

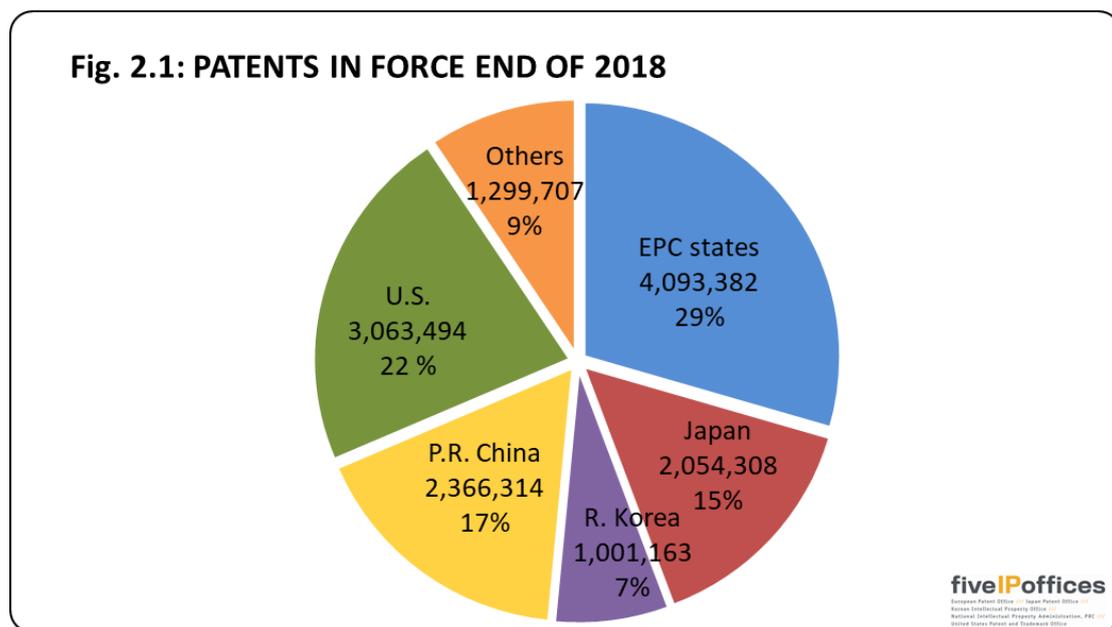
Chapter 2

THE IP5 OFFICES

This chapter details developments at each of the IP5 offices⁸.

International trade and markets continue to be of great importance, so innovators want their intellectual creations to be protected concurrently in multiple major markets.

Patents are used to protect inventions and their counts are recognized as a measure of innovative activity. Fig. 2.1 shows the number of patents in force worldwide at the end of 2018. The data are based on worldwide patent information available from the WIPO Statistics Database⁹.

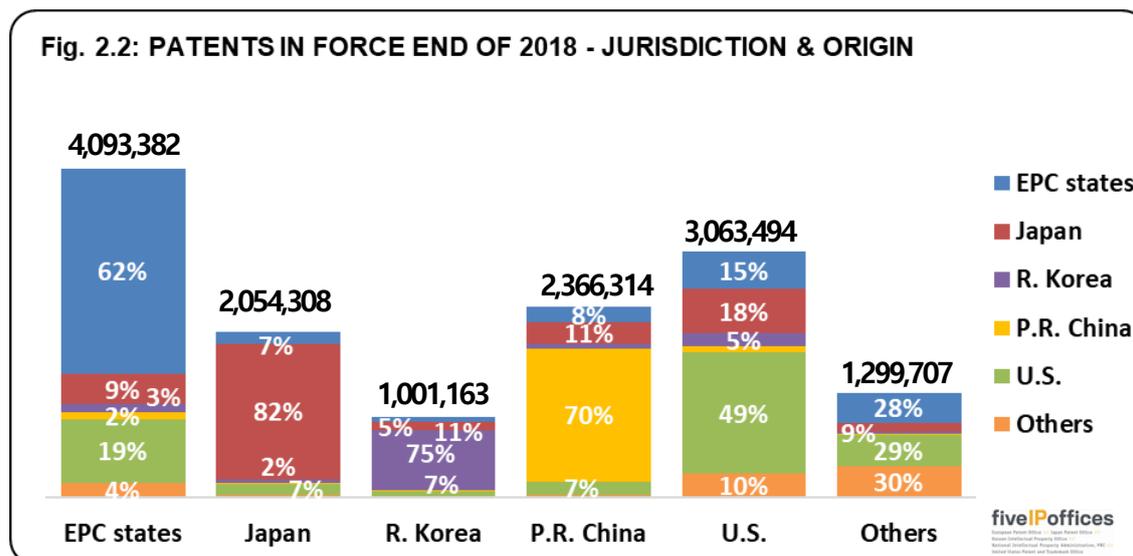


At the end of 2018, 91 percent of the 13.9 million patents that were in force were valid in one of the IP5 Offices jurisdictions. This demonstrates the prominent role that is played by the IP5 Offices.

⁸ The statistical tables file found in the web version of this report includes extended time series for some of the data included in this chapter. <http://www.fiveipoffices.org/statistics/statisticsreports.html>

⁹ www.wipo.int/ipstats/en/index.html Data for patents in force for 2018 are missing for some countries in the WIPO data. Where available, the most recent previous year's data were substituted for missing 2018 data. Data for 2019 are not yet available from WIPO.

Fig. 2.2 shows the residence of the holders of the patents in force at the end of 2018 in the regions of the IP5 Offices.



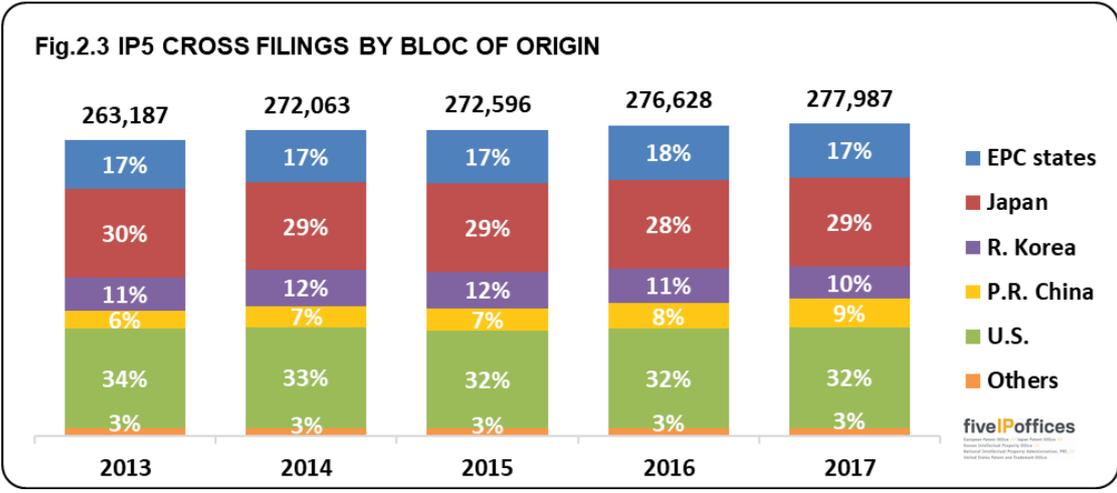
At the end of 2018, of the 13.9 million patents in force, 29 percent were valid in the EPC states, 22 percent in the U.S. 15 percent in Japan, 7 percent in R. Korea and 17 percent in P. R. China.

In 2018, while 82 percent of the patents valid in Japan originated in Japan¹⁰, only 49 percent of the U.S. patents had a U.S. origin. For EPC States, the corresponding shares was 60 percent, it was 75 percent for R. Korea, and 70 percent for P.R. China.

It is estimated that each year more than 250,000 first filings from the IP5 Offices result in subsequent patent applications to at least one other IP5 Office, accounting for over 500,000 applications including the resulting duplicates for the same inventions. To address the issue of the backlogs that can build up as a result of this, the IP5 Offices are working together to try to reduce the amount of repetition of similar work that takes place between offices for these patent applications.

Figure 2.3 shows the development of the number of cross filings between the IP5. Offices over the period 2013 to 2017 according to the bloc of the corresponding first filing.

¹⁰ Patent origin is based on the patent's first-named inventor or applicant.



The Figure 2.3 is based on published applications data allowing to track subsequent applications in other jurisdictions. As a consequence, data beyond 2017 are not yet complete.

EUROPEAN PATENT OFFICE

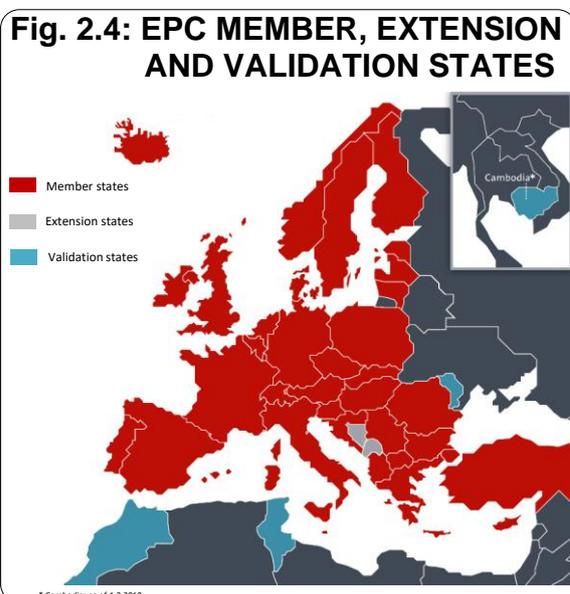
The mission of the EPO is to deliver high-quality patents and efficient services that foster innovation, competitiveness and economic growth. Its main task is to grant European patents according to the EPC. Moreover, under the PCT, the EPO acts as a receiving office as well as a searching and examining authority. A further task is to perform, on behalf of the patent offices of several member states (Belgium, Cyprus, France, Greece, Italy, Latvia, Lithuania, Luxembourg, Malta, Monaco, the Netherlands and San Marino), state of the art searches for the purpose of national procedures. The EPO plays a major role in the patent information area, developing tools and databases.

Member states

The EPO is the central patent granting authority for Europe, providing patent protection in up to 44 countries on the basis of a single patent application and a unitary grant procedure.

At the end of 2019, the 38 members of the underlying EPO were:

Albania	Austria	Belgium	Bulgaria	Croatia
Cyprus	Czech Republic	Denmark	Estonia	Finland
France	Germany	Greece	Hungary	Iceland
Ireland	Italy	Latvia	Liechtenstein	Lithuania
Luxembourg	Malta	North Macedonia	Monaco	Netherlands
Norway	Poland	Portugal	Romania	San Marino
Servia	Slovakia	Slovenia	Spain	Sweden
Switzerland	Turkey	United Kingdom		



Bosnia-Herzegovina and Montenegro, had agreements with the EPO to allow applicants to request an extension of European patents to their territories.

Cambodia, Moldova, Morocco and Tunisia had agreements to validate European patents in their territories. Similar agreement with other states are under negotiations.

The national patent offices of all the above states also grant patents. After grant, a European patent becomes a bundle of national patents to be validated in the states that were designated at grant. The 44 countries for which European patents provide protection represent a population of around 700 million people.

Highlights of 2019

In January 2019, the EPO welcome three new Vice-Presidents. Mrs Simon, Mr Rowan and Mr Ernst, took up respectively responsibility for the General Corporate Services, the Patent Granting Process and the Legal & international affairs.

The number of patent applications filed with the European Patent Office (EPO) grew by 4 percent, to exceed 181,000. The internal reforms implemented as part of the Quality and Efficiency strategy that prioritized examination work and increased productivity led to a further reduction of volume of pending applications. This allowed to re-orient partially the production leading to further increase of the number of granted patents to almost 138,000.

In response to users' need for timely delivery of services, the EPO undertook an initiative, known as Early Certainty, to speed up the patent granting process. Launched in 2014, Early Certainty from Search aimed at increasing legal certainty for applicants by providing a search report with written opinion within 6 months from filing. The programme led to some significant improvements in terms of timeliness. In 2019, the EPO kept focusing on the timeliness of examination and opposition reduced by 3.7 and 1.7 months respectively in 2019¹¹. The percentage of EPO PCT international search reports published along with the application (i.e. A1 publications) remains high above 96 percent in 2019.

In June 2019, the EPO published its Strategic Plan 2023. It presents a strategy for a modernised and sustainable of the office organisation. The Strategic Plan provides also a clear roadmap for achieving that vision distributed over five goals. It outlines the actions and initiatives to be taken and the improvements required if the EPO is to deliver sustainability and excellence. It also explains how the EPO intend to achieve the five strategic goals not only on behalf of its stakeholders, but in partnership with them too. After all, this is a joint venture for all those involved and the Plan relies on effective and transparent co-operation with its stakeholders. More information can be found on the EPO homepage.

EPO Production information

Activities associated with searches, examinations, oppositions, appeals and classifications are all performed by EPO staff. The EPO does not outsource any of its core activities. The decision to grant or refuse a patent is taken by a division of three examiners. In Table 2.1, production figures for filings, applications, searches, examinations, oppositions and appeals in the European procedure are given for the years 2018 and 2019. There was a further increase in demand in 2019 as represented by the number of patent applications.

The EPO fast track procedure, Programme for Accelerated Prosecution of European Patent Applications (PACE), can be requested without an additional fee and is open for any field of technology. However, with the introduction of Early Certainty initiative, the normal procedure has been accelerated. As a consequence, the number of such requests decreased markedly. In 2018, PACE was requested for 5 percent of the European examinations.

¹¹ The new methodology is based on mean average delays. In the case of the examination it measures time until the decision to grant the patent.

Table 2.1: EPO PRODUCTION INFORMATION

EPO PRODUCTION FIGURES	2018	2019	Change	%Change
Patent applications (Euro-direct & Euro-PCT regional phase)	174,481	181,406	+ 6,925	+ 4.0%
Searches carried out				
European (including PCT supplementary)	122,403	123,722	+ 1,319	+ 1.1%
PCT international	84,224	83,960	- 264	- 0.3%
On behalf of national offices	26,499	25,380	- 1,119	- 4.2%
Total production search	233,126	233,062	- 64	- 0.0%
Examination-Opposition (final actions)				
European	185,364	177,872	- 7,492	- 4.0%
PCT Chapter II	7,867	6,339	- 1,528	- 19.4%
Oppositions	4,061	3,977	- 84	- 2.1%
Total final actions examination- opposition	197,292	188,188	- 9,104	- 4.6%
European granted patents	127,625	137,784	+ 10,159	+ 8.0%

Patent information

A key activity of the EPO is collating patent data and making it available to the public through its products and services, such as Espacenet, and as bulk data for commercial providers and partner institutions. Today, the EPO aim to go further than that. The EPO is not only a provider of patent information, but seeks to inspire its users to turn that into patent knowledge. The EPO's goal is to take users on a journey starting at patent information and ending with in-depth IP knowledge, so they can take informed IP-related decisions with confidence at every step of the way.

The EPO's patent databases remain the most comprehensive collection of patent literature. The total number of records in the EPO worldwide bibliographic database (DOCDB) recently passed the 120 million mark and EPO worldwide legal event data (INPADOC) more than 300 million. EPO databases are accessible through services such as Espacenet and also via numerous commercial providers and partner institutions. For users interested in performing statistical analyses of patent data, the EPO's PATSTAT database and the PATSTAT online services are the most relevant. They form a unique basis for conducting sophisticated analyses of bibliographic and legal status data for patent intelligence and analytics.

To demonstrate the value and utility of patent information and to encourage users to acquire and develop their own patent knowledge, the EPO published several "Patent insight reports". These are studies covering a number of diverse emerging technologies and have included graphene composites, quantum metrology, blockchain and cancer immunotherapy. They have been published in the EPO's online and print media, and in peer-reviewed journals such as Nature Biotechnology.

As a result of co-operation with patent offices worldwide, full-text patent collections in languages such as Chinese, Japanese, Korean and Russian are being added. Patent Translate is the EPO's free online machine translation service. Integrated into the EPO's Espacenet worldwide patent database and European publication server, it provides translations for a total of 32 different languages. There are currently approximately 20,000 translation requests per working day on Patent Translate from around the globe.

The journey from patent information to patent knowledge cannot be embarked upon with data alone; the user also needs the right tools to access that data. So, after intensive user consultations and testing, an enriched version of the EPO's Espacenet patent search service was launched in November 2019. This marked a major step towards making the EPO's patent information more accessible to users. Access is free. The latest version offers some advanced functions, including:

- A dynamic query builder for easier searching;
- A richer, cleaner result list;
- An improved legal status overview covering the entire patent family;
- A responsive design to facilitate searching from different devices.

International and European Cooperation

2019 was a momentous year for the EPO in terms of its efforts to build a European patent network with a global impact. Since the adoption of SP2023 in June 2019, the EPO's geographical coverage has grown sharply. In 2019 the EPO signed a validation agreement with Georgia and seven reinforced partnership agreements with Ethiopia, Argentina, Malaysia, Mexico, Indonesia, Brazil and ARIPO. This brings the potential coverage of the EPO's products and services up to 1.9 billion inhabitants across 38 member states, two extension states, four validation states and eight reinforced partnerships. Effective coordination with other IP offices and international organisations enables the EPO to avoid duplication of efforts.

In 2019, 29 patent offices were using the Cooperative Patent Classification (CPC) to classify their own publications. At the end of the year, about 55.5 million patent documents were classified in the CPC, of which 6.7 million were classified by the publishing offices themselves.

In 2019 the EPO continued to invest in the Patent Prosecution Highway (PPH) and initiated the gradual implementation of this scheme in a permanent manner. The PPH provides European applicants with simplified, cost-efficient access to accelerated prosecution elsewhere on the basis of high-quality EPO work products indicating patentable claims. The EPO PPH network currently comprises of 16 partner offices, while PPH arrangements with further offices are scheduled to become operational in due course. PPH participation volumes continued to increase in 2019 suggesting that expedited processing remains an appealing option for applicants in certain technical fields with short product life-cycles.

The EPO hosts the Common Citation Document (CCD), which in 2019 contained over 350 million citations from 35 patent offices world-wide. The CCD currently contains enriched citation data, i.e. data indicating the claims to which the citation is relevant in the patent application for which the search was done and the pertinent passage in the cited document, from 18 patent offices, including the EPO, CNIPA, JPO and WIPO.

Economic studies

In 2019, the EPO Chief Economist Unit published three new studies on the economic impact of patents. The first two studies were carried out jointly with the Chief Economist of the EU Intellectual Property Office (EUIPO). They address, respectively, the contribution of IPR-intensive industries to the EU economy (www.epo.org/ipr-intensive-industries) and the interplay between the use of IPR by European SMEs and their ability to grow in subsequent years (www.epo.org/high-growth). The third study is an EPO scoreboard assessing the success and challenges of the commercialisation of patents filed with the EPO by European SMEs (www.epo.org/scoreboard-smes). This study was launched at the first ever “High Growth Technology Business conference” jointly organised by the EPO and Licensing Executive Society International in Dublin in December 2019.

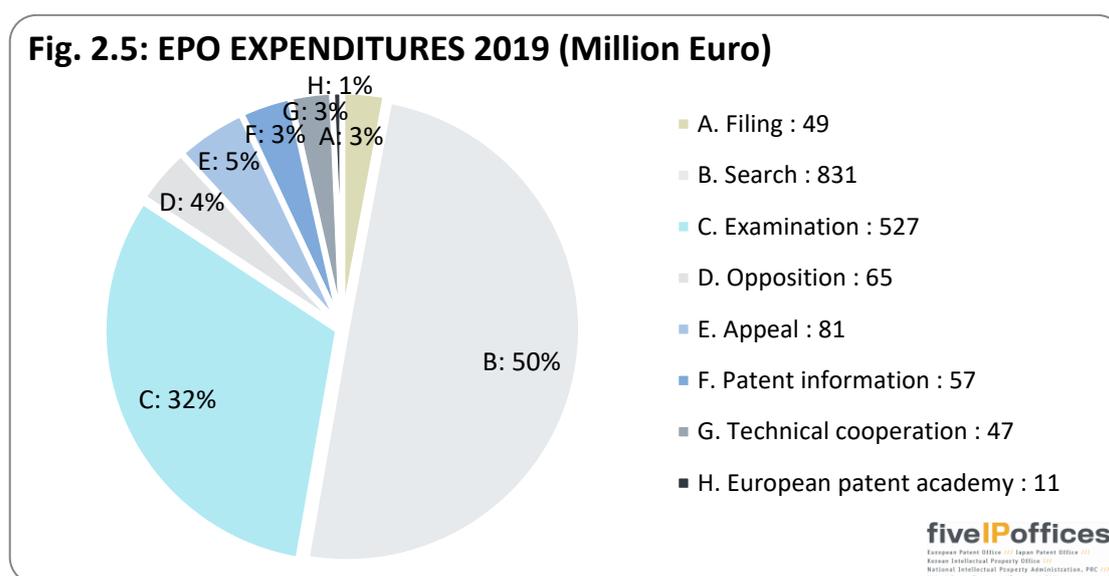
EPO budget

The EPO is financially autonomous and does not receive any subsidies from the Contracting States of the Organisation. Expenses are therefore mainly covered by revenue from fees paid by applicants and patentees. In 2019, the EPO budget amounted to 2.4 billion EURO.

Fees related to the patent grant process, such as the filing, search, examination, and appeal fees as well as renewal fees for European patent applications (i.e. before grant) are paid to the EPO directly. 50 percent of the renewal fees for European patents (i.e. after grant) are kept by the Contracting States of the Organisation where the European patent is validated after the central grant process.

On the expenses side, in addition to the salaries and allowances supported by a patent office, the EPO, as the office of an international organisation, also finances other social staff expenses such as pensions, fees for sickness and long-term care as well as education costs for the children of the employees. The EPO community consists of about 23,000 persons (active staff, pensioners, and their respective family members).

Fig. 2.5 shows EPO expenses¹², based on the International Finance Reporting Standards (IFRS) by category in 2019.



¹² The EPO uses the word “expenses” in accordance with the IFRS reporting approach.

A description of the items in Fig. 2.5 can be found in Annex 1.

EPO Staff

At the end of 2019, the EPO staff totalled about 6,608 employees (-1.3 percent) from 35 different European countries¹³. This comprises 4,240 search, examination, and opposition examiners and 189 Boards of appeal members.

Following their recruitment, examiners are included in a training programme for three years. The staff works in the three official languages of the EPO (English, German, and French).

More information

Further information can be found on the EPO's Homepage:
www.epo.org

¹³ For more details, see the 2018 EPO social report at www.epo.org/about-us/annual-reports-statistics.html

JAPAN PATENT OFFICE

The JPO has been aiming to achieve the “world’s fastest and utmost quality patent examinations”. To this end, the JPO has been implementing various measures focused on “maintaining speed”, “granting high quality rights”, and “cooperating and collaborating with foreign IP offices”.

1) Examination Performance

With the acceleration of the intellectual property creation cycle, there is a growing need to shorten total pendency, and the JPO has been engaging in initiatives to speed up examinations. In 2019, the JPO achieved 9.5 months on average for FA pendency and 14.3 months on average for Total Pendency respectively.

2) Accelerated Examination System

Under certain conditions, the JPO offers an accelerated examination system/super-accelerated examination system that, upon the request of an applicant, expedites the commencement of an examination. An accelerated examination system may be applied for applications that are also filed in one or more other countries and applications by small and medium-sized enterprises, etc. The JPO is running pilot programs for a super-accelerated examination system for highly important applications, such as applications for inventions that have already been put into practice and that are also filed in one or more other countries. In principle, this system aims for the period from request to first action to be within one month (within two months for PCT National Entry Phase applications)¹⁴.

3) Quality Management Initiatives

Under the “Quality Policy on Patent Examination”, which constitutes the JPO’s fundamental principles of quality management, and the “Quality Management Manual for Patent Examination” (Quality Management Manual), the JPO has been engaging in the following initiatives in order to realize the utmost quality of patent examinations in the world.¹⁵

Quality Assurance

Before sending applicants and agents documents by examiners regarding notices and decisions, etc., managers in the examination office check substantive and formal aspects of such documents for all cases. Examiners consult with other examiners in order to share search know-how and knowledge, etc., in order to curb search and decision discrepancies among examiners.

Quality Verification

Decisions and notices, etc. prepared by examiners are audited by quality management officers to check compliance and validity in terms of content and format before sending official documents to applicants and agents. In order to ascertain various user needs, the JPO conducts interviews at informal meetings with businesses, accepts information provided in relation to individual cases, and expands the scope of user satisfaction surveys covering overseas users and small-scale users.

¹⁴ For more information on Accelerated Examination System, please visit JPO’s website.

<https://www.jpo.go.jp/e/system/patent/shinsa/jp-soki/index.html>

¹⁵ For more details about Quality Management Initiatives, please visit the following:

<https://www.jpo.go.jp/e/introduction/hinshitu/shinsa/index.html>

4) International Cooperation on Examination

Patent Prosecution Highway (PPH)

The PPH is a framework that allows an application determined to be patentable by the Office of First Filing (OFF) to undergo, at the request of the applicant, accelerated examination with simplified procedures at the Office of Second Filing (OSF) that is a PPH partner of the OFF. The world's first PPH, advocated by the JPO, was launched between Japan and the U.S. in July 2006 as a pilot program.

- As of January 2020, the number of IP offices participating in the PPH has increased to 54.¹⁶
- As of January 2020, the JPO has been implementing the PPH with 44 IP offices, including new PPH collaboration with the Department for Promotion of Industry and Internal Trade (DPIIT) of the Ministry of Commerce and Industry of India from December 2019, and the Saudi Authority for Intellectual Property (SAIP) from January 2020.
- With regard to the PPH program between the JPO and the National Institute of Industrial Property (INPI) of Brazil, restrictions on the technical fields eligible for PPH requests to the INPI were eased in April 2019, and all technical fields became eligible in December 2019.
- In addition, the JPO serves as the secretariat of the "Global Patent Prosecution Highway (GPPH)", a multinational framework launched in January 2014. In January 2019, the National Institute for the Defense of Free Competition and the Protection of Intellectual Property (INDECOPI) of Peru joined the GPPH framework, bringing the number of IP offices participating in the GPPH to 26. In the GPPH, all types of PPH, including PPH-MOTTAINAI and PCT-PPH¹⁷, are available among the participating IP offices.

Patent Prosecution Highway Plus (PPH Plus)

The PPH Plus is a framework that accelerates acquisition of right for an application of the same invention which is already granted a patent in Japan, by utilizing the examination results by the JPO. The JPO is currently implementing this framework with the Brunei Intellectual Property Office.

Cooperation for facilitating Patent Grant (CPG)

CPG is a framework that accelerates patent grant without conducting substantial examination, for an application of the same invention which is already granted a patent in Japan. The JPO is currently implementing this framework with the Ministry of Industry and Handicraft of Cambodia, and the Department of Intellectual Property, Ministry of Science and Technology of Lao PDR.

4) Recent Trends in AI-related Inventions

¹⁶ The PPH Portal Site provides one-stop access to the PPH implementation status and statistical information for participating IP offices.

<https://www.jpo.go.jp/e/toppage/pph-portal/index.html>

¹⁷ PPH-MOTTAINAI is a framework that enables an applicant to request PPH for an application determined to be patentable by the Office of Earlier Examination (OEE), regardless of which of the two partner offices first receives the patent application. PCT-PPH is a framework that enables an applicant to request PPH for an application whose patentability is positively assessed in a written opinion or international preliminary examination report at the PCT international phase.

Taking into account recent advances in AI technology centering on deep learning, the JPO studied the status of patent applications for AI-related inventions in Japan and overseas and released a report and previous data in July 2019.¹⁸

This study defines “AI-related invention”¹⁹ as (1) AI core invention (FI: G06N) and (2) inventions in which AI has been applied to various technical fields and examined such inventions. An overview of the study findings is as follows.

- Domestic patent applications for AI-related inventions have increased rapidly since 2014 due to the impact of the third AI boom.
- Applications for AI-related inventions referring to deep learning have increased rapidly since 2014. In 2017, nearly half of domestic patent applications for AI-related inventions referred to deep learning.
- For AI-applied areas, applications stand out in the fields of image processing, information retrieval and recommendation, business-related, and medical diagnosis. Between 2015 and 2017, applications for control and robotics fields increased in particular. Applications related to AI core technology (IPC: G06N) are on the rise, both to the IP5 Offices and PCT. Among them, the number of applications to the USPTO and the CNIPA is particularly high.

¹⁸ https://www.jpo.go.jp/e/system/patent/gaiyo/ai/ai_shutsugan_chosa.html

¹⁹ The above definition of “AI-related invention” is used only in this research, and does not represent an official definition by the JPO.

JPO Production information

Table 2.2 shows production figures for applications, examinations, grants, appeals or trials and PCT activities in the Japanese procedure in 2018 and 2019.

Table 2.2: JPO PRODUCTION INFORMATION

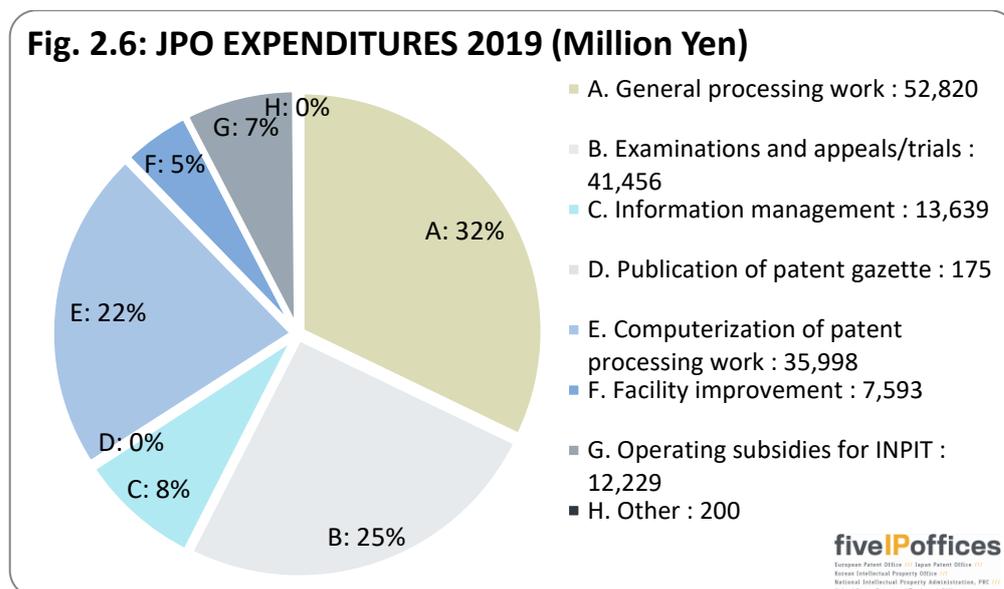
JPO PRODUCTION FIGURES	2018	2019	Change	% Change
Applications filed (by Origin of Application)				
Domestic	253,630	245,372	- 8,258	- 3.3%
Foreign	59,937	62,597	+ 2,660	+ 4.4%
Total	313,567	307,969	- 5,598	- 1.8%
Applications filed (by Type of Application)				
Divisional ²⁰	27,267	27,665	+ 398	+ 1.5%
Converted ²¹	93	92	- 1	- 1.1%
Regular	286,207	280,212	- 5,995	- 2.1%
Total	313,567	307,969	- 5,598	- 1.8%
Examination				
Requests	234,309	235,182	+ 873	+ 0.4%
First Actions	232,701	227,293	- 5,408	- 2.3%
Final Actions	236,279	224,375	- 11,904	- 5.0%
Grants				
Domestic	152,440	140,865	- 11,575	- 7.6%
Foreign	42,085	39,045	- 3,040	- 7.2%
Total	194,525	179,910	- 14,615	- 7.5%
Appeals/Trials				
Demand for Appeal against refusal	16,536	16,699	+ 163	+ 1.0%
Demand for Trial for invalidation	159	113	- 46	- 28.9%
PCT Activities				
International searches	47,934	51,666	+ 3,732	+ 7.8%
International preliminary examinations	2,131	2,000	- 131	- 6.1%

²⁰ Divisional application(s) is/are one or more new patent application(s) which is/are filed by dividing a part of the patent application that includes two or more inventions under certain conditions.

²¹ Converted applications include patent applications which are converted from an application for utility model registration or design registration (under Article 46 of Patent Act), and patent applications filed based on a registration of utility model (under Article 46bis).

JPO budget

Fig. 2.6 shows JPO expenditures by category in 2019.



A description of the items in Fig. 2.6 can be found in Annex 1.

JPO Staff Composition

As of the end of FY 2019, the total number of staff at the JPO was 2,792.

Examiners		
Patent / Utility model		1,682
Design		48
Trademark		140
Appeal examiners		383
General staff		539
Total		2,792

More information

Further information can be found on the JPO's Homepage:

<https://www.jpo.go.jp/e/>

KOREAN INTELLECTUAL PROPERTY OFFICE

Overview

As the Korean governmental agency primarily responsible for overseeing intellectual property rights (IPRs), the Korean Intellectual Property Office (KIPO) strives to conduct its intellectual property (IP) administration in accordance with the national paradigm of creative economy, which seeks to foster innovation and new engines of economic growth to drive Korea's future prosperity.

Domestically, KIPO has put as great an emphasis as possible on further developing its examination services, as well as promoting economic sustainability through a virtuous cycle of IP creation, utilization, and protection. On the international front, KIPO strengthened its cooperative ties with foreign IP offices and other international organizations.

Premium Examination Services

KIPO aims to provide fast, high-quality, and customer-oriented examination services by continuing to improve examination systems, raise the quality of IP administration, and reduce first action pendency. The average first office pendency in 2019 was 10.8 months for patents and utility models, 6.8 months for trademarks, and 5.4 months for industrial designs.

IP Competitiveness

In 2019, KIPO received a preliminary total of 510,968 applications filing for patents, utility models, industrial designs, and trademarks in 2019. Out of that number, 84,216 applications were filed by residents of foreign countries.

PCT Applications

The number of PCT applications from Korea has continually grown every year. The KIPO has the 5th largest amount of PCT applications by country of origin. There were 18,885 PCT applications in total for 2019 which is an 11.5 increased from 16,991 applications in 2018.

The Korean language is also the 5th most commonly used language as an official PCT publication language.

Korea Becomes the World's 7th Country to Surpass 2 Million Patent Registrations

Since the first establishment of a legal system for intellectual property (IP) in the Republic of Korea in 1946, the quantity and range of IP applications have exponentially increased. The Korean Intellectual Property Office (KIPO) registered the first patent registration in 1948 and reached the registration of one million patents after sixty-two years in 2010. In just a few years afterwards, KIPO issued the registration of its second millionth patent by 2019, becoming the 7th country in the world to achieve this milestone.

500,000 in Annual IPR Filings

For the first time, the total volume of intellectual property right (IPR) filings for a one-year period recorded 510,968 cases in 2019, which is a 6.4 percent increase from previous year. Additionally, the Korean patent market for small and medium-sized enterprises (SMEs) has been rapidly growing as the volume of patent application by SMEs have surpassed that of large enterprises since 2015.

PROVIDING IP SERVICES

1. Examination for Fourth Industrial Revolution Technologies

1) Convergence Technology Examination Bureau

In order to adapt to the developments in the IP environment and provide sufficient IP services, KIPO implemented measures to improve its patent examination accordingly. In 2019, an organizational restructuring was initiated within KIPO which led to the new establishment of a “Convergence Technology Examination Bureau” dedicated to the examination of technologies related to the Fourth Industrial Revolution (4IR) such as artificial intelligence (AI), big data, and bio-health.

Patent examination was originally carried out by four bureaus: the Patent Examination Policy Bureau and Patent Examination Bureau 1, 2, and 3. A more efficient system was established through reorganization by fields of technology and relocation of examiners with specific expertise which would support technological innovation and advancement. As of 2019, there are five bureaus organized to carry out patent examinations: the Patent Examination Policy Bureau, the Convergence Technology Examination Bureau, the Electricity & Telecommunications Examination Bureau, the Chemical & Biotechnology Examination Bureau, and the Machinery & Metals Examination Bureau.

2) Consensus-based Consultative Examination Among Examiners

Patent examination is generally conducted by one examiner for each invention. Even if consultation with other examiners was provided, the examination is processed under the name of one main examiner. Along with the new establishment of the Convergence Technology Examination Bureau in 2019, KIPO began implementation of examinations based on the consultation and consensus of three examiners specializing in 4IR technologies.

In this newly implemented system, three examiners in the Convergence Technology Examination Bureau consult from the onset of examination and come to a consensus, similar to that of the Intellectual Property Trial Tribunal.

Due to many 4IR-related inventions often incorporating two or more different technical fields, a group of examiners makes it possible to provide relatively higher-quality examination services and increase examination consistency by sharing opinions on patentability requirements and reducing discrepancies.

2. Introducing the “Venture Team” Project at KIPO

Government organizations are often occupied with undertaking their entrusted obligations rather than supporting the implementation of innovative but challenging ideas which could greatly improve convenience for its users. Therefore, a “venture team,” based on conceptualized ideas for policies and services, can be temporarily formed within the organization dedicated to actualizing the idea.

On June 12, 2019, the Ministry of Interior and Safety of Korea hosted a “Venture Team Idea Competition. Two of KIPO’s ideas were selected as winners of the competition and KIPO permitted to establish two new “Venture Teams” within its organization to carry out their ideas, accordingly.

Promoting IP Creation and Utilization

1. Expanding Patent Big Data Utilization in Industry

1) Expansion of IP-R&D Centered on Materials, Parts, and Equipment

KIPO began implementing an IP-R&D plan for securing core technologies already known in patents and improve the efficiency of R&D projects. This plan to strengthen R&D consists of three major tasks: expanding IP-R&D program in public R&D projects; supporting IP-R&D customized to each stage of growth of companies; and strengthening the foundation for IP-R&D proliferation in industry, academia, and research.

2) Commencing an Era of 1 Trillion Won in IP-backed Financing

IP-backed financing provides funds to companies by a means of a loan or investment based on their IP assets. In 2019, the total amount of IP-backed financial transactions reached 1.35 trillion South Korean Won (equivalent to 1.11 billion US Dollar) in Korea. The first loan based on IP was made with the Korea Development Bank (KDB) in 2013, and transactions for IP-backed financing have increased steadily ever since. Notably, the overall scale of 1.35 trillion South Korean Won in total transactions for 2019 shows a significant growth in IP-backed financing, a 77 percent increase from that of 2018.

3) Launching the Patent Mutual Aid Program

KIPO implemented the Patent Mutual Aid program as a policy program to provide a stable management base which can alleviate and resolve IP risk while also support advancement into overseas markets. The program provides mutual aid among companies when SMEs need funds in disputes related to domestic and overseas IP or for securing IPRs in other countries. The Patent Mutual Aid Center began operation of in August 2019 after the Korea Technology Finance Corporation was selected as the operating agency to entrust the mutual aid program.

Establishing Global IP Cooperation

1. Hosting the Heads of the World’s Five Largest IP Offices

On June 12, 2019, the 12th IP5 Heads of Office Meeting was convened in Songdo, Incheon. The meeting was concluded with the adoption of a Joint Statement on improving the global patent system in response to changes brought on by the fourth Industrial Revolution technologies. The heads of IP5 Office also agreed to launch a task force whose main assignment is to explore collaborative approaches to innovative technologies such as AI.

2. Advancing Korea-ASEAN IP Cooperation

On November 25, 2019, the second Korea-ASEAN Heads of IP Office Meeting was held in Seoul, Korea since the first meeting launched in 2018 after five years of consultation with the ASEAN member states. Under the chairmanship of KIPO Commissioner Won-joo Park, the future direction of Korea-ASEAN IP cooperation was presented to the attending delegations from the IP offices from all ten ASEAN member states, and the “Joint Statement on Korea-ASEAN Intellectual Property” was adopted laying a foundation for deeper cooperation toward the achievement of IP-driven mutual prosperity.

KIPO Production information

Table 2.3 shows production figures for applications, examinations, grants, appeals or trials and PCT activities for 2018 and 2019.

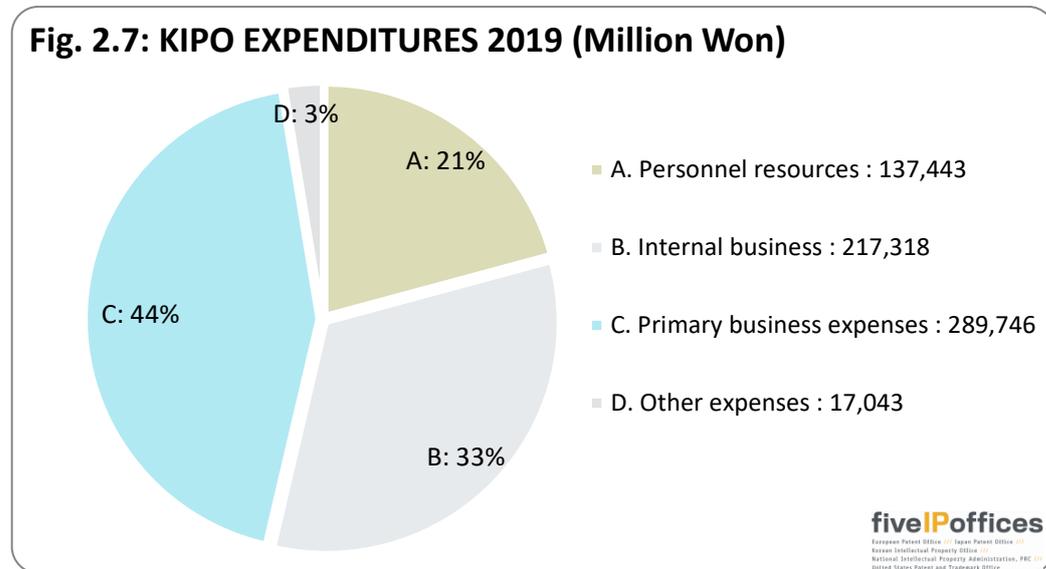
Table 2.3: KIPO PRODUCTION INFORMATION

KIPO PRODUCTION FIGURES	2018	2019	Change	% Change
Applications filed (by Origin of Application)				
Domestic	162,561	171,603	+ 9,042	+ 5.6%
Foreign	47,431	47,372	- 59	- 0.1%
Total	209,992	218,975	+ 8,983	+ 4.3%
Examination				
Requests	180,680	183,816	+ 3,136	+ 1.7%
First Actions	162,689	172,371	+ 9,682	+ 6.0%
Final Actions	165,902	170,160	+ 4,258	+ 2.6%
Grants				
Domestic	89,227	94,852	+ 5,625	+ 6.3%
Foreign	29,785	30,809	+ 1,024	+ 3.4%
Total	119,012	125,661	+ 6,649	+ 5.6%
Appeals/Trials				
Demand for Appeal against refusal	3,624	2,820	- 804	- 22.2%
Demand for Trial for invalidation	460	477	+ 17	+ 3.7%
PCT Activities				

International searches	24,104	27,154	+ 3,050	+ 12.7%
International preliminary examinations	131	131	+ 0	+ 0.0%

KIPO budget

Fig. 2.7 shows KIPO expenditures by category in 2019.



A description of the items in Fig. 2.7 can be found in Annex 1.

KIPO Staff Composition

At the end of 2019, the KIPO had a total staff 1,741. The breakdown is as follows.

Examiners	
Patents and Utility Model	868
Designs and Trademarks	195
Appeal examiners	107
Other staff	571
Total	1,741

More information

Further information can be found on KIPO's Homepage:

www.kipo.go.kr/en/MainApp

China National Intellectual Property Administration

Statistical Overview of 2019

1) Patent Examination Status

In accordance with the Patent Law of the People's Republic of China, the CNIPA is the authority to receive and examine applications for invention, utility model and design patents, and to grant patent rights in compliance with the Patent Law. The mechanism of earlier publication and request for substantive examination applies when processing invention patent applications, while the duration of patent rights for invention is 20 years, counted from the date of filing. The preliminary examination mechanism applies when processing utility model and design applications, while the duration of patent rights for utility models and designs is 10 years, counted from the date of filing.

2) Patent Applications in 2019

In 2019, the number of applications for the three kinds of patents in P.R. China was nearly 4.38 million. Among these applications, there were 1.40 million applications for invention patents, a decrease of 9.2 percent compared to the previous year, 2.27 million applications for utility model patents and 0.71 million applications for design patents.

3) Patents Granted in 2019

In 2019, the CNIPA granted 0.45 million patents for invention, with an increase of 4.8 percent compared to the previous year, 1.58 million patents for utility model and 0.56 million patents for industrial design.

CNIPA production information

Table 2.4 shows production figures for applications, examination, grants, re-examination and invalidation, PCT activities are given for the years 2018 and 2019. The data in table 2.4 concentrate only on patents for invention.

Table 2.4: CNIPA PRODUCTION INFORMATION

CNIPA PRODUCTION FIGURES	2018	2019	Change	% Change
Applications filed				
Domestic	1,393,815	1,243,568	- 150,247	- 10.8%
Foreign	148,187	157,093	+ 8,906	+ 6.0%
Total	1,542,002	1,400,661	- 141,341	- 9.2%
Examination				
First actions	838,869	1,069,288	+ 230,419	+ 27.5%
Final actions	808,474	1,023,221	+ 214,747	+ 26.6%
Grants				
Domestic	345,959	360,919	+ 14,960	+ 4.3%
Foreign	86,188	91,885	+ 5,697	+ 6.6%
Total	432,147	452,804	+ 20,657	+ 4.8%
Re-examination and invalidation				
Re-examination requests	28,695	44,138	+ 15,443	+ 53.8%
Invalidation request	1,387	1,403	+ 16	+ 1.2%
PCT activities				
International searches	52,497	55,776	+ 3,279	+ 6.2%
International preliminary examinations	451	527	+ 76	+ 16.9%

4) Examination Period

The CNIPA adopted time-sliced segment management (where the whole procedure was monitored and managed by divided time point and period) in the whole examination procedure for examination period management by objectives to ensure well-distributed and reasonable examination period. In 2019, the pendency period for the granting of invention patents was approximately 22.2 months.

Information and Documentation

In order to support the national technological innovation, the national economic growth and the patent examination, the CNIPA has always highly valued the construction of its patent documentation and information system. Its unremitting efforts for years have resulted in the current various patent information resources, and automatic search and management system.

1) Patent Information Public Service System

In 2019, The CNIPA completed the catalogue on basic IP Information, developed a management system, issued the Measures for the Management of IP Basic Information and Data. The CNIPA made the IP basic data further available, continued to improve the patent data service test system, and added five types of data resources, such as the status of the Chinese laws, invalidation, and re-examination. The types of

data available for the public to download rose to 34 with the download bandwidth doubled, and the paper agreements were replaced by electronic protocols. In 2019, the number of registered users of the patent data service test system reached 15, 000, with an increase of 10 percent, and the total amount of data downloaded accumulatively by users exceeded 478TB, with an increase of 59 percent. The international data exchange and the data sharing among domestic ministries and commissions were actively advanced.

2) Documentation Resources and Services

Throughout 2019, a total of 149 types of documentation resources were allocated, including six types of patent resources and 143 types of non - patent resources, which provided solid support for patent examination, patent information public services and others. CNIPA continued to exchange patent documentation with 31 countries (regions) or organizations and provided Chinese patent documentation to 6 PCT international search and preliminary examination authorities.

As of the end of 2019 , CNIPA had 540 types of patent documentation resources , including 191 types of bibliographic data, 167 types of full-image data, 83 types of full-text data, 18 types of special theme data, 72 types of auxiliary search, and 20 types of other categories. The bibliographic data covered 104 countries (regions) or organizations; the full-image data covered 103 countries (regions) or organizations; and the full-text data covered 36 countries (regions) or organizations. At present, CNIPA had nearly 130 million pieces of patent documentation.

Documentation Services Focusing on the improvement in the patent examination quality and efficiency, CNIPA compiled the Documentation Resources Quick Guide. Feedback on the progress of the full-text submission form was ensured to be given within one hour during the working days. Throughout the Year ' CNIPA provided examiners with 2,685 pieces of patent documentation and 23,600 pieces of non-patent documentation , held multi-level training on the use of non-patent documentation resources to improve the efficiency of their use , and organized 14 training courses on various types of non-patent databases throughout the year , with more than 2,800 people trained accumulatively.

CNIPA made continuous efforts in innovating services, enriching online and offline service means, spreading IP knowledge and culture by online public lectures, virtual IP exhibition and others, providing information services such as on-site, telephone and online consultations, commissioned searches and others, and comprehensively improving the service quality and efficiency of service counters .

International Cooperation

In 2019, CNIPA continued its in -depth participation in the reform of the global IP governance system, actively promoted the formulation of international IP rules by participating in international affairs, and promoted multilateral and bilateral cooperation in a balanced manner, as to significantly raise China's voice and influence in global IP affairs . CNIPA strived to build a new IP international cooperation framework, featuring coordinated progress in multilateral, plurilateral, bilateral cooperation and collaboration with neighboring countries.

The CNIPA steadily pressed ahead with the eight pragmatic cooperation projects established at the 2018 High- level Conference on IP for Countries Along the Belt and Road. In May, The Belt and Road IP Training Workshop was organized in Chengdu, Sichuan. In July, the 2019 CNIPA Seminar on Intellectual Property Protection and Examination Practice for Latin American Countries, as well as the patent examination training workshop for the GCC Patent offices were held in Beijing. A total of 26 Students from the Second batch of " Belt and Road "master program on IP completed their Studies in China. CNIPA sent IP experts to the IP authorities of Laos, Vietnam , Ecuador, Ethiopia, Cambodia , Saudi Arabia, and relevant regional organizations, such as the African Regional Intellectual Property organization (ARIPO) and the Gulf Cooperation Council (GCC) to carry out training on IP examination, laws and regulations, etc.,

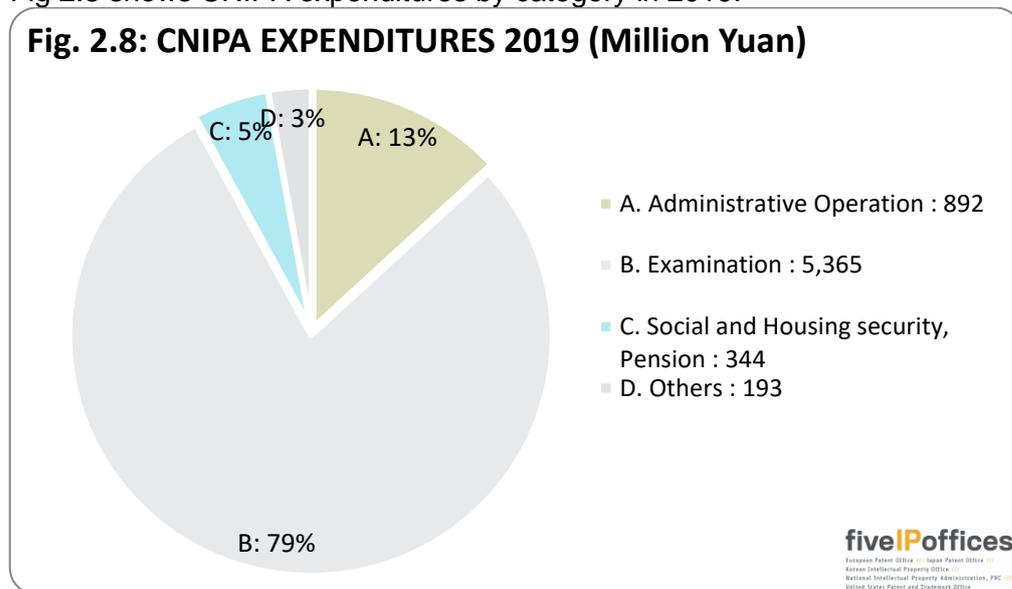
In 2019, the total number of partners that signed PPH cooperation agreements with the CNIPA has increased to 29 , and the launched PPH pilot programs have increased to 27 Among them , CNIPA initiated a new pilot program with Argentina, signed the cooperation agreement on a new pilot program with Norway and planned to sign a new pilot program cooperation agreement with Saudi Arabia. The pilot programs with Iceland and Egypt were successfully extended. CNIPA also signed the extension agreements on pilot programs with IP authorities of Singapore and the Czech Republic. The IP5 PPH will also be extended for three years. The extension agreement on pilot programs with Brazil was also signed. In addition, the consultation on projects with the African Regional Intellectual Property organization proceeded smoothly.

Since its official launch on January 1, 2019, the China-Korea Cooperative Search Pilot (CSP) operated smoothly. PCT Collaboratives Search and Examination Pilot (PCT CS&E) continued to progress steadily, and the work related to the expansion of non-English languages led by CNIPA was also successfully launched. At present, the pilot program has received applications in languages other than English, Chinese, Japanese, Korean, French and German. Based on users' demand for information related ted to patents granted overseas, CNIPA continued to carry out promotion and training activities in relation to the international cooperation projects on examination and their outcomes through various Channels.

CNIPA continued to carry out data exchange cooperation with 26 countries, regions and organizations. The African Regional Intellectual Property Organization and Kyrgyzstan IP authority newly joined the Cloud Patent Examination System (CPES), bringing the total number of users to 51.

The CNIPA budget

Fig 2.8 shows CNIPA expenditures by category in 2019.²²



A description of the items in Fig. 2.8 can be found in Annex 1.

The CNIPA Staff Composition

By the end of 2019, the CNIPA has 8 functional departments (vice bureau level).

More information

Further information can be found on the CNIPA's Homepage:

<http://www.english.cnipa.gov.cn>

²² Percentages may not total 100 due to rounding.

UNITED STATES PATENT AND TRADEMARK OFFICE

Mission Statement

The mission of the United States Patent and Trademark Office (USPTO) is:

Fostering innovation, competitiveness and economic growth, domestically and abroad by delivering high quality and timely examination of patent and trademark applications, guiding domestic and international intellectual property policy, and delivering intellectual property information and education worldwide, with a highly skilled, diverse workforce.

The USPTO is pivotal to the success of innovators. In fulfilling the mandate of Article 1, Section 8, Clause 8, of the U.S. Constitution, “To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries”, the USPTO is on the cutting edge of technological progress and achievement in the United States.

The USPTO provides valued products and services to its customers in exchange for fees that are appropriated to fund its operations. The powers and duties of the USPTO are vested in the Under Secretary of Commerce for Intellectual Property and Director of the USPTO, who consults with the Patent Public Advisory Committee and the Trademark Public Advisory Committee. The USPTO operates with two core business units, Patents and Trademarks.

The USPTO’s Strategic Plan for Fiscal Years (FY)²³ 2018-2022 sets forth the Agency’s three mission-focused strategic goals and one management goal, as well as the proposed objectives and initiatives to meet those goals. The strategic goals collectively focus efforts on issuing predictable, reliable, and high-quality IP rights, aligning patent and trademark examination capacity with current and projected workloads, modernizing information technology, enhancing the customer experience, promoting IP rights abroad, monitoring and helping address dynamic IP issues in Congress and the Courts, maintaining a sustainable funding model, and developing IP policy. This plan was developed with input from the public advisory committees, stakeholders, the public, and USPTO employees.

- Goal 1: Optimize Patent Quality and Timeliness.
- Goal 2: Optimize Trademark Quality and Timeliness.
- Goal 3: Provide Domestic and Global Leadership to Improve IP Policy, Enforcement, and Protection Worldwide.
- Management Goal: Deliver Organization Excellence.

Agency News

In FY 2019, the USPTO exceeded patent pendency goals achieving the USPTO’s lowest first action pendency since January 2002, despite total application filings nearly doubling in that time, from 353,000 in FY 2002 to 667,000 in FY 2019.

FY 2019 marks the 14th consecutive year that the USPTO Trademark examining attorneys surpassed pendency and quality targets. Additionally, in FY 2019, Trademark Operations took several important actions toward enhancing the accuracy

²³ USPTO’s Fiscal Year is October 1 to September 30.

of the U.S. Trademark Register and reducing fraudulent filings. Such actions include the expansion of random post-registration audits, implementation of a new U.S. Counsel Rule, and educating applicants and the public on counterfeiting.

The USPTO's Pro Se Art Unit provides dedicated educational and practical resources to small businesses, independent inventors, and under-resourced inventors. In FY 2019, around 1,200 patents were granted in applications handled by examiners in the Pro Se Art Unit. Through education and enhanced customer service, the Pro Se Art Unit helped increase accessibility to patent protection with almost 37 percent of all pro se applications examined by the Pro Se Art Unit resulting in a patent grant. In addition, examiners in the Pro Se Art Unit worked with unrepresented applicants on thousands of applications to help make the patent system more accessible, transparent and understandable.

The USPTO continued to evaluate programs designed to advance the progress of a patent application and to provide applicant assistance, including programs such as Track One for Prioritized Examination, First Action Interview Pilot Program, Quick Path Information Disclosure Statement (QPIDS), the After Final Consideration Pilot 2.0 (AFCP 2.0), and Patents 4 Patients (the Cancer Immunotherapy Pilot Program). As a result of this continued evaluation, QPIDS was established as a permanent program this year. In addition, effective September 3, 2019, the limit on the number of Track One requests that may be granted in a fiscal year was increased from 10,000 to 12,000. The goal of the Track One program is to offer faster patent examination, by allowing applicants to receive final disposition within about 12 months.

In FY 2019, the USPTO took a closer look at the progress and potential of women in patenting, publishing a Progress and Potential report that studied U.S. women inventors named on U.S. patents granted from 1976 through 2016 and examined the trends and characteristics of their patents.

In addition to the Progress and Potential Report, the USPTO also published a Report to Congress pursuant to The Study of Underrepresented Classes Chasing Engineering and Science Success (SUCCESS) Act. This report contained a literature review and found a need for additional information to determine the participation rates of women, minorities, and veterans. The report concluded with six new USPTO initiatives and five legislative recommendations for increasing the participation of women, minorities, and veterans as inventor-patentees and entrepreneurs. The initiatives include creating an IP toolkit for corporate employee inventors to help demystify the patent process and encourage greater participation; recognizing individuals and/or organizations that are undertaking efforts and/or accelerating diversity among entrepreneurs; establishing a council to develop a national strategy for promoting and increasing innovation inclusiveness; expanding USPTO educational outreach programs for youth and teachers; working with other relevant U.S. Government (USG) agencies to develop workforce training materials with information on how to obtain a patent and the importance of invention and IP protections; and increasing the development of IP training materials for educators. The legislative recommendations are to enhance USPTO authority to gather information in a voluntary, confidential, biennial survey of individuals named in patent applications that have been filed with the USPTO; enhance authority for USG interagency data sharing and cooperation; expand the purposes/scopes of relevant USG federal grant programs to include activities that promote invention and entrepreneurship, as well as the protection of inventions and innovations using IP among underrepresented groups; create a set of commemorative innovation quarters and postage stamps to be released into circulation that feature a spectrum of American inventors from a variety of backgrounds, including those from

underrepresented groups; and support exhibits at national museums featuring inventors/entrepreneurs from underrepresented groups.

At the end of FY 2019, 11,084 employees agency-wide were working from home at least one day per week, translating to 87 percent of the USPTO workforce. A structured telework program provides cost savings by reducing the need for additional office space, enhances recruitment and retention, fosters greater efficiency in production and management and provides opportunities for expanded work flexibility and better work–life balance for participating employees. USPTO’s teleworkers help to minimize the USPTO’s impact on the environment in the Washington, D.C., metropolitan area, and in FY 2019, they spared the environment more than 51,000 tons in estimated CO² emissions.

International Cooperation and Work Sharing

The USPTO provides IP educational and training programming both to improve IP laws and their administration around the world, and to enhance IP awareness and technical capacity. The USPTO’s programs address a full range of IP protection and enforcement matters, including enforcement of IP rights at national borders, Internet piracy, health and safety threats from counterfeit goods, trade secret protection and enforcement, copyright policy, and patent and trademark examination. In FY 2019, the Office of Policy and International Affairs conducted a total of 140 such training activities through its Global Intellectual Property Academy (GIPA), reaching over 9,500 individuals. Approximately 45 percent of all individuals served were U.S. IP rights owners and users, and approximately 55 percent were patent, trademark, and copyright officials from 123 countries; prosecutors; police; customs officials; and IP policymakers. In FY 2019, GIPA continued its nearly decade-long commitment to the production and maintenance of in-depth, on-demand content through distance-learning on the USPTO website and its YouTube playlist. These modules are available in five languages and cover six areas of IP protection and enforcement.

The USPTO has also entered into a number of agreements with intergovernmental organizations. One of these was an agreement with INTERPOL’s Illicit Goods and Global Health Program to cooperate on training and capacity-building programs to promote effective IP enforcement internationally. These collaborations included a July 2019 Central Asia regional program on trafficking in counterfeit goods. In a related development, in FY 2019, the USPTO finalized an interagency agreement under the State Department’s Middle East Partnership to conduct IP enforcement programs in Morocco, Algeria, Tunisia, Jordan, Qatar, Bahrain, and Kuwait.

The USPTO continued to be a global leader in developing work-sharing programs that result in efficiencies for patent applicants and examiners. The USPTO continued to optimize its Patent Prosecution Highway (PPH) programs, which have proven to increase efficiencies and decrease costs for applicants filing in multiple offices. At the end of FY 2019, a total of 61,944 applications with petitions had been filed under the PPH, with 53,814 patents granted.

The USPTO also continued its stewardship of the Global Dossier, a set of business services that provide a single point of access to related applications filed in multiple patent offices at no cost to users. The USPTO continues to evaluate how to add more functionality to Global Dossier to benefit its stakeholders, including providing legal status information and increasing the scope of application data available in the service. In addition, the USPTO continued to pilot innovative collaborative search programs to enhance predictability and reliability of IP rights worldwide.

USPTO production information

Table 2.5 includes production figures for application filings, PCT searches and examination, first actions, grants, applications in appeal and interference, and patent cases in litigation for the years 2018 and 2019.

Table 2.5: USPTO PRODUCTION INFORMATION

USPTO PRODUCTION FIGURES	2018	2019	Change	% Change
Applications filed				
Utility (patents for invention) ²⁴	597,141	621,453	+ 24,312	+ 4%
Domestic	285,095	292,998	+ 7,903	+ 2.8%
Foreign	312,046	328,455	+ 16,409	+ 5.3%
Plant	1,079	1,134	+ 55	+ 5%
Reissue	1,013	1,110	+ 97	+ 10%
Total utility, plant & reissue	599,233	623,697	+ 24,464	+ 4%
Design	45,083	46,847	+ 1,764	+ 4%
Provisional	169,340	170,089	+ 749	+ 0%
Total	813,656	840,633	+ 26,977	+ 3%
Request for continued examination (RCE) ²⁵	170,366	170,568	+ 202	+ 0%
PCT Chapter I searches	22,210	22,465	+ 255	+ 1%
PCT Chapter II examinations	991	1,003	+ 12	+ 1%
First actions (utility, plant, reissue)	592,895	600,057	+ 7,162	+ 1%
Grants (total)	307,759	354,430	+ 46,670	+ 15%
U.S. residents	144,413	167,115	+ 22,703	+ 16%
Foreign	163,346	187,315	+ 23,967	+ 15%
Japan	47,566	53,542	+ 5,975	+ 13%
EPC states	48,963	55,638	+ 6,675	+ 14%
R. Korea	19,780	21,684	+ 1,904	+ 10%
P.R. China	14,488	19,209	+ 4,724	+ 33%
Others	32,549	37,242	+ 4,689	+ 14%
Applications in appeal and interference proceedings				
Ex-parte cases received	8,684	6,889	-1,795	- 21%
Ex-parte cases disposed	10,989	11,353	+ 364	+ 3%
Inter-partes cases received	26	10	- 16	- 62%
Inter-partes cases disposed	38	19	- 19	- 50%
Patent cases in litigation				
Cases filed	669	682	+ 13	+ 2%
Cases disposed	645	778	+ 133	+ 21%
Pending cases (end of calendar year)	639	561	- 78	- 12%

²⁴ Unless otherwise noted, the USPTO statistics presented elsewhere in this report are limited to utility patent applications and grants, and include Requests for Continued Examination (RCEs)..

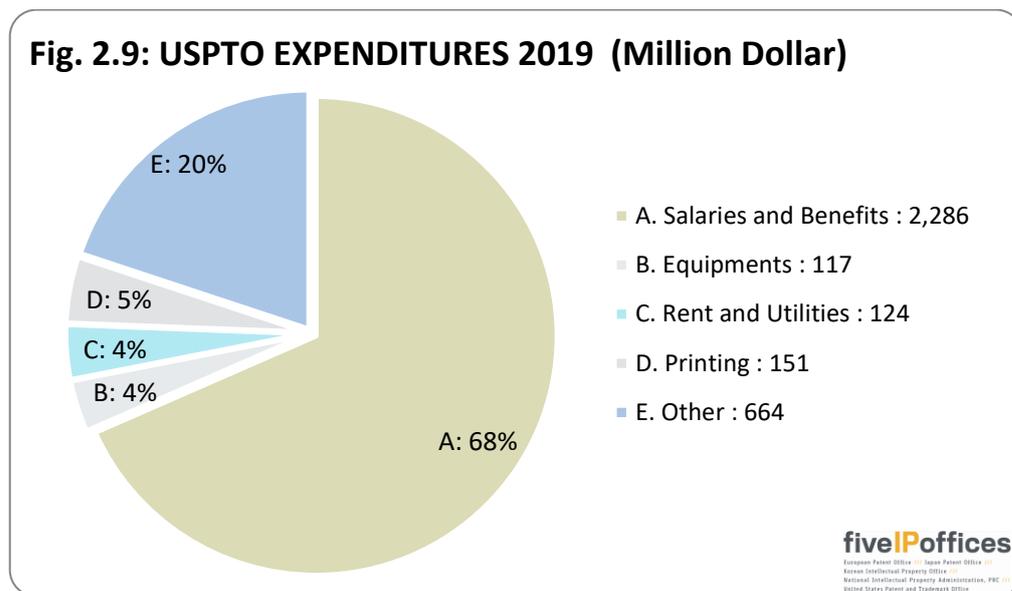
²⁵ A Request for Continued Examination is a USPTO procedure under which an applicant may obtain continued examination of an application by filing a submission and paying a specified fee, even if the application is under a final rejection, appeal, or a notice of allowance.

USPTO budget

The USPTO utilizes an activity based information methodology to allocate resources and costs that support programs and activities within each of the three strategic goals. In FY 2019, USPTO expenditures totalled \$3.341 billion. Agency-wide, 18.7 percent of expenditures were allocated to IT security and associated IT costs.

Goal 1 – Optimize Patent Quality and Timeliness	\$ 2.940 billion
Goal 2 – Optimize Trademark Quality an Timeliness	\$ 334.2 million
Goal 3 – Provide Domestic and Global Leadership to Improve IP Policy, Protection and Enforcement Worldwide	\$ 66.9 million

Fig. 2.9 shows USPTO expenditures by category in 2019²⁶



A description of the items in Fig. 2.9 can be found in Annex 1

USPTO Staff Composition

At the end of FY 2019, the USPTO work force was composed of 12,652 federal employees. Included in this number are 8,125 Utility, Plant, and Reissue patent examination staff and 171 Design examination staff; 627 Trademark examining attorney staff, and 3,729 managerial, policy, legal, administrative and technical support staff.

More information

Further information can be found on the USPTO's website:
<http://www.uspto.gov>

²⁶ Percentages may not total 100 due to rounding.