regarding the constitutionality of the agency's administrative patent judges (APJs). Our interim procedures for providing parties a mechanism for requesting Director review of PTAB final decisions in inter partes reviews and post-grant reviews were posted almost immediately after the Supreme Court decision was announced. We invited patent practitioners and the public to provide their input on these interim procedures and were quick to adopt changes. We will continue to refine the procedures as we gain experience with Director reviews of PTAB decisions.

This year also marked the 75th anniversary of the Lanham (Trademark) Act of 1946, which created our national system of trademarks that protects brands and consumers. At two events during the summer, the USPTO, along with industry partners, members of Congress, Secretary of Commerce Gina Raimondo, and other distinguished guests, celebrated the important role the Lanham Act has played in helping business owners build and protect strong national and global brands.

In addition to celebrating this significant milestone, our Trademarks organization developed new rules for implementing the Trademark Modernization Act (TMA) of 2020. This act provides business owners with additional tools to help clear the federal Trademark Register of unused marks, and it enables the USPTO to move applications through the system more efficiently. In the spring of 2021, we held three public roundtables to gather feedback on proposals for new rules to implement the procedures required by the new law, and offered a comment period for stakeholder input on the proposed rules. These events provided us with valuable information that helped to shape the final decisions on the implementation of the act.

As mentioned, trademark filings surged to unprecedented levels through the first half of the fiscal year before gradually subsiding to a more normal pace through the late spring and summer months. The overall 30% increase in filings for FY 2021 resulted in a delay in processing times for applications. We are addressing the backlog created by the surge by hiring and training 73 new trademark examining attorneys, and support staff to help process the applications. We are also identifying and deploying IT solutions to increase efficiencies in key areas. We continue to explore additional ways to respond to the dramatic increase in filings experienced in FY 2021, and deliver on our goal of providing timely and high-quality examination.

Regarding our overall finances, following a tumultuous FY 2020, the USPTO's finances stabilized in FY 2021. This stabilization will lessen cash-flow stresses in the year ahead. As described later in the financial section of this report, our revenues remained steady in Patents and increased in Trademarks. We have strong and healthy reserves in both accounts.

We are confident that the USPTO's financial and performance data are complete, reliable, accurate, and consistent. For the 29th consecutive year, the USPTO earned an unmodified (i.e., clean) audit opinion on its annual financial statements, giving the public independent assurance that the agency's financial information is presented fairly and follows generally accepted accounting principles. The independent auditors also reported no material weaknesses or significant deficiencies, or instances of noncompliance with laws or regulations during the FY 2021 financial reporting period.

In addition, we continue to upgrade our IT systems to ensure uninterrupted service to tens of thousands of internal and external users. We have moved major applications off proprietary platforms and onto the cloud. We are expanding bandwidth and establishing secure connectivity to multiple databases and systems.

We are also augmenting the backup of all our critical databases and are engaged in ongoing tests of the disaster recovery mechanisms for systems crucial to operations. These efforts will increase reliability and security and decrease costs associated with the massive IT requirements of our staff and the public.

We are modernizing patent filings as well by transitioning to the use of the DOCX format and implementing the new Patent Center. These developments will enable more streamlined, less technically cumbersome examination, improved application quality and efficiency, increased data quality, smarter interfaces, and stronger security.

As the world's leading IP agency, the USPTO is also spearheading the promotion of innovation among the nation's current and future inventors. We offer numerous educational and outreach programs that aim to expand participation in the innovation ecosystem by engaging with students, teachers, parents, and mentors in diverse communities. In partnership with the National Inventors Hall of Fame, these programs reached more than 200.000 K-12 students and 23.000 teachers in FY 2021. We view these programs as essential to the future competitiveness and prosperity of our country. They complement the nation's focus on expanding science, technology, engineering, and mathematics (STEM) education, and help provide the underpinnings for a healthy, national IP system that encourages invention, innovation, and entrepreneurship.

On the international front, we continue to work on global IP harmonization. Over the past year, we established worksharing agreements with Mexico and Cambodia and signed a memorandum of understanding with India to cooperate on a number of activities pertaining to securing, using, and enforcing IP rights. Our Office of Policy and International Affairs also continues working with China to implement better IP protections for trade secrets and patents in accordance with the Economic and Trade Agreement between the Government of the United States of America and the Government of the People's Republic of China (Phase One), signed on January 15, 2020.

In response to administration priorities set by the President, the USPTO established the Economic Relief Working Group, Climate Working Group, and Equity Working Group. The working groups consist of employees from across the USPTO and assist with facilitating the nation's economic recovery, tackling the climate crisis, and increasing access to the IP ecosystem for all. The working groups are committed to carrying out the directives of the Executive Orders (EOs) by identifying key areas of improvement; recommending actions; and helping to implement changes via policies, programs, and initiatives. One of the working groups' significant accomplishments was a redesign of the Inventor and entrepreneur resources and Patent basics webpages. These, serve as busy hubs of USPTO resources and information and provide centralized access to a variety of USPTO products and services as well as an orientation to the full patent and trademark application processes. The USPTO.gov website had more than 13 million unique users in FY 2021.

As the nation's innovation agency, we embrace our constitutional role in making the patent and trademark systems more effective for all people seeking to protect their valuable IP. We honor the dedication of every member of our staff to our essential mission. We look forward to the innovations of future inventors and entrepreneurs, and we remain devoted to serving them and the American public, whose lives are enhanced so richly by these advancements.

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

November 5, 2021

THF **USPTO** VISION

Leading the nation and the world in intellectual property

TABLE 1: 2018-2022 STRATEGIC PLAN

Strategic Goals with Resources Invested	Objectives	
	Optimize Patent Application Pendency	
Goal I:	Issue Highly Reliable Patents	
Optimize Patent Quality and Timeliness Obligations: \$3,266.3 million	Foster Innovation Through Business Effectiveness	
Total Program Cost: \$3,189.3 million	Enhance Operations of the Patent Trial and Appeal Board (PTAB)	
Goal II:	Optimize Trademark Application Pendency	
Optimize Trademark Quality and Timeliness	Issue High-Quality Trademarks	
Obligations: \$380.9 million	Foster Business Effectiveness	
Total Program Cost: \$372.0 million	Enhance Operations of the TTAB	
Goal III: Provide Domestic and Global Leadership	Provide Leadership and Education on Domestic Intellectual Property Policy and Awareness	
to Improve Intellectual Property Policy, Enforcement, and Protection Worldwide Obligations: \$75.3 million Total Program Cost: \$66.1 million	Provide Leadership and Education on International Intellectual Property Policy and Awareness	
	Enhance Human Capital Management and Foster Employee Engagement	
MISSION SUPPORT GOAL:	Optimize Speed, Quality, and Cost-Effectiveness of Information Technology Delivery to Achieve Business Value	
Achieve Organizational Excellence*	Ensure Financial Sustainability to Facilitate Effective USPTO Operations	
	Enhance the USPTO's Interaction with Internal and External Stakeholders and the Public at Large	

*The cost associated with Mission Support Goal activities is distributed among the agency's primary Strategic Goals I, II, and III.

STRATEGIC GOAL I: OPTIMIZE PATENT QUALITY AND TIMELINESS

The USPTO is dedicated to its mission to deliver "high quality and timely examination of patent applications" per laws, regulations, and practices and in a fashion that is consistent with the goals and objectives in the USPTO 2018-2022 Strategic Plan. This mission and its key performance measures directly support DOC's Strategic Objective 1.3, Strengthen IP protection. For more information, please visit the <u>Commerce Performance Data Pro</u> website.

In FY 2021, the USPTO continued to press forward, serve the public, and promote commerce in the United States. The efforts of its employees reassured stakeholders and the public and enabled innovators and inventors to make progress in their work. Like many other government agencies and private businesses, the USPTO adopted an almost fully virtual operating model for FY 2021, with the vast majority of employees and contractors working remotely full-time. Operations under a virtual operating model continued to support the agency's pendency goals.

The USPTO saw a .10% decrease in serialized filings, resulting in a utility, plant, and reissue patent application inventory of 642,781 at the end of FY 2021. The Request for Continued Examination (RCE) inventory decreased to 13,614. The USPTO also remained open for business, albeit virtually, supporting stakeholders and the public more broadly.

OBJECTIVE 1: OPTIMIZE PATENT APPLICATION PENDENCY

In FY 2021, the USPTO continued efforts toward the established pendency goal that 90% of both total performance (i.e., mailed actions) and total (i.e., remaining) inventory be within statutory time frames set by 35 U.S.C. § 154(b)—also referred to as PTA compliance. The statutory time frames are:

- Fourteen months from the filing date of a patent application to the mailing date of a first office action (a statement of the examiner's position and the primary action to establish the issues that exist)
- Four months to respond to an amendment, which includes an RCE
- Four months to act on a decision from the PTAB
- Four months to issue a patent after payment of the issue fee
- Thirty-six months from the filing date of an application to the issue date of a patent

For FY 2021, the USPTO set targets to achieve total PTA statutory compliance for 84% of all mailed actions and 86% of all remaining inventory. The actual total PTA compliance for all mailed actions was 83%, and total PTA compliance for all remaining inventory was 86%. The USPTO continues to align examination capacity with the inventory levels of unexamined patent applications. In addition, efforts toward the long-term PTA compliance goals contribute to the optimization of patent application pendency and the predictability of the patent application process. FY 2021 PTA compliance for each PTA category is represented in Table 2.

TABLE 2: PTA PERFORMANCE DATA

PTA Category	PTA Compliance Mailed Actions	PTA Compliance Remaining Inventory
Issue an office action within 14 months after application filing	39%	71%
Respond to an amendment within four months	97%	97%
Respond to an RCE filing within four months	84%	80%
Act on the application within four months after a decision from the \ensuremath{PTAB}	99%	100%
Patent granted within four months after payment of the issue fee	99%	98%
Issue a patent within 36 months of the filing date	87%	95%
Total PTA Compliance	83%	86%

Note: The Total PTA Compliance for both Mailed Actions and Remaining Inventory results are the weighted average of their PTA categories.

OPTIMIZE PENDENCY AND EXAMINATION TIME FRAMES

The USPTO continued to focus on meeting DOC's Strategic Objective 1.2: Advance Innovation by accelerating and improving the reliability of patent processing. The focus on PTA compliance in FY 2021 improved the predictability of patent application processing for USPTO stakeholders.

ALIGN PRODUCTION CAPACITY WITH INCOMING WORKLOAD

Patents routinely reviews pendency to align production capacity with incoming workload. Every year, analysis is performed to determine the areas of high pendency, and new patent examiner hires are placed in these areas.

Table 3 shows how the USPTO evaluates the efficiency of the patent examination process as measured by the relative cost-effectiveness of the entire process over time or the efficiency with which the organization applies its resources to production. Actual results are based on total patent-related expenses USPTO-wide compared with patent production.

Fiscal Year	Target	Actual
2016	\$4,687	\$4,198
2017	\$4,607	\$4,312
2018	\$4,786	\$4,593
2019	\$5,142	\$4,633
2020	\$5,253	\$5,003
2021	\$5,718	\$5,378
2022	\$5,934*	

TABLE 3: TOTAL COST PER PATENT PRODUCTION UNIT

* Based on FY 2022 President's Budget

IDENTIFY AND OFFER ADDITIONAL PROSECUTION OPTIONS

The USPTO continued to evaluate programs designed to advance the progress of a patent application and to provide applicant assistance, including the Track One Prioritized Patent Examination Program; Quick Path Information Disclosure Statement; After Final Consideration Pilot 2.0; COVID-19 Prioritized Examination Pilot Program; Patents 4 Patients, also known as the Cancer Immunotherapy Pilot Program; and the PPH.

OBJECTIVE 2: ISSUE HIGHLY RELIABLE PATENTS

INCREASE EXAMINERS' ABILITY TO OBTAIN THE BEST PRIOR ART DURING EXAMINATION

A patent examiner's ability to find the best prior art during the patent examination process ensures both quality and timeliness. Prior art refers to the references and documents that may be used to determine the novelty or non-obviousness of claimed subject matter in a patent application. The USPTO continued to improve patent examiners' ability to access prior art through the deployment of advanced technology solutions. These solutions included both the new patent search system described later in the Develop Artificial Intelligence Programs for Patents at the USPTO section and the involvement of experts who were available to help with search strategies based on technology and classification.

In FY 2020, the USPTO launched Patents End-to-End (PE2E) Search—a modern, scalable enterprise search tool—to a subset of patent examiners. In FY 2021, the USPTO began to roll out the tool to the patent examining corps, starting with examiners in two Technology Centers. In early FY 2022, the USPTO will continue to roll out the tool to the rest of the patent examining corps and release a limited, public version of the tool. PE2E Search provides features similar to legacy USPTO patent search tools and allows for additional search functionalities, including access to over 70 million foreign, full-image patent documents from over 60 countries with full machine English translations. The most recent examiner version of PE2E Search also integrates artificial intelligence (AI) capabilities that helps examiners identify relevant documents and suggests additional areas to search.

EXPLORING NEW WAYS TO MEET CUSTOMER NEEDS: SUBJECT MATTER ELIGIBILITY

In December 2020, the USPTO issued a request for information and public input on the Article of Manufacture requirement of 35 U.S.C. § 171, the statutory provision governing subject matter eligibility for design patent protection. The request explained that the USPTO has historically interpreted the Article of Manufacture requirement as requiring applicants to claim their designs as applied to or embodied in an Article of Manufacture. Thus, for example, a design for a computer-generated icon would be eligible if claimed as shown on a computer screen, monitor, or other display panel or otherwise as embodied in an Article of Manufacture. However, some stakeholders have expressed that the USPTO's interpretation of section 171 is preventing them from obtaining protection for certain new and emerging technologies (e.g., projections, holographic imagery, and virtual/augmented reality) that do not require a physical display screen or other tangible article to be viewable and thus are not applied to or embodied in an Article of Manufacture. Accordingly, the USPTO requested public input on whether it should revise its interpretation of the Article of Manufacture requirement to protect digital designs encompassing these new and emerging technologies.

USE PATENT QUALITY DATA TO IDENTIFY AREAS FOR IMPROVEMENT

Examining patent applications efficiently and effectively is paramount to the IP ecosystem. The USPTO evaluates patent quality by measuring and assessing its work products. Review quality assurance specialists from the Office of Patent Quality Assurance (OPQA) review a random sample of employee work products for compliance

with title 35 of the U.S.C. and the relevant case law at the time of the patentability determination. These reviews are performed using the Master Review Form (MRF), a modular review form designed to capture information about the quality of USPTO work products. The MRF includes over 20 unique sections and over 330 inquiries. Feedback and data obtained from these reviews allow the USPTO to identify quality trends earlier in the examination process and pursue any corrective measures, such as training.

In FY 2021, the OPQA's patent quality metrics were based on the completion of 12,036 reviews. Table 4 shows the results of these reviews for the correctness of office actions during FY 2021.

TABLE 4: PATENT COMPLIANCE INDICATORS

Statute	Goal	Actual
35 U.S.C. § 101 (including utility and eligibility) - Ensures the patent application contains a new and useful invention.	>97%	98.3%
35 U.S.C. § 102 (prior art compliance) – Ensures the patent application is a novel invention in view of the appropriate prior art.	>95%	95.1%
35 U.S.C. § 103 (prior art compliance) – Ensures the patent application is not an obvious invention in view of the appropriate prior art.	>93%	90.7%
35 U.S.C § 112 (35 U.S.C. § 112(a),(b) including (a)/(b) rejections related to 35 U.S.C. § 112(f))) - Ensures the patent application adequately satisfies multiple invention disclosure requirements.	>93%	92.2%

The OPQA also uses the MRF to capture a patent examiner's use of best practices and to designate certain instances of high-quality examiner work as warranting an accolade. The accolades program effectively provides positive feedback to patent examiners by recognizing specific, praiseworthy work via a letter from the Director of the OPQA. Accolade-worthy work generally goes beyond the basic requirements, as found in the Manual of Patent Examining Procedure (MPEP) and is most often recognized for the use of identified best practices in effective manners, clear writing styles, and excellent customer service. Approximately 15.6% of all patent examiner work reviewed in FY 2021 received an accolade.

REFINE PRODUCTION STANDARDS TO ACHIEVE PATENT QUALITY EXPECTATIONS AND GOALS

In FY 2021, the USPTO implemented a process that revises the time allotted for examining patent applications, routes applications to patent examiners, and evaluates patent examiner performance via the examiner's performance appraisal plan.

This implementation was possible due to an initial phase that started last fiscal year and offered an increase in the base or minimum time patent examiners are allotted to examine each application. Also, additional time was allotted for applications that contained particular attributes above a specified threshold, including the overall number of claims, the length of the specification, and the number of pages in any filed Information Disclosure Statements. Examination time is also based on an application's classification "picture," which represents the full scope of technology covered in an application and accounts for multidisciplinary inventions.

The new method for allotting examination time is more transparent and flexible; adjustments can be made as the patent examination or prosecution conditions change. This flexibility allows for maintaining the necessary time to ensure stakeholder confidence in the certainty of resultant patent rights and enables optimal pendency, cost, and quality levels.

The new application routing process more effectively matches each application's unique technological profile with the work experience of a patent examiner, thereby enhancing the process of assigning applications to patent examiners with the requisite expertise and experience.

The updated examiner performance appraisal plan establishes a road map for enhanced patent quality by providing patent examiners with a list of exemplary practices in the areas of search, clarity of the written prosecution record, and principles of compact prosecution. For example, the road map emphasizes search by highlighting the importance of searching the inventive concept as disclosed in an application to identify the best prior art in the case at the earliest possible time in prosecution.

Throughout the year, the USPTO remained committed to studying the impacts of the implementation of this new process on patent examiners and internal stakeholders, collecting information and feedback to develop targeted solutions to continue improving the processes by which time is allotted for examining patent applications, routing applications to patent examiners, and evaluating patent examiner performance via the examiner's performance appraisal plan. While continuing to analyze these impacts, the USPTO provided additional examination time to patent examiners to ensure the proper classification of eligible patent applications. This effort is ongoing, and the USPTO expects to have the results around the beginning of FY 2022. For more information on these updates, please visit the <u>examiner performance appraisal</u> webpage.

OBJECTIVE 3: FOSTER INNOVATION THROUGH BUSINESS EFFECTIVENESS

ENHANCE PATENT CUSTOMER EXPERIENCE

Patents measured Customer Experience (CX) across all Patents Contact Centers, and customer satisfaction scores were above industry benchmarks. The knowledge gained from this analysis led to data-driven enhancements for customers. Some of these enhancements will use human-centered design principles and practices in one of the USPTO's two newly formed labs.

The labs apply these principles and practices to solve policy, process, and technology challenges. The first of these is the Patents' Design Lab, which researches topics related to policy and process, identifies possible interventions, pilots the interventions, studies the effectiveness of the interventions, and makes recommendations about them. The second is the Innovation Lab, which prototypes solutions to solve customer and employee needs, tests the solutions' efficacy, and scales the solutions. Future collaborations between these two labs will address people, process, and technology needs.



DEVELOP ARTIFICIAL INTELLIGENCE PROGRAMS FOR PATENTS AT THE USPTO

To incorporate AI into patent examination tools and processes, the USPTO has undertaken a comprehensive development strategy, including extensive market research and rigorous testing of a wide range of proofs of concepts to identify the best solutions. The objective is both to deploy smarter technology and to build a smarter organization by coupling the strengths of examiners with the strengths of AI. This is the beginning of a new trajectory in how technology is leveraged to transform patent operations for the better.

OBJECTIVE 4: ENHANCE OPERATIONS OF THE PATENT TRIAL AND APPEAL BOARD

ENHANCE THE CONSISTENCY, TRANSPARENCY, AND CERTAINTY OF PATENT TRIAL AND APPEAL BOARD PROCEEDINGS

During this unprecedented and challenging time, the PTAB continued its mission without interruption and made several improvements to its processes and proceedings to enhance consistency, transparency, and certainty for ex parte appeals and AIA proceedings.

The PTAB continued to meet all statutory due dates for AIA proceedings (Table 5 and Table 6), while also reducing the average pendency of ex parte appeals from approximately 30 months in 2015 to 12.7 months for appeals decided in the fourth quarter of FY 2021 (Table 7). The PTAB has a long-term pendency goal of 12 months in ex parte appeals in all technology areas, and the Board is on its way to achieving that goal.



TABLE 5: PTAB TIMELINESS OF DECISION TO INSTITUTE

Fiscal Year	Target	Actual
2015	3.0	2.7
2016	3.0	2.6
2017	3.0	2.5
2018	3.0	2.6
2019	3.0	2.7
2020	3.0	2.6
2021	3.0	2.7
2022	3.0	-

Target met.

TABLE 6: PTAB TIMELINESS OF AIA TRIAL PROCEEDINGS

Fiscal Year	Target	Actual
2015	12.0	11.3
2016	12.0	11.7
2017	12.0	11.7
2018	12.0	11.8
2019	12.0	11.7
2020	12.0	11.7
2021	12.0	11.8
2022	12.0	-

Target met.

TABLE 7: PTAB PENDENCY OF DECIDED APPEALS FROM APPEAL NUMBER ASSIGNMENT DATE (AVERAGE NUMBER OF MONTHS)

Fiscal Year	Target	Actual
2015	-	29.8
2016	26.0	25.5
2017	23.5	17.8
2018	16.9	15.1
2019	16.5	14.8
2020	14.5	13.4
2021	14.2	12.7
2022 Target met.	14.0	-

STRATEGIC GOAL II: OPTIMIZE TRADEMARK QUALITY AND TIMELINESS

OBJECTIVE 1: OPTIMIZE TRADEMARK APPLICATION PENDENCY

Trademark operations are aligned with the USPTO's strategic goal of optimizing trademark quality and timeliness. The agency implements U.S. trademark laws and regulations for the mutual benefit of consumers and businesses in accordance with the USPTO's 2018-2022 Strategic Plan.

The USPTO received a historic 943,928 trademark application classes in FY 2021, eclipsing last year's record total of 738,112 by 27.9%. Chinese and U.S. filers represented the leading drivers of that growth, accounting for about 61.5% and 31.1% of the increase respectively. The rest of the world is collectively responsible for the remaining 7.4%. Year-to-date growth of application classes in FY 2021 ranged between 71.3% and 27.5% each month. There is no one reason for this sustained growth. It is likely, however, that the following factors played a significant role: the growth of online sales during the pandemic, government stimuli and subsidies, anticipation of the USPTO's fee increase on January 2, 2021, and a robust level of entrepreneurialism. Regardless of the cause, the impact on Trademarks operations has been significant.

The surge in trademark filings has resulted in substantial increases in the USPTO's trademark application pendency and other processing times in the cycle. First action pendency was 6.3 months in FY 2021, exceeding the optimum target range of 2.5-4.5 months. Prior to FY 2021, first actions on newly filed applications were routinely issued in less than 3.5 months annually, dating back to 2007. First action pendency measures the time between when the USPTO first receives a trademark application and when it is first pulled by an examining attorney for examination. Despite the agency's success in prior years, the rising inventory of applications due to the record amount of filings has pushed first action pendency beyond the target range for the first time in nearly 15 years.

For final disposal, which measures from the date of filing to the date that the application was either registered or abandoned, the USPTO averaged 11.2 months. Despite the adverse impact on first action pendency, Trademarks successfully achieved the 12-month final disposal target, further extending its broad success of sustained optimal trademark pendency (see Tables 8 and 9). The achievement of optimal pendencies is a critical indicator for stakeholders because these milestones often impact business decisions. Taking aggressive steps to address the surge in a manner that seeks to return to optimal time frames has been and remains a core priority.

The USPTO met the increases in application filings with a multifaceted strategy composed of:

- Reorganizing workloads among professional staff
- Expanding the output of the examining corps by hiring additional examining attorneys and increasing overtime
- Identifying and implementing options for streamlining work processes, including exploring the use of robotic process automation tools
- Launching a pilot program to add bandwidth with specialized contractors

FY 2021 was an extraordinary year for the USPTO, with trademark application filings surging well beyond what could have been imagined in the middle of an economic shutdown. At the same time, Trademark's examination capacity was significantly strained due to the pandemic. These conditions resulted in first action pendency levels not seen in nearly two decades. An operational assessment conducted after the close out of the fiscal year concluded that the performance of trademark examining attorneys and support staff was remarkable as compared to previous years, and that the pendency goal would have been met but for this abnormal congruence of extraordinary filings and the pandemic. The inventory of unexamined applications has more than doubled since last year as the economic recovery continues, so pendency will further increase before returning to normal pre-pandemic levels. The USPTO has staked a recovery path for FY 2022 and beyond that includes a new flexible capacity model, enhanced examination efficiencies that leverage artificial intelligence and robotic process automation, and an initiative to streamline and reengineer key operational processes. As part of our recovery strategy, the USPTO is also reviewing and reassessing ways to better define, evaluate and measure performance.

Fiscal Year Actual Target 2016 2.5 to 3.5 3.1 2017 2.5 to 3.5 2.7 2018 2.5 to 3.5 3.4 2019 2.5 to 3.5 2.6 2020 2.5 to 3.5 3.0 2021 2.5 to 4.5 6.3 2022 2.5 to 6.0

TABLE 8: TRADEMARK AVERAGE FIRST ACTION PENDENCY (MONTHS)

Target not met.

TABLE 9:TRADEMARK AVERAGE TOTAL PENDENCY (MONTHS)

Fiscal Year	Target	Actual
2016	12.0	9.8
2017	12.0	9.5
2018	12.0	9.6
2019	12.0	9.3
2020	12.0	9.5
2021	12.0	11.2
2022	12.0	

Target met.

OBJECTIVE 2: ISSUE HIGH-QUALITY TRADEMARKS

Trademark examination quality is predicated on first and final office actions meeting certain legal and procedural standards. Quality reviews are completed on first office actions and on the examining attorney's final action approval or denial of the registration of a given mark (see Tables 10 and 11). The first action compliance rate is the total number of first actions without any substantive decision-making errors made, substantive decision-making errors missed, or substandard refusals under section 2 of the Trademark Act divided by the total number of first actions reviewed. The final compliance rate is the total number of cases without any substantive decision-making errors divided by the total number of reviewed final actions and cases approved for publication. First and final action compliance rates were 96.3% and 98.7%, respectively, for FY 2021.

TABLE 10: TRADEMARK FIRST ACTION COMPLIANCE RATE

Fiscal Year	Target	Actual
2016	95.5%	97.1%
2017	95.5%	97.3%
2018	95.5%	96.9%
2019	95.5%	96.4%
2020	95.5%	95.7%
2021	95.5%	96.3%
2022	95.5%	

Target met.

TABLE 11: TRADEMARK FINAL ACTION COMPLIANCE RATE

Fiscal Year	Target	Actual
2016	97.0%	97.8%
2017	97.0%	98.3%
2018	97.0%	97.9%
2019	97.0%	97.4%
2020	97.0%	98.1%
2021	97.0%	98.7%
2022	97.0%	

Target met.

Trademarks' most comprehensive quality measure, exceptional office actions, exceeded the annual target of 50% by achieving 54.1% in FY 2021. Table 12 illustrates the USPTO's exceptional office action rates, which reflect its commitment to ongoing excellence in searching, developing supporting evidence, writing office actions, and communicating decisions.

Table 13 shows how the USPTO evaluates the efficiency of the trademark examination process as measured by the average cost of trademark disposal compared with the direct and indirect costs associated with trademarks. This efficiency measure is calculated by dividing total expenses associated with the examination and processing of trademarks (including multiyear IT investments, overhead costs, and allocated expenses) by outputs or office disposals. Actual results are based on total trademark-related expenses office-wide compared with office disposals (e.g., abandoned and registered applications, etc.).

TABLE 12: EXCEPTIONAL OFFICE ACTION RATE

Fiscal Year	Target	Actual
2016	40.0%	45.4%
2017	40.0%	45.0%
2018	45.0%	48.0%
2019	46.0%	54.5%
2020	50.0%	51.0%
2021	50.0%	54.1%
2022	50.0%	

Target met.

TABLE 13: TOTAL COST PER TRADEMARK OFFICE DISPOSAL

Fiscal Year	Target	Actual
2016	\$590	\$600
2017	\$561	\$586
2018	\$540	\$576
2019	\$539	\$600
2020	\$691	\$586
2021	\$620	\$583
2022	\$640*	

* Based on FY 2022 President's Budget

OBJECTIVE 3: FOSTER BUSINESS EFFECTIVENESS

RENEWED FOCUS ON IT MODERNIZATION TO ENHANCE OPERATIONS

The persistent surge of trademark applications further illuminated an imperative to modernize Trademarks' IT and production systems. As reported last year, the USPTO experienced uncertain revenues resulting from the pandemic-related economic downturn. To mitigate the impact of this downturn and ensure the agency had sufficient funding to sustain core mission operations, the USPTO strategically deferred planned investment in IT modernization that would have delivered a new suite of modern trademarks IT solutions. However, the USPTO did fund maintenance of the legacy Trademarks IT systems to sustain business operations.

USE BUSINESS INTELLIGENCE AND DATA ANALYTICS TO GUIDE DECISIONS

Trademarks' strategic investments in business intelligence and data analytics continued in FY 2021 as the USPTO expanded the use of objective data and information to drive decision-making. The USPTO expanded its staff of Trademarks business intelligence analysts, including staff with expertise in AI and ML, to help address the growing challenges of the volume of applications received, suspicious and fraudulent applications, maintenance of the overall integrity of the register, and efforts to anticipate the needs of applicants and registrants more effectively.

The USPTO released two trademark dashboard products in January 2021. These products provide management unique, granular insights into the types of goods, services, and classes that fuel the growth of new application filings and contribute to suspicious or fraudulent filings as well as increase the effectiveness of the

identification of trademark applicants' profiles. Data-driven analytics and AI are integral components of the USPTO's Strategic Plan, so Trademarks will continue to make investments in this part of the business for the benefit of applicants, the public, and the agency's global partners. During FY 2021, the USPTO continued to expand its trademark-focused analytics, including:

- Proof-of-use reporting automation
- Identification and automation of goods and services misclassification
- Applicant profile analysis
- Growth analysis (countries, goods and services, entities, pro se vs. non-pro se, etc.)
- Digitally altered specimen analysis

These FY 2021 accomplishments build on a broader portfolio of products, data, and information that improves operations for the trademark community. In FY 2022, Trademarks expects to expand its analytic capabilities, including additional investments to support the integration of AI to enhance predictive capabilities in the near term to more proactively meet the growing need for reliable, actionable data and information.

PROTECTING THE INTEGRITY OF THE REGISTER

As filings have increased, so have suspicious trademark application and registration maintenance filings. The USPTO made considerable strides in protecting the integrity of the Trademark Register in FY 2021 through statutory, technological, and operational adjustments.

Most trademark filings are legitimate, but some are submitted with fake or digitally altered or created specimens of use or false information designed to circumvent U.S. Rules of Practice or USPTO website terms of use. Collectively, these filings pose a financial and reputational risk to the USPTO and a risk to the integrity of the register. In response, the USPTO continued to launch new or improve existing initiatives in FY 2021 aimed at protecting the integrity of the Trademark Register, including:

- Administrative sanctions: The Commissioner for Trademarks established an administrative process to investigate improper submissions filed with the USPTO in trademark matters. The Commissioner has the authority to investigate submissions that appear to violate the Trademark Rules of Practice, including the rules concerning signatures, certificates and representation of others in trademark matters before the USPTO (USPTO rules), or USPTO website terms of use, and following notice and a reasonable opportunity to respond, impose sanctions as deemed appropriate. Sanctions may include terminating proceedings. The results of the investigation are also referred to the USPTO's Office of Enrollment and Discipline when there is evidence of attorney misconduct, or to law enforcement agencies when there is evidence of criminal conduct.
- Deletion fee: To preserve a trademark registration, between years five and six after the date of registration and every 10 years after the date of registration, a registrant must file a maintenance document certifying that the mark is currently being used on all goods and services listed in the registration or delete goods and services that are currently not in use

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at the time of filing. In January 2021, the USPTO implemented a deletion fee that is required to be paid each time a registrant deletes goods or services from the registration in the context of examination of the maintenance declaration. The fee is designed to disincentivize inaccurate claims of use in maintenance submissions.

- Letter of protest: The USPTO expanded the letter of protest procedure to allow third parties to submit relevant evidence in a pending application showing that the mark is not in actual use in commerce. If the evidence is relevant, it will be sent to the examining attorney for consideration of a possible refusal.
- Address verification: The U.S. counsel rule requires every foreign domiciliary to be represented before the USPTO by a U.S. licensed attorney. To evaluate whether the rule is invoked, each applicant or registrant must provide a domicile address. The USPTO has received applications with unacceptable domicile addresses that appear to be designed to circumvent the U.S. counsel rule. The USPTO is working to automate address verification to improve examination efficiency and enforce compliance with U.S. rules.

IMPLEMENTING THE TMA

The TMA was enacted on December 27, 2020. It amends the Trademark Act of 1946 to establish nonuse proceedings before the Director as well as a new ground for cancellation at the TTAB for a mark that has never been used. These nonuse proceedings before the Director will allow third parties to challenge registrations that have never been used in commerce or that were not in use when required by the Trademark Act without having to file a petition to cancel at the TTAB. The TMA also authorizes the Director to shorten the response periods to office actions in order to move applications, particularly suspicious ones, more quickly through the system.

The USPTO undertook public comment rulemaking and held three roundtables to solicit stakeholder feedback on proposals for implementing the TMA provisions related to the USPTO. The nonuse proceedings are required to be implemented by December 27, 2021. The remaining provisions' dates of implementation are outlined in the final rule.

The TMA provides the trademark community with new tools for removing unused registered trademarks from the federal Trademark Register, and gives the USPTO the ability to move applications through the system more efficiently.

IMPROVE THE CUSTOMER EXPERIENCE

Trademarks continued to execute a trademark customer experience (CX) program to provide consistent, clear, and intuitive services to trademark customers in FY 2021.

Better Website Experience for Small Businesses, Entrepreneurs, and Newcomers to Trademarks: To help build a strong foundation for novice customers, Trademarks redesigned the <u>Trademark basics section</u> of <u>www.uspto.gov</u> based on customer survey research, collaboration among staff with various areas of subject matter expertise, and usability testing with customers and staff who provide customer support. This redesign improved accessibility and ease of use for customers new to trademarks and without legal expertise, such as entrepreneurs and small business owners. Among first-time website visitors, customer satisfaction scores increased from 69 to 71 on a 100-point scale in a three-month, pre- and post-redesign analysis. Customer scores also increased in the areas of information browsing and clarity. For all 21 new or redesigned Trademark basics webpages, 92.2% of customers indicated the pages were helpful (as opposed to not helpful).

To further increase the accessibility of resources for small businesses, Trademarks used the insights from CX research (e.g., the target audience expects a linear order of landing page headings) to improve the <u>Inventor and entrepreneur resources landing</u> <u>page</u>. This added to Trademarks' return on investment from the usability testing, survey collection and analysis, and staff time and effort.

New CX Research to Inform Decision-Making: To gain greater insight into customer needs, Trademarks launched new surveys on its outreach and educational events as well as on TEAS. This allowed Trademarks to understand the CX better and to evaluate the quality of Trademarks services throughout more of the customer journey.

Trademarks also developed an identity verification prototype this year as part of its strategic efforts to fight trademark fraud and improve database security. To ensure a quality experience once launched, Trademarks conducted usability testing to bring the voice of its customers into the decision-making process. These CX research findings led to improvements to the user interface and communications— improvements that are still underway.

Transparency and Accountability for CX: Additionally, Trademarks has been designated as a High-Impact Service Provider under OMB Circular A-11, section 280, and Trademarks has fulfilled all of the guidance's requirements, including conducting a CX maturity self-assessment and developing a trademark CX action plan. Trademarks CX data and action plans are available on <u>the DOC page of Performance.gov</u>.

OBJECTIVE 4: ENHANCE OPERATIONS OF THE TRADEMARK TRIAL AND APPEAL BOARD

In FY 2021, as the global pandemic continued, the TTAB worked without interruption to enhance its operations. The TTAB expanded its COVID-19 relief efforts for stakeholders, reduced average pendency numbers for the disposition of contested trial case motions and the issuance of final decisions on the merits in both appeals and trials, planned for changes necessitated by the TMA, worked to further streamline processes through the stabilization and enhancement of IT systems, prepared for the next generation of IT systems, and continued to improve and enhance the overall customer experience.

In response to the Coronavirus Aid, Relief, and Economic Security Act of 2020, the TTAB provided relief for customers impacted by the COVID-19 pandemic while processing extensions of time, notices of opposition, and ex parte appeals throughout the year. In support of the agency's COVID-19 Prioritized Trademark Examination Program, initiated in June 2020, the TTAB began expediting the review and issuance of ex parte appeal decisions for applications examined under the program in FY 2021. In further support of these relief efforts, the USPTO initiated a Conference Pilot Program for oppositions against applications examined under the COVID-19 Prioritized Trademark Examination Program. Under the Conference Pilot Program, a TTAB attorney or judge participates in the parties' mandatory settlement and discovery planning conferences and is available upon a party's request. Such conferences were useful to the parties, providing clarity and procedural information to facilitate efficient case litigation and potential settlement.

The Board continues its commitment to the transparent reporting of data and performance measures, and it continues to report statistics and trends guarterly on its webpage and through regularly scheduled TPAC meetings and other stakeholder events. From FY 2017 through FY 2019, the TTAB experienced increases in filings across the four main types of incoming filings (appeals, extensions to oppose, oppositions, and petitions to cancel) and filings moderated in FY 2020. In FY 2021, the TTAB saw declines in its three types of filings for trial proceedings—less than 1% in oppositions, 4% in petitions to cancel, 9% in extensions of time to oppose-but experienced an increase of 1.3% in new appeals being commenced. Though the TTAB saw declines in its overall new filings in FY 2020 due to prior, three-year increases in cases commenced, the TTAB had to work through a significant inventory of contested motions in trial cases and a significant inventory of trial and appeal cases that had matured to ready for decision (RFD) on the merits. The Board diligently worked through these matters in FY 2020, bringing down pendency times throughout the year. Thus, in FY 2021, the TTAB met its pendency goals in all categories, during each quarter, and cumulatively for the full year. The TTAB aims to issue decisions on trial cases in 15 weeks or less, in 12 weeks or less for ex parte appeals, and in 12 weeks or less for contested trial case motions. In FY 2021, final decisions on the merits of trial cases issued on average within 9.8 weeks of when such cases became RFD, decisions in appeals issued on average within 7.7 weeks of being RFD, and decisions on motions issued on average within 9.9 weeks of being RFD. The TTAB continues to monitor the surge in new trademark application filings that occurred in FY 2021, and the Board is planning for the impact of these applications eventually resulting in increased appeals and trial case filings, such as oppositions. In FY 2021, the TTAB hired one new ATJ and two interlocutory attorneys to keep pace with current inventories and in anticipation of potential future increases.

STRATEGIC GOAL III:

PROVIDE DOMESTIC AND GLOBAL LEADERSHIP TO IMPROVE INTELLECTUAL PROPERTY POLICY, ENFORCEMENT, AND PROTECTION WORLDWIDE

The USPTO is required by statute to provide guidance to the Secretary of Commerce and federal agencies on domestic and international IP issues, as well as U.S. treaty obligations. The USPTO's initiatives to fulfill this mandate are reflected under Strategic Goal III. The USPTO leads negotiations on behalf of the United States at WIPO; advises and assists the United States Trade Representative (USTR) in the negotiation and implementation of the IP provisions of free trade agreements; advises the Secretary of Commerce and the administration on a full range of IP policy matters, including in the areas of patents, designs, copyrights, trademarks, plant variety protections, and trade secrets. The USPTO also develops and delivers programs on the protection, use, and enforcement of IP; conducts empirical studies on IP; and interacts with other IP offices and international organizations on matters involving IP.

OBJECTIVE 1: PROVIDE LEADERSHIP AND EDUCATION ON DOMESTIC INTELLECTUAL PROPERTY POLICY AND AWARENESS

The USPTO works to meet Objective 1 by playing a leadership role in domestic IP initiatives and policy development for the administration and engaging with Congress and federal agencies on legislative efforts to improve the IP system. In addition to formulating policy, the USPTO conducts various educational and training programs on IP, encourages and undertakes empirical studies on IP and innovation's economic impact, and improves access to IP-related data.

PROVIDE DOMESTIC POLICY FORMULATION AND GUIDANCE ON KEY ISSUES IN ALL FIELDS OF IP ENFORCEMENT AND PROTECTION

Throughout FY 2021, USPTO officials provided policy formulation and guidance by organizing numerous briefings for congressional staff and conducting public meetings to solicit stakeholder views on a wide range of IP policy matters, including patenteligible subject matter and steps for addressing fraudulent trademark applications.

Drive Artificial Intelligence. The USPTO expects AI to produce a new wave of innovation and creativity, posing novel challenges and opportunities for IP policy. The USPTO has engaged in the AI-IP policy discussion through a variety of undertakings, including:

- An updated public dataset produced by the USPTO's Office of the Chief Economist (OCE), the Artificial Intelligence Patent Dataset (AIPD). The dataset identifies AI trends across companies, technologies, and locations from 1976 to 2020 for granted patents and from 2000 to 2020 for pre-grant patent publications—and provides training data for complete replication.
- Active participation in international forums, such as the five leading IP offices' (IP5) New Emerging Technologies/Artificial Intelligence Task Force and WIPO conversations on AI and emerging technology.
- The publication of a USPTO report, "Public Views on Artificial Intelligence and Intellectual Property Policy," which summarized responses to two Federal Register Notices that invited comments on IP issues related to AI.
- The publication of a page on the USPTO's website with information on the agency's AI initiatives and other AI-related information.
- The design and planning of two public events on different aspects of AI and IP: one devoted to copyright issues in ML and the other to patent issues in AI and the life sciences.
- The provision of IP expertise to the National Science and Technology Council's subcommittee on ML and AI.

Maintain the COVID-19 Response Resource Center. The USPTO launched the online COVID-19 Response Resource Center in FY 2020 to provide stakeholders and other interested parties with improved access to USPTO initiatives, programs, and other helpful, IP-related information regarding the COVID-19 pandemic. The center continues to serve as a centralized location for information and assistance, allowing users to learn about various USPTO initiatives easily and aiding the public throughout the ongoing pandemic.

Enhance Patents 4 Partnerships. A key deliverable in FY 2020 was the rapid development of Patents 4 Partnerships, an online platform created by the USPTO to unite parties that have COVID-19-related technologies available for voluntary licensing with parties that have an interest in these technologies and the ability to commercialize them. Patents 4 Partnerships provides a centralized and easily accessible platform for listing U.S. patents and patent application publications, and offers potential licensees a database of available technologies that is searchable by an extensive range of criteria.

In FY 2021, the USPTO worked to enhance the usefulness of the Patents 4 Partnerships platform by increasing the number of listed entries through additional outreach to industry and U.S. federal laboratories. The USPTO is also considering expanding Patents 4 Partnerships or creating a new, analogous platform to focus on green technologies.

ENGAGE OTHER U.S. GOVERNMENT AGENCIES, STAKEHOLDERS, AND CONGRESS ON LEGISLATION THAT IMPROVES THE IP SYSTEM

In FY 2021, several of the USPTO's legislative priorities were included in the FY 2021 appropriations act (Pub. L. 116-260)—namely, the TMA, the Copyright in Small-Claims Enforcement Act, and the Protecting Lawful Streaming Act. In addition, two legislative changes were enacted that will improve the functioning of the USPTO: the FY 2021 appropriations act increased the USPTO's representation funds for use by the agency's IP attachés, and the USPTO's Telework Enhancement Act Pilot Program was made permanent through the National Defense Authorization Act for FY 2021 (Pub. L. 116-283).

The USPTO continued to engage Congress, other U.S. government agencies, state and local elected officials, and stakeholders to discuss and promote effective and balanced, IP-related legislation, policies, administrative actions, and programs. This engagement included efforts to promote increased diversity in the patent system as well as technical assistance on legislative proposals on topics such as drug pricing, secondary liability for online marketplaces that sell counterfeit goods, and enhancements to the USPTO's Patents for Humanity Program. The USPTO also continued its cooperative educational efforts with the U.S. Small Business Administration (SBA).

PROVIDE DOMESTIC EDUCATION ON IP AT ALL LEVELS, INCLUDING TO U.S. GOVERNMENT AGENCIES, STAKEHOLDERS, THE PUBLIC, AND STATE AND LOCAL COMMUNITIES

The USPTO provides IP educational programming to improve IP laws and their administration domestically and around the world and to enhance IP awareness and technical capacity. In FY 2021, the USPTO conducted 250 training programs through its Global Intellectual Property Academy (GIPA), including programs coproduced with the USPTO's regional offices, serving over 17,800 individuals (see Figures 23 and 24 of USPTO's FY 2021 PAR). Approximately 43% of all attendees were representatives of domestic, small and medium-sized enterprises (SMEs); IP practitioners; and IP owners and users. Approximately 57% were patent, trademark, and copyright officials; prosecutors; police; customs officials; and policy makers from the United States and 131 other countries, including intergovernmental organizations.

The USPTO provides IP training for U.S. government officials at the federal, state, and local levels. Programs in FY 2021, conducted in-person and virtually, included a decades-long partnership with the U.S. Department of State's Foreign Service Institute to train Foreign Service officers and an ongoing effort with the National Association of Attorneys General to train state attorneys general. Intermediate and advanced training in all areas of IP was offered to U.S. federal government officials as well.

The USPTO also continued its support of <u>STOPfakes.gov</u>, the U.S. government's one-stop shop for tools and resources for use in the protection and enforcement of IP rights. The USPTO's FY 2021 contributions included an update to its China Intellectual Property Rights Toolkit, a comprehensive guide for U.S. stakeholders doing business in China.

In FY 2021, the USPTO expanded access to the innovation ecosystem demographically and economically by partnering with the SBA and SBA-funded small business support organizations, CBP, and the U.S. Copyright Office.

Recent programming has covered all areas of IP and focused on the importance of IP protection and enforcement to U.S. companies doing business abroad. One initiative, the China IP Road Show series, has focused on educating U.S. businesses of all sizes on how to better protect and enforce their IP in China. This popular series, which has reached more than 6,200 participants since 2017, pivoted in 2020 from a series delivered in person in various U.S. cities to a virtual program format. The nine programs hosted in FY 2021 addressed patenting in China, IP protection and enforcement, U.S. government resources, legislative and case law changes following the signing of the U.S.-China Phase One Agreement, and a two-part series on China IP basics.

OBJECTIVE 2: PROVIDE LEADERSHIP AND EDUCATION ON INTERNATIONAL IP POLICY AND AWARENESS

The USPTO advances this objective in many settings and through a variety of undertakings. It helps lead efforts to improve IP systems in other countries and provides technical expertise in negotiating and implementing international agreements to enhance IP protection and enforcement.

PROVIDE INTERNATIONAL POLICY FORMULATION AND GUIDANCE ON KEY ISSUES IN ALL FIELDS OF INTELLECTUAL PROPERTY ENFORCEMENT AND PROTECTION

Throughout FY 2021, the USPTO provided policy advice and technical expertise on international IP matters to multiple federal agencies, including the Office of the USTR, the Office of the U.S. Intellectual Property Enforcement Coordinator, the Department of State, the Department of Homeland Security, and other bureaus of DOC.

ENGAGE WITH OTHER GOVERNMENTS TO IMPROVE THEIR IP ENFORCEMENT AND PROTECTION, INCLUDING BY PROVIDING EDUCATION AND CAPACITY BUILDING

In FY 2021, the USPTO continued to offer capacity building programs through GIPA to help improve IP systems in key countries and regions, including through expanded virtual training. Virtual programs were conducted in multiple languages, around the clock to accommodate target audience time zones. Some programs were developed in collaboration with other U.S. government agencies, including DOC's Commercial Law Development Program, the Department of Justice, and the Department of Homeland Security.

TABLE 14: NUMBER OF PEOPLE, INCLUDING FOREIGN GOVERNMENT OFFICIALS AND U.S. STAKEHOLDERS, TRAINED ON BEST PRACTICES TO PROTECT AND ENFORCE IP

Fiscal Year	Target	Actual
2016	5,000	4,975
2017	5,000	4,134
2018	5,000	7,242
2019	4,500	9,854
2020	5,000	10,688
2021	5,000	17,841
2022	5,000	

Target met.

Measure updated in FY 2018 to include U.S. stakeholder education, to reflect administration priorities.

In FY 2021, the USPTO trained over 17,800 participants, including over 10,000 foreign government officials representing 131 countries and intergovernmental organizations (see Figure 26 and Table 21 of USPTO's FY 2021 PAR). A complete list of all countries represented at GIPA trainings in FY 2021 is available online at the **Data Visualization Center webpage**.

Table 14 shows the total number of people, including foreign government officials and U.S. stakeholders, trained through GIPA in FY 2021.

WORK WITH THE ADMINISTRATION TO IMPROVE IP ENFORCEMENT AND PROTECTION IN COUNTRIES OF INTEREST, INCLUDING THROUGH THE IP ATTACHÉ PROGRAM

The USPTO worked throughout FY 2021 to improve IP protection and enforcement for U.S. stakeholders in countries of interest. Both its headquarters-based IP experts, and its IP attachés provided training and other technical assistance to foreign government officials to advance the interests of the U.S. government and U.S. stakeholders. The IP attachés also provided information about the latest developments in international IP to other U.S. government agencies, both in Washington D.C. and abroad, to better inform U.S. policy development.

Enhance the IP Attaché Program. The IP Attaché Program is a key component of the USPTO's effort to improve IP systems internationally. Through this program, the USPTO selects IP experts to serve as attachés at U.S. embassies, consulates, and missions in different cities throughout the world. They advocate for improving IP policies, laws, and regulations abroad to benefit U.S. businesses, entrepreneurs, and other stakeholders. In addition, the attachés train foreign officials on effective IP enforcement; monitor economic, legal, and legislative developments in their regions that might affect U.S. stakeholders' IP interests; conduct public awareness programs to educate audiences on IP and its value; and provide valuable information to U.S. stakeholders entering foreign markets or conducting business abroad about how to navigate foreign laws and regulations, how foreign courts and governments work, and how to protect and enforce IP abroad. Currently, there are 13 attachés in the program, supported by IP specialists and staff.

In FY 2021, the USPTO worked to enhance interactions between the attachés and

U.S. stakeholders through meetings with various rights holder groups, including the American Intellectual Property Law Association (AIPLA), the International Anti-Counterfeiting Coalition (IACC), and the International Trademark Association (INTA). The IP Attaché Program assisted 8,993 U.S. stakeholders; conducted 3,909 meetings with foreign government officials, 89 training programs for 4,097 participants, and 68 public awareness programs for 7,791 participants; submitted 519 weekly activity reports; and reported 71 identifiable successes. (These figures overlap with metrics reported by GIPA on page 107 of USPTO's FY 2021 PAR.) The attachés also continued to lead the USPTO's successful implementation of action plans in prioritized countries, as shown in Table 15. During the COVID-19 pandemic, IP attachés have continued to work in their home offices, helping U.S. stakeholders with IP interests around the world.

Also in FY 2021, the USPTO continued its work to enhance the general effectiveness of the IP Attaché Program. Measures included elevating the diplomatic rank of attachés in Beijing, Brussels, New Delhi, and Mexico City; deploying attachés to Brussels, Geneva, and Rio de Janeiro; and selecting attachés for Johannesburg and Bangkok.

Engage with Chinese Officials. In FY 2021, the USPTO met virtually with officials from CNIPA to discuss the work plan between the two agencies, including programs to facilitate the implementation of the commitments China made under the U.S.-China Phase One Agreement. The USPTO also held technical discussions with Chinese government officials with IP responsibilities. These included officials from CNIPA, the State Administration for Market Regulation, the Ministry of Public Security, the Ministry of Commerce, the Ministry of Finance, the Supreme People's Court, and the Supreme People's Procuratorate.

The USPTO has three IP attachés posted to China. They work closely with U.S. law enforcement attachés and are in contact with Chinese government agencies to discuss IP enforcement challenges.

TABLE 15: PERCENTAGE OF PRIORITIZED COUNTRIES FOR WHICH IP COUNTRY TEAMS HAVE MADE PROGRESS ON AT LEAST THREE OF THE FOUR PERFORMANCE CRITERIA: FY 2016-2021

- 1. Institutional improvements of intellectual property (IP) office administration for advancing IP rights,
- 2. Institutional improvements of IP enforcement entities,
- 3. Improvements in IP laws and regulations, and
- 4. Establishment of government-to-government cooperative mechanisms.

Fiscal Year	Target	Actual
2016	75.0%	100.0%
2017	75.0%	100.0%
2018	66.0%	100.0%
2019	66.0%	66.0%
2020	66.0%	100.0%
2021	66.0%	100.0%
2022	66.0%	

Target met

Measure: Target updated in FY 2018 to reflect a decrease in the number of prioritized countries from four to three.

MISSION SUPPORT GOAL:

SUSTAIN ORGANIZATIONAL EXCELLENCE

OBJECTIVE 1: ENHANCE HUMAN CAPITAL MANAGEMENT AND FOSTER EMPLOYEE ENGAGEMENT

OPTIMIZE THE PERFORMANCE CULTURE

In FY 2021, the USPTO remained committed to fostering a high-performance workforce culture during a continued period of maximum telework. Through the use of an effective performance management system, employees received continuous coaching, feedback, and development opportunities needed to succeed and achieve results. The performance management system is effective because it:

- Draws distinctions between high-level and low-level performers
- Uses clearly defined standards and expectations at all organizational and individual levels
- Acknowledges achievements through the use of a transparent and robust reward and recognition system for high performers
- Links individual performance plans to organizational goals

The USPTO provides ongoing training each year to business units to ensure that all aspects of the performance management system are successfully applied.

In FY 2021, USPTO provided performance management training to newly hired managers in connection with the Supervisory Certificate Program and performance management essentials training to more than 900 existing managers and supervisors. The USPTO also conducted 10 training sessions during FY 2021 that covered conduct and performance and an overview of the performance management process.

CONTINUE TO STRENGTHEN THE USPTO TELEWORK ENVIRONMENT

A structured telework program benefits the USPTO by reducing the need for additional office space, enhancing recruitment and retention, fostering greater efficiency in production and management, and providing opportunities for expanded work flexibility and better work-life balance for participating employees. Additionally, these programs improve the USPTO's climate resiliency, enabling USPTO employees to remain productive during extreme weather events, and help minimize the USPTO's impact on the environment. For instance, in the Washington, D.C., metropolitan area in FY 2021, the USPTO's telework programs spared the environment more than 52,000 tons in estimated CO₂ emissions (see Figure 30 of USPTO's FY 2021 PAR for highlights of the environmental impact of telework in FY 2021).

Since the USPTO's first telework program was established 24 years ago with 18 trademark examining attorneys, telework has grown dramatically at the USPTO (see Figure 27 of USPTO's FY 2021 PAR), and the agency's telework programs continue to evolve. Between FY 2020 and FY 2021, the percentage of positions eligible to telework decreased slightly from 94.51% to 94.39%. (See Figure 28 of USPTO's FY 2021 PAR for the state-by-state breakout of full-time telework participants in FY 2021). Figure 29 of USPTO's FY 2021 PAR shows the percentage of eligible employees who teleworked in

FY 2021 by organization or business unit. These values reflect those who are on permanent official telework agreements and do not reflect those who are teleworking only due to mandatory telework. Throughout FY 2021, however, an even greater share of the USPTO workforce continued to work remotely due to the ongoing COVID-19 pandemic. Effective March 23, 2020, the USPTO began operating under a mandatory/ maximum telework status. This transition was seamless, since over 90% of eligible employees were already participating in telework programs, and the agency was well prepared to provide these flexibilities while continuing to serve the needs of its stakeholders during the pandemic.

Based on the lessons learned during this time, the USPTO began taking steps in FY 2021 to further expand and streamline its telework programs, including consolidating programs, providing consistency across various agency programs (where practicable), revising eligibility criteria for the programs, and making more types of positions eligible to telework more often.

OBJECTIVE 2: OPTIMIZE SPEED, QUALITY, AND COST-EFFECTIVENESS OF INFORMATION TECHNOLOGY DELIVERY TO ACHIEVE BUSINESS VALUE

This objective focuses on the IT activities required to support the USPTO and move it toward the next generation of tools and services for all mission-specific systems identified under the strategic goals. The USPTO will continue to provide cost-effective and transparent operations, processes, and information as it moves to accomplish its goals.

The USPTO has initiated several large and multiyear efforts that will ultimately lead to increased resilience, cost savings, and a better user experience for USPTO employees and customers. These efforts include the recently completed relocation of the USPTO's Alternate Processing Data Center from Boyers, Pennsylvania, to Manassas, Virginia; the continuing migration of critical systems to the cloud; a strengthened security posture and the implementation of Virtual Data as a Service; and the planned migration of the USPTO's on-premise data centers from Alexandria, Virginia, to the Manassas location. All of these initiatives will support the USPTO in enhancing the redundancy and resilience of IT systems and data; improving disaster recovery capabilities; maximizing computing power; and, ultimately, reducing the USPTO's physical data center footprint.

As of July 2021, over 100 product teams, made up of more than 1,000 individuals, have been trained in the USPTO NWOW and have begun working in ways aligned to key agile principles with a keen focus on frequent value delivery. Great strides were made in culture change by providing immersive learning experiences in the USPTO "Dojo." A dojo is a learning format that brings team members together and coaches them through the initial steps of developing a product roadmap, mission statement, and groomed backlog (i.e., collection of value-driven user requirements prioritized and scheduled for development).

ADVANCED ANALYTICS AI/ML

Over the past year, the USPTO has continued to develop and deploy AI/ML tools across multiple initiatives recently highlighted in the <u>USPTO Director's Blog</u>. The use of the technologies in patent and trademark operations continues to improve the USPTO's effectiveness in providing customers with timely and high-quality products and services.

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In FY 2021, the USPTO was recognized for its AI and ML tools, receiving a "<u>FutureEdge50</u>" award for applying emerging technologies at the agency. The USPTO was the only federal agency in this award category.

OBJECTIVE 3: ENSURE FINANCIAL SUSTAINABILITY TO FACILITATE EFFECTIVE USPTO OPERATIONS

The USPTO does not receive general taxpayer funding. Instead, the agency's operations depend on fees that are paid by customers in exchange for the USPTO's IP products and services. While the USPTO's fee schedule takes into account the cost of delivering each individual service, as a government agency with responsibility to the broader American public, individual fee rates also incorporate key public policy objectives (e.g., many patent fees are discounted for small businesses and "micro-entities," like the inventor who works out of their garage). Further, sometimes payments are received in different fiscal years from when services are delivered. To strike the right balance between fee income, costs, organizational risks, and policy benefits over multiple years, the USPTO uses sophisticated planning and budgeting models. The agency also maintains operating reserves to ensure that it has sufficient resources to mitigate the risk of uncertain demand and enable financial stability to consistently finance agency operations, even as day-to-day fee collections fluctuate or major economic or fiscal events affect the agency's cash flow.

The operating reserves proved critical in the early months of FY 2021. Fee adjustments first proposed in August 2018 were published on August 3, 2020, in the Final Rule on **Setting and Adjusting Patent Fees During Fiscal Year 2020.** These adjustments went into effect on October 2, 2020. A considerable share of customers elected to pay certain fees (namely patent maintenance fees) ahead of the fee increase, leading to a spike in fee collections at the end of FY 2020 that would have otherwise been collected in the first few months of FY 2021. This caused the USPTO's FY 2020 revenue to exceed the level that had been appropriated for spending by Congress by \$232 million. While the USPTO was ultimately able to have these funds restored through a reprogramming action (approved by Congress on March 1, 2021), the agency relied heavily on its patent operating reserves to maintain a substantially normal operating tempo throughout the first five months of the fiscal year.

Also crucial for the agency's financial health was the finalization and publication of a **Final Rule adjusting trademark fees**, which was published on November 17, 2020, and became effective on January 2, 2021. These changes, first proposed in August 2019, were conceived to allow the USPTO to continue financing the full cost of its trademark business, as well as to protect the integrity of the Trademark Register and improve the efficiency of agency processes. The need for the fee change was heightened by the unpredictability introduced by the COVID-19 pandemic, which resulted in a sharp drop in trademark revenue throughout the third quarter of FY 2020, followed by an unprecedented filing surge that continued through much of FY 2021. The additional revenue generated by the fee change has enabled the USPTO to initiate actions to begin aggressively responding to the rapidly rising trademark application backlog. In addition to looking at every step of the examination process to find ways to increase efficiency, the agency is adding examining attorneys, support staff, and contractor support and implementing IT solutions and system enhancements to process applications faster and more effectively.

This year, the USPTO continued reviewing the patent and trademark fee schedules to ensure the new fees meet the current and future needs of the IP environment. It has

been determined that certain adjustments to the patent and trademark fee structures may be necessary to preserve an optimal balance of customer, public, and USPTO financing needs. If necessary, preliminary fee change proposals are anticipated to be introduced in FY 2022, with multiple opportunities for public dialogue and input.

The USPTO also continued to improve its cost-effectiveness. One area where the agency is methodically evaluating its efficiency and cost-effectiveness is in IT delivery. In FY 2021, the agency benchmarked the USPTO's IT spending against other industries and used the information to guide IT and acquisition planning. The analysis identified areas in which the USPTO should target future savings as it works towards its long-term IT goals for increasing resiliency, improving cybersecurity, and moving to the cloud.

The USPTO is also working to generate greater value for the money spent is by looking at how the agency manages resources through acquisition services. The most notable achievement in this area in FY 2021 was the re-competition of the USPTO's largest patent processing contract. This contract had been held by a single incumbent for more than four decades. Over the course of several years, the USPTO's acquisition team devised and carefully executed a strategy that enabled the agency to transition from a high-risk, sole-source contract to a competitive, multi-vendor environment. The new contracts, awarded in June to two firms, include service and cost incentives and are expected to save the USPTO at least \$150 million over the next 10 years. Beyond financial savings, the new contracts facilitate contingency planning for this missioncritical function, increase physical and cybersecurity requirements, and include subcontracting plans that support small businesses and incorporate backup locations that improve the agency's continuity of operations posture and climate resiliency.

OBJECTIVE 4: ENHANCE THE USPTO'S INTERACTIONS WITH INTERNAL AND EXTERNAL STAKEHOLDERS AND THE PUBLIC AT LARGE

To maximize the nation's potential, all Americans must be able to innovate, seek patent protection for their inventions, and reap the rewards from innovation through entrepreneurship and commercialization. In addition, these opportunities must be afforded to groups that have historically been underrepresented in the IP system (e.g., based on demographic characteristics, geography, or economic conditions). For more information on the USPTO's efforts to broaden the IP ecosystem, please visit the **Expanding Innovation** section of our website.

LAUNCH NATIONAL COUNCIL FOR EXPANDING AMERICAN INNOVATION¹

In FY 2020, the USPTO launched a major initiative aimed at expanding invention, innovation, and entrepreneurship in the United States by forming the NCEAI. In October 2021, Secretary Raimondo announced that she will serve as the new Chair. In her first act as Chair the Secretary renamed the NCEAI the Council for Inclusive Innovation, or Cl². The Cl² is composed of high-level leaders from the federal government, industry, academia, and professional and nonprofit organizations, as well as venture capitalists and independent inventors, who are committed to increasing the opportunities for all Americans to participate in innovation. A top priority of the Cl² is to help the USPTO develop a long-term, comprehensive national strategy to build a more diverse and inclusive innovation ecosystem by encouraging participation demographically, geographically, and economically. The Cl² will

1 NCEAI was re-branded in October 2021 to Council for Inclusive Innovation CI².

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strategize about how to devise an approach that spurs interest in innovation and inventing and provides for increased access to the innovation ecosystem. By encouraging, empowering, and supporting all future innovators, the Cl² will be an important catalyst for increasing opportunity and fueling the U.S. innovation economy. The USPTO will continually document progress in these areas through updates such as our "Progress and Potential" report on women inventor-patentees.

The NCEAI (re-branded CI²) began a series of Innovation Chat webinars to further the discussion on how to increase opportunities for all Americans to participate in innovation. There have already been chats on the importance of expanding American innovation in an inclusive IP system and on creating innovators.

For more information, please visit the <u>Cl</u>² section of our website.

PATENT AND TRADEMARK RESOURCE CENTERS

The Patent and Trademark Resource Centers (PTRCs) are a nationwide network of public, state, and academic libraries designated by the USPTO to disseminate patent and trademark information and support the public's diverse IP needs. The PTRC library staff are information experts trained on how to use search tools to access patent and trademark information.

Each of the PTRCs is located within a library supported by either a state government, a municipal government, or a university. The USPTO collaborates with these government and university libraries by providing comprehensive training and other support to the staff, whereas the governments and universities collaborate by allocating resources, including staff; physical space for consultations with entrepreneurs; and access to collections, public meeting space, and other resources. The PTRCs have experienced closures and reduced walk-in services since the beginning of the pandemic. Reduced walk-in services persist at some institutions, and many PTRCs continue to offer customer assistance using video conferencing platforms.

The USPTO tracks two metrics for the PTRCs: the number of individuals assisted and the number of attendees at classes. In FY 2021, the PTRCs assisted 6,787 individuals and had 7,991 class attendees.

INVENTORS ASSISTANCE CENTER

The Inventors Assistance Center (IAC) provides patent information and services to the public, including entrepreneurs and small businesses. The IAC is staffed by former USPTO officials (e.g., patent examiners, supervisory patent examiners), who answer general questions concerning patent examining policy and procedure.

Specifically, the IAC answers questions concerning the necessary format and formal requirements for a patent application; provides assistance with the proper completion of patent application forms; provides general information concerning patent examining rules, procedures, and fees; and directs callers to appropriate USPTO personnel or resources, as necessary.

TRADEMARK ASSISTANCE CENTER

The TAC is the main support center for all trademark customers, from first-time filers to legal professionals and experienced trademark applicants. It serves as the primary touchpoint for entrepreneurs and small businesses across the country to obtain information and assistance regarding the trademark application, registration, and maintenance process. The TAC serves as an educational resource for those who desire brand protection.

ENHANCED EDUCATION AND OUTREACH EFFORTS IN SUPPORT OF SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS

Ensuring that the innovators, inventors, and entrepreneurs of the future receive a STEM-based education and consistent exposure to STEM activity is critical to our country's economic prosperity. The USPTO fully supports government-wide STEM efforts through both its longstanding national outreach partnerships, including with the nonprofit National Inventors Hall of Fame (NIHF), founded in 1973, and its own Office of Education (OE) and Office of Innovation Outreach (OIO).

CREATE STRATEGIC PARTNERSHIP AND COLLABORATION THROUGH THE REGIONAL OFFICES

The USPTO's regional offices and the Eastern Regional Outreach Office, housed at USPTO headquarters, support, facilitate, coordinate, and lead high-level engagements with community IP leaders and government officials at the local, state, and federal levels across the country. Each regional office communicates and carries out the USPTO mission, strategic plan, and goals by providing resources, information, programs, and services that benefit and encourage the growth of our innovation-based economy.

The USPTO is committed to creating strategic partnerships focused on the continuing education of its stakeholders, including IP professionals, who rely on the USPTO's regional offices to assist them in remaining current on emerging IP issues. These issues that affect not only their businesses but also the economy as a whole. The partnerships focus on communicating and advancing IP policies; delivering IP education across all levels of knowledge, from first-time inventors to skilled patent practitioners; and getting K-12 students excited about STEM careers. Through these efforts, the regional outreach teams help broaden the innovation ecosystem—geographically, demographically, and economically—by providing more individuals with the knowledge and tools to innovate and to protect their inventions.

The regional outreach teams trained and judged law students competing in the USPTO National Patent Application Drafting Competition, and they trained new patent attorneys and patent agents litigating before the PTAB through the Legal Experience and Advancement Program (LEAP).

MANAGEMENT CHALLENGES AND WHAT'S AHEAD

WORKING TO PROVIDE STABLE AND SUSTAINABLE FUNDING IN AN UNSTABLE WORLD

The USPTO has unique financial needs. Operating as a business-like government agency, the USPTO recognizes that demand for its services, funding streams, production capacity, and performance are inextricably linked with and heavily influenced by the state of the U.S. and global economies. Stable, sustainable funding and timely access to the fees the agency collects continue to serve as the cornerstones for accomplishing the USPTO's mission.

The last two years have demonstrated that the USPTO must execute its mission nimbly. Global business disruptions from the COVID-19 pandemic, court decisions,

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international IP policy shifts, changes in customer practices in response to the USPTO's policies, growth in international filings—all of these factors have shown how quickly demand for the USPTO's services can change and the necessity of the agency to respond in a timely manner. Specifically, the rapidly evolving trademark landscape—including the growth of e-commerce during the pandemic, the proliferation of government incentives in other countries for certain business behaviors, and other changes—necessitates careful monitoring and assessment of the trademark fee schedule. For both patents and trademarks, the USPTO must respond appropriately to changing customer practices to ensure that its operating model, which relies on cost recovery, works properly.

The USPTO maintains two operating reserves—one each for Patents and Trademarks—to mitigate financial and operational risks and enable sustainable funding given the agency's cost recovery operating model. The USPTO manages these reserves within a range of acceptable balances—a minimum planning level and an optimal planning level—based on an assessment of key risk factors. The patent and trademark operating reserves enable the USPTO to finance agency operations consistently in support of the mission or shift the operating approach as the situation dictates. The Government Accountability Office (GAO) has indicated that "an operating reserve is important for fee-funded programs to match fee collections to average program costs over time and because program costs do not necessarily decline with a drop in fee collections."

The USPTO views building the operating reserves to their optimal levels as a budgetary requirement, which balances near-term operational needs and long-term goals. Looking forward, as the agency considers potential structural changes to its patent and trademark fee schedules, the operating reserves will be critical in enabling the USPTO to maintain financial sustainability.

The USPTO's fee schedules are the basis for incoming fee collections and must be monitored and managed to support operational goals. A critical component of setting fees at appropriate levels is the USPTO's ability to forecast and monitor changes in revenue, spending, agency workload trends, and the IP environment more broadly. As the USPTO's operating environment becomes more and more complex, the agency must be able to comprehend the data that is available to inform fee schedules and finance agency spending requirements. To do so, the USPTO must position itself to make comprehensive, data-driven decisions as part of delivering sound financial management.

RELIANCE ON INFORMATION TECHNOLOGY

The USPTO is a global leader in promoting laws and policies that advance innovation and IP rights and encourage economic growth through innovation and creativity. IT enables the USPTO to achieve its mission to champion innovation. The USPTO's mission and support organizations are reliant on technology services, including search and examination tools as well as tools for managing access rights and accepting fees associated with patent and trademark services.

To achieve the USPTO's mission, IT development and operations must be agile, reliable, and able to adapt and take advantage of constantly evolving emerging technologies and methodologies. The USPTO continues its multiyear efforts to modernize its business IT solutions and supporting IT infrastructure to keep pace

with emerging and evolving business needs, security, and technology standards that will ultimately allow the agency to retire aging legacy solutions. In FY 2021, the USPTO identified three key areas for IT investment and focus: the movement of applications to the cloud, resilience, and cybersecurity. By focusing on these areas, the USPTO aims to deliver modern, secure, and resilient IT solutions. Recent activities include migrating all USPTO applications from Windows Server 2003 and 2008 to a supported version that is not prone to security vulnerabilities; conducting numerous cloud assessments to identify cloud-ready applications; and securing new contractors to support faster time-to-delivery from autonomous and empowered, agile development teams.

INTELLECTUAL PROPERTY LEGAL CHALLENGES

The USPTO faced legal challenges in FY 2021 that will continue to affect its patent operations in FY 2022 and likely raise similar difficulties in the trademark realm. More specifically, the Supreme Court's FY 2020 decision in Peter v. NantKwest held that, although 35 U.S.C. § 145 provides that the applicant shall pay "[a]II the expenses of the proceedings" in a district court suit to obtain a patent, these expenses do not include expenses for attorney and paralegal time. In its FY 2020 Booking.com v. lancu decision, the Supreme Court similarly vacated the attorney and paralegal expenses award in a corollary § 1071(b) trademark action based on its decision in NantKwest. This fiscal year, the Federal Circuit held that § 145 expenses also do not include expert witness fees incurred by the USPTO in the defense of the PTAB's decisions in district court. Under these circumstances, the USPTO expert witness fee expenditures in § 1071(b) actions are presumed to no longer be recoverable. Because the USPTO typically cannot effectively defend patent rejections in district court without the use of expert witnesses and the expert witness fees in such cases can often exceed \$100,000, these decisions may dramatically affect the way the USPTO litigates these actions.

PERFORMANCE AUDITS AND EVALUATIONS

The OIG completed and issued four final audit reports in FY 2021 for the USPTO. The OIG issued 26 recommendations in these reports for USPTO corrective actions to mitigate the audit findings. The USPTO concurred with all recommendations and began or has taken steps to address the recommendations. There were no GAO final reports issued during this period.

CERTIFICATE OF EXCELLENCE IN ACCOUNTABILITY REPORTING

The Association of Government Accountants (AGA) awarded the USPTO the Certificate of Excellence in Accountability Reporting (CEAR®) for its FY 2020 PAR. In addition, the USPTO received a "Best in Class" award for its summary of financial and performance highlights. The AGA highlighted certain areas of the report in particular.

For example, the AGA said the report provided a high quality summary of the USPTO s financial and mission performance. It also said the report was timely, and the agency received an unmodified audit opinion on the financial statements.

In addition, the AGA said the report integrated noteworthy features—including new, innovative, and best practices—that helped support full disclosure,

transparency, and accountability. Examples of noteworthy features included:

- 1. Prominent, clear, concise, one page financial and performance highlights
- 2. Concise, specific report contributions and acknowledgments
- Prominent report contributor recognition and an invitation to provide feedback
- 4. Useful web index and links
- 5. Clear, concise, three page performance summary
- 6. Simple, succinct funding diagram
- 7. Prominent, concise explanation of key mission areas
- 8. Focused pursuit of expanded patent system participation
- 9. Professional, visually appealing graphics and color scheme information
- 10. Responsiveness to the prior year s CEAR[®] recommendations

The CEAR® program was established in collaboration with the Chief Financial Officers Council and the U.S. Office of Management and Budget (OMB) to improve accountability by streamlining reporting and improving the effectiveness of such reports so they clearly show both what an agency accomplished with taxpayer dollars and the challenges that remain.



The USPTO s 2020 PAR cover and the AGA s Certificates of Excellence in Accountability Reporting

FINANCIAL HIGHLIGHTS

The USPTO received an unmodified (clean) audit opinion, dated November 5, 2021, from the independent public accounting firm of KPMG LLP on its FY 2021 financial statements, provided on pages 145 to 173 of USPTO's FY 2021 PAR. This is the 29th consecutive year that the USPTO has received an unmodified audit opinion, an outcome that provides independent assurance to the public that the information in the USPTO financial statements is fairly presented, in all material respects, in conformity with accounting principles generally accepted in the United States of America. In addition, KPMG LLP reported no material weaknesses or significant deficiencies in the USPTO's internal controls and no instances of noncompliance with laws and regulations affecting the financial statements. The agency resolved a significant deficiency related to IT security in FY 2021 that KPMG LLP had identified in FY 2015 and repeated with revisions in each subsequent fiscal year.

The USPTO financial management process ensures that management decisionmaking information is dependable, internal controls over financial reporting are effective, and compliance with laws and regulations is maintained. The issuance of these financial statements is a component of the USPTO's objective to continually improve the accuracy and usefulness of its financial management information.

RESULT OF OPERATIONS

In FY 2021, the USPTO generated a net cost of \$243.0 million. The net cost increased due to the decrease in earned fee collections, offset by a smaller increase in program costs.

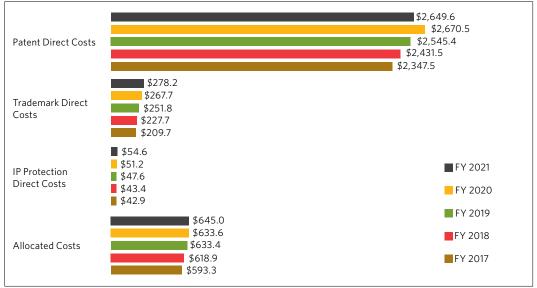
Earned revenue totaled \$3,384.4 million for FY 2021, a decrease of \$272.7 million, or 7.5%, from the FY 2020 earned revenue of \$3,657.1 million. This significant decrease was the result of a shift in the timing of fee collections from FY 2021 to FY 2020 caused by some customers opting to pay certain patent fees early. These early patent fee collections resulted in an estimated \$266 million in maintenance fees paid before the patent fee increase went into effect on October 2, 2020.

Figure 1 shows the USPTO funding resources and how they are used to deliver on the mission of the USPTO, thereby recognizing earned revenue.

FIGURE 1: USPTO RESOURCES AND HOW THEY ARE USED

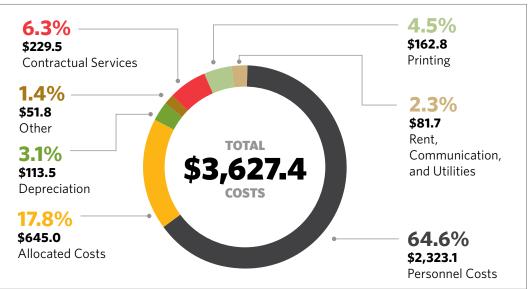
Two Primary SOURCES OF FUNDING	PATENT USER FEES		TRADEMARK USER FEES		
	•		•		
Are appropriated as this FUNDING TYPE	SALARIES AND EXPENSES				
	•	•	•	•	
To support the USPTO LINES OF BUSINES and SUPPORTING ACTIVITIES FOR BUSINESS LINES	Patents Business Line	Suppor Activitie Business	s for	Trademarks Business Line	
	•	•	V	•	
That support these STRATEGIC PRIORITIES					
Optimize patent quality and timeliness	 				
Optimize trademark quality and timeliness				 ✓ 	
Provide domestic and global leadership to improve intellectual property policy, enforcement, and protection worldwide		~			
Mission support goal: To deliver organizational excellence		~			

Program costs totaled \$3,627.4 million for FY 2021, an increase of \$4.4 million, or 0.1%, over FY 2020 program costs of \$3,623.0 million.



USPTO PROGRAM COSTS (dollars in millions)

FY 2021 USPTO PROGRAM COSTS (dollars in millions)

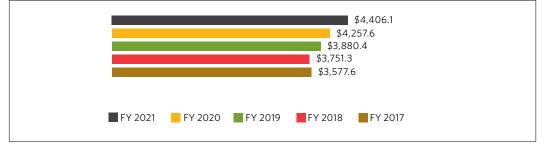


BUDGETARY RESOURCES AND REQUIREMENTS

The USPTO was provided appropriation authority to spend anticipated fee collections in FY 2021 for an amount up to \$3,695.3 million. In FY 2021, however, the USPTO did not collect the entire amount of anticipated fee collections appropriated; patent and trademark fee collections amounted to \$3,625.0 million.

During FY 2021, total budgetary resources available for spending were 3.5% greater than the amount available in the preceding year, with a 23.2% increase over the past four fiscal years. The change in budgetary resources available for use is depicted by the accompanying figure. The amount of budgetary resources in any given year is directly related to the demand for the USPTO's services, as manifested in the number of applications filed and IP rights renewed during the fiscal year, and the availability of agency operating reserves, including amounts deposited in the PTFRF.

ANNUAL GROWTH IN AVAILABLE BUDGETARY RESOURCES (dollars in millions)



OTHER FINANCIAL INFORMATION

A statement from the Chief Financial Officer, a complete set of financial statements, and a discussion and analysis of those statements can be found in the USPTO's FY 2021 PAR, which is available on the USPTO website at <u>www.uspto.gov/annualreports.</u>



UNITED STATES PATENT AND TRADEMARK OFFICE

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www.uspto.gov For an electronic version of the 2021 USPTO PAR, scan the barcode.