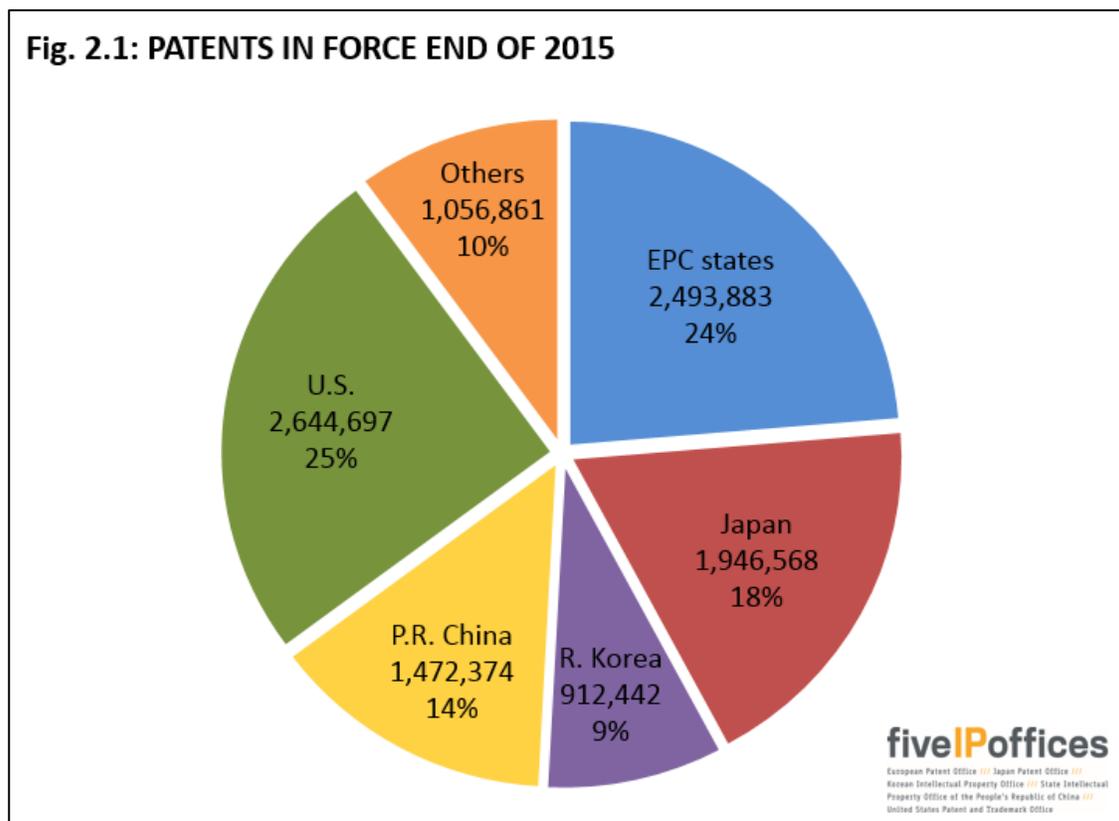


Chapter 2

THE IP5 OFFICES

As the world sees economic barriers between nations fade away, innovators want their intellectual creations to be protected concurrently in multiple major markets. It is estimated that more than 250,000 patent applications for the same inventions are filed each year in two or more of the IP5 Offices, leading to increasing backlogs. To address this issue, the IP5 Offices are working together to try to reduce the amount of duplication of work that takes place between offices for these patent applications.

Patents are used to protect inventions and their counts are recognized as a measure of innovative activity. The following figure shows the number of patents in force worldwide at the end of 2015. The data are based on worldwide patent information available from the WIPO Statistics Database¹⁰.



At the end of 2015, 90 percent of the 10.5 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.

¹⁰ www.wipo.int/ipstats/en/index.html. Data for patents in force for 2015 are missing for some countries in the WIPO data. Where available, the most recent previous year's data were substituted for missing 2015 data.

EUROPEAN PATENT OFFICE

The mission of the EPO is to support innovation, competitiveness, and economic growth across Europe through a commitment to high quality and efficient services. 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, San Marino and Turkey) 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 42 countries on the basis of a single patent application and a unitary grant procedure.

At the end of 2016, the 38 members of the underlying European Patent Organization were:

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

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

Two more states, Moldova and Morocco, had agreements to validate European patents in their territories.

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 42 countries for which European patents provide protection represent a population of around 700 million people.

Highlights of 2016

2016 was another positive year for the EPO. Applications remained stable at a high level (after earlier growing 5 percent in 2015), while the number of grants increased by 40 percent from 2015 to 2016. This further large growth in the EPO performance was a positive effect of the internal reforms

implemented as part of the Quality and Efficiency strategy that prioritized examination work and increased productivity, as well as further recruitment of examiners and increases in production.

In 2016, the EPO increased its production (search, examination and opposition) by 9 percent. The number of searches completed by the EPO was up by 3 percent to about 244,700, while the number of final actions in examination and oppositions increased to about 151,200 actions including the PCT international phase work. The number of published granted patents was significantly higher at about 96,000. There were 2,290 decisions completed by the EPO Boards of Appeal in 2016.

Launched in 2014, the Early Certainty for Search initiative aims at increasing legal certainty for applicants by providing a search report with written opinion within 6 months from filing. It also benefits the general public by enhancing the transparency of pending patent rights in Europe, providing an overview of prior art and patentability early on in the proceedings. The programme led to some significant improvements in terms of timeliness. In 2016, searches were completed on average in 5.1 months. 95 percent of the PCT international phase search reports were ready on time for publication with the application by WIPO.

In 2016, the ISO 9001 certification of the entire patent process was maintained and a surveillance audit of the EPO Quality management system reported that this is a now well embedded with no non-conformities to the operational procedures.

Every year the EPO carries out user satisfaction surveys on its search, examination and opposition services including patent administration. These surveys obtain input that is considered together with other quality-related data to enable reviews to be made of the quality and efficiency of the EPO internal processes in these areas. The result for 2016 shows 79 percent markings of good or very good for search and examination and an increase to 87 percent in markings of good or very good for patent administration. In 2016 the Intellectual Assets Magazine (IAM) survey ranked the EPO as the best of the five largest patent offices for quality. This was the fifth consecutive IAM survey in which EPO was ranked at number 1 for the quality of its products and services.

In April 2015, the Federated European Patent register was launched. From a single access point, this new service offers free legal-status information about European patents in the national post-grant phase. As of November 2017, twenty three member states are participating in the Federated Register service.

The Global Dossier now offers additional file-wrapper¹¹ access via Espacenet and the European Patent Register to PCT and Canadian applications.

The Early Certainty initiative was expanded to also cover examination and opposition, streamlining procedures to deliver patents faster. A reform of the Boards of Appeal was initiated in 2016 to increase its judicial autonomy and efficiency, helping to reduce the number of pending cases.

¹¹ The file wrapper is the collection of documents concerning an application, including the application itself, exchanges with the EPO and publicly available information about the application.

Independent assessments were carried out on social conditions, on finances and on health and safety risks, with positive results in all three areas.

Progress continued in 2016 on the development of the unitary patent product and the Unified Patent Court (UPC). To enter into force, the Agreement on the UPC needs to be ratified by at least 13 states including France, Germany and United Kingdom. Currently, 14 countries have ratified the Agreement: Austria, Belgium, Bulgaria, Denmark, Estonia, Finland, France, Italy, Lithuania, Luxembourg, Malta, Portugal, Sweden and the Netherlands. Also the UK made a commitment to ratify in due course.

Grant procedure

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 2015 and 2016. There was a further increase in demand in 2016 as represented by the overall number of patent filings.

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, in 2016 the number of PACE requests decreased by 54 percent to 10,870 (1,890 searches, 8,980 examinations). PACE was requested for less than 2 percent of the European searches and about 6 percent of the European examinations.

Table 2.1: EPO PRODUCTION INFORMATION

EPO PRODUCTION FIGURES	2015	2016	Change	% Change
Patent filings (Euro-direct & PCT international phase)	279,002	296,227	17,225	6.2%
Patent applications (Euro-direct & Euro-PCT regional phase)	160,022	159,353	-669	-0.4%
Searches carried out				
European (including PCT supplementary)	128,547	133,544	4,997	3.9%
PCT international	85,139	83,581	-1,558	-1.8%
On behalf of national Offices and other	24,391	27,564	3,173	13.0%
Total production search	238,077	244,689	6,612	2.8%
Examination - Opposition (final actions)				
European examination	113,586	137,939	24,353	21.4%
PCT Chapter II	9,363	9,180	-183	-2.0%
Oppositions	3,713	4,102	389	10.5%
Total final actions examination-opposition	126,662	151,221	24,559	19.4%
European patents granted	68,421	95,940	27,519	40.2%
Appeals settled				
Technical appeals	2,287	2,229	-58	-2.5%
Other appeals	48	61	13	27.1%
Total decisions	2,335	2,290	-45	-1.9%

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 raw data for commercial providers.

The EPO's patent databases remain the most comprehensive collection of patent literature. 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. The total number of records in this database recently passed the 100 million mark. These databases are available through services such as Espacenet from the EPO and also via numerous commercial providers. 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.

Patent Translate is the EPO's free online machine translation service that is built specifically in order to handle complex, technical patent vocabulary. Integrated into the EPO's Espacenet worldwide patent database and European publication server, it provides translations for a total of 32 different languages. In March 2017, Patent Translate for the first time made use of "neural machine translation" (NMT) technology. Since end of August, all the 32 languages are supported by NMT.

There are currently between 15,000 and 20,000 translation requests per working day on Patent Translate from around the globe.

International and European Cooperation

The EPO continues to be engaged in different types of co-operation programmes both inside and outside Europe: including the European Patent Network (EPN), Trilateral (EPO, JPO, USPTO), IP5, and bilateral agreements.

The EPO collaborates in the joint, comprehensive IP5 PPH pilot programme that started in January 2014, with the objective to promote inter alia the use of PCT work products for PPH purposes. This pilot has been extended until 5th January 2020. The project enables users with a positive patentability opinion from one office to request accelerated treatment at all or some of the other Offices, while at the same time allowing Offices to share work results on corresponding applications. The EPO also started new PPH pilots with Australia and Colombia in 2016. Similarly, in the course of 2016, the EPO laid the groundwork for the expansion of its PPH network, e.g. with Russia, Malaysia, The Philippines and the Eurasian Patent Office.

The EPO hosts the Common Citation Document (CCD) which in 2016 contained about 250 million citations. The CCD currently contains enriched citation data from EPO, China, Croatia, Japan and Switzerland search/examination reports. More countries are expected to become available in the context of the Quality at Source project, such as Estonia, Spain, Lithuania and Portugal.

Economic studies

During 2016, the EPO Chief Economist Unit collaborated with the European Union Intellectual Property Office in the publication of the second edition of the joint study *Intellectual property rights intensive industries and economic performance in the European Union*.¹² There was also further cooperation with the United Nations Environmental Programme regarding Green Patents.

EPO budget

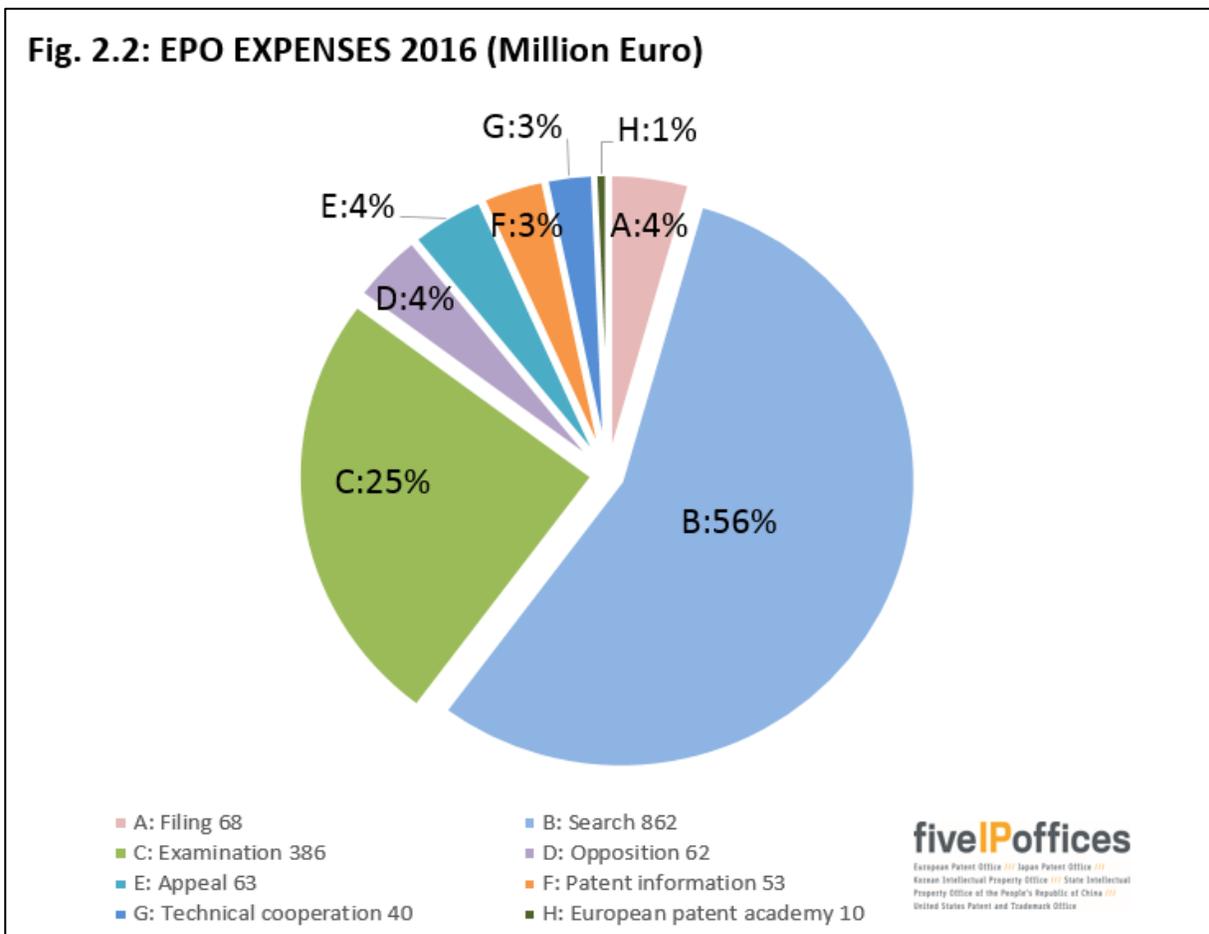
The EPO is financially autonomous and does not receive any subsidies from the Contracting States of the Organisation. Expenses are therefore mainly covered by revenue from fees paid by applicants and patentees. In 2016, the EPO budget amounted to 2.1 billion EURO.

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.

¹² See www.epo.org/news-issues/press/releases/archive/2016/20161025.html

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. 2.2 shows EPO expenses¹³, based on the International Finance Reporting Standards (IFRS) by category in 2016.



A description of the items in Fig. 2.2 can be found in Annex 1.

EPO Staff

At the end of 2016, the EPO staff totalled about 6,801 employees from 34 different European countries¹⁴. The total number of search, examination, and opposition examiners reached a record figure of 4,310. Boards of appeal are composed of 153 members.

¹³ The EPO uses the word “expenses” in accordance with the IFRS reporting approach.

¹⁴ For more details, see the 2016 EPO social report at www.epo.org/about-us/annual-reports-statistics.html

Following their recruitment, examiners are included in a training programme for three years. The staff work 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

JAPAN PATENT OFFICE

Toward the World's Fastest and Utmost Quality in Patent Examination

The JPO has been aiming to realize the “world’s fastest and utmost quality patent examination” so that once applicants obtain patents in Japan, they may also be able to smoothly obtain patents abroad on the ground that the JPO’s examination results are used as trustworthy judgements when foreign IP Offices conduct examinations. To this end, the JPO has been implementing various measures with three pillars, which are “maintaining speed,” “granting high-quality rights” and “cooperation and collaboration with foreign IP Offices.”

1) Initiatives for Timely Examination

a) Securing the Necessary Number of Examiners

In FY 2016, continuing from FY 2015, the JPO made efforts to maintain and enhance its capabilities of examination, for example, by rehiring some of the examiners whose fixed-term employment contracts expired. For the FY 2017 budget, the seats of 13 permanent examiners and 101 fixed-term examiners were requested. The JPO will continue to make efforts to ensure further improving and strengthening the patent examination system by way of securing the necessary number of patent examiners.

b) Outsourcing Preliminary Prior Art Search

The JPO has been promoting the speeding up of examination through utilizing private sector ability by outsourcing prior art searches, which examiners are primarily responsible for, to registered search organizations. As of December 2016, there are ten registered search organizations that conduct prior art searches. In FY2016, prior art searches for 161,000 applications were outsourced. For nearly two thirds of them, that is, 112,000 applications, the coverage of prior art search was expanded to foreign patent documents in addition to Japanese patent documents.

2) Further Enhancement in Examination Quality

a) Measures for Quality Management

In April 2014, the JPO announced the “Quality Policy on Patent Examination” according to the fundamental principles of quality management. In August 2014, the JPO released the “Quality Management Manual for Patent Examination” (Quality Manual) outlining JPO’s quality management and its implementation system in documents.

b) Subcommittee on Examination Quality Management

In August 2014, the JPO established the Subcommittee on Examination Quality Management. It consists of external experts under the Intellectual Property Committee of the Industrial Structure

Council, the Ministry of Economy, Trade and Industry. The Subcommittee objectively evaluates and validates the implementation of the examination quality management system at the JPO. Based on the report from the Subcommittee on Examination Quality Management, the JPO has been implementing measures in the examination quality management for patent, design and trademark

c) Improving an environment for Prior Art Search

Prior art search is one of the important pillars for maintaining and improving examination quality, and therefore, it is crucial to constantly keep on improving the environment. In order to allow users to efficiently search national and foreign patent documents, the JPO revises and reclassifies search indexes on a regular basis by making the File Index (FI)¹⁵, which is the Japanese patent classification system, updated and compliant with the latest International Patent Classification (IPC), etc. In FY2016, the JPO revised the FI scheme with 172 main groups and conducted F-term¹⁶ maintenance with 36 themes. Additionally, the JPO has newly created a national patent classification for IoT (Internet of Things)-related technologies as “broad facet¹⁷”. The applicable area of the ZIT is set as the all technical fields to enable search patent documents relating to IoT-related technologies comprehensively. The JPO further conducted CS-term¹⁸ maintenance according to the latest technical trends to allow users to efficiently search non-patent literatures relating to computer software technologies. In addition, in order to allow users to efficiently and accurately search foreign patent documents, the JPO has improved the examination environment to enable high-precision machine translation of foreign languages.

d) Revision of the Examination Guidelines for Patent and Utility Model

The JPO revised the "Examination Guidelines for Patent and Utility Model¹⁹" based on the results of deliberations in the Working Group on the Patent Examination Standards, which includes the revision concerning the use invention of foods, the revision associated with legislative amendments to the Patent Act, etc. for the purpose of accession to the Patent Law Treaty, and the revision concerning the extension of patent term. The JPO published the revised version of the Examination Guidelines in both Japanese and English in March 2016, and it became effective on April 1, 2016. The JPO also revised the "Examination Handbook for Patent and Utility Model²⁰" along with the Examination

¹⁵ FI (File Index) is the JPO's unique classification subdividing the International Patent Classification (IPC).

¹⁶ F-term (File Forming Term) is the JPO's unique classification dividing each technical field (theme) into various technical viewpoints (purpose, use, construction, materials, manufacturing method, processing operation method, control means, etc.)

¹⁷ The broad facet enables document collection (search) across the fields from the cross-sectional viewpoint, and includes superconductive technology (ZAA), environmental maintenance technology (ZAB), E-commerce technology (ZEC), as well as other term.

¹⁸ CS term (Computer Software Term) is a classification developed for searching non-patent literatures relating to computer software technologies JPO examiners can use the CS term for searching the non-patent literatures in the CSDB (Computer Software Database) in which literatures relating to computer software technologies including software manuals and non-technical magazines have been stored

¹⁹ www.jpo.go.jp/tetuzuki_e/t_tokkyo_e/1312-002_e.htm

²⁰ www.jpo.go.jp/tetuzuki_e/t_tokkyo_e/handbook_sinsa_e.htm

Guidelines. In March and September 2016, it was revised by reviewing and organizing the concepts of clarity requirements for the product-by-process claim and adding more case examples. In September 2016, 12 case examples were added regarding IoT related technology.

3) Association and Cooperation with Overseas Offices

a) Patent Prosecution Highway (PPH)

The PPH is a framework in which an application is determined to be patentable by the Office of First Filing (OFF). An office with which the first patent application was filed will be subject to accelerated examination with simple procedures, upon the request of the applicant, in the Office of Second Filing (OSF) that is in cooperation with the OFF for this program. The PPH advocated by the JPO was launched between Japan and the U.S. in July 2006. Since then, the number of PPH participating Offices has expanded to 45 as of December 2016, and the cumulative number of requests for PPH in the world reached approximately 27,137 in 2016.

b) International Examiner Exchange Program

The International Examiner Exchange Program is a measure through which examiners from different IP Offices communicate directly to build up a good work relationship with each other for the following purposes:

1. Promoting work-sharing of patent examination among the IP Offices based on mutual understanding of prior art search and examination practices,
2. Disseminating the JPO's examination practices and examination results to foreign IP Offices,
3. Harmonizing patent examination at a higher level of quality,
4. Harmonizing patent classification, and
5. Promoting the JPO's initiatives, etc.

The JPO has implemented a short term or a mid-to-long term Examiner Exchange Program with 29 IP Offices and organizations in total during the period from April 2000 to December 2016. In 2016, the JPO dispatched 66 examiners mainly to emerging economies including India and the ASEAN²¹ countries in addition to the five major IP Offices, and received 28 examiners from other IP Offices.

c) US-JP Collaborative Search Pilot Program

As a new form of patent examination cooperation, the JPO and the USPTO commenced the US-JP Collaborative Search Pilot Program (US-JP CSP), starting from August 1, 2015. The US-JP CSP is an initiative concerning inventions for which patent applications were filed in both Japan and the U.S., examiners in both the JPO and the USPTO conduct their own prior art searches and share search results along with their opinions before independently but simultaneously sending a first

²¹ Association of South East Asian Nations. The member states are Republic of Indonesia, Kingdom of Cambodia, Republic of Singapore, Kingdom of Thailand, Republic of Philippines, Brunei Darussalam, Socialist Republic of Vietnam, Malaysia, Republic of the Union of Myanmar and Lao People's Democratic Republic.

examination result to the applicant at an earlier stage. Through this initiative, it would be expected that users can predict, more accurately, the timing of examination and patent granting on their filed inventions, and that stronger and more stable patent rights can be granted to applicants based on prior art search results conducted by both the JPO and the USPTO examiners. Both the JPO and the USPTO relaxed the requirement for filing a request for the US-JP CSP, starting from August 1, 2016 and thereby, applicants have also become able to file a request for the US-JP CSP concerning their unpublished patent applications.

JPO Production Information

In Table 2.2, production figures for applications, examination, grants, appeals or trials, and PCT activities in the Japanese procedure are given for the years 2015 and 2016.

Aiming to achieve “the World’s Fastest and Utmost Quality in Patent Examination”, the JPO has been further accelerating patent examination and continuing to focus on raising the quality of patent examination. As a result, the JPO completed 246,879 First Actions and 251,877 Final Actions in 2016. In addition, during 2016, the JPO granted 203,087 patents.

Table 2.2: JPO PRODUCTION INFORMATION

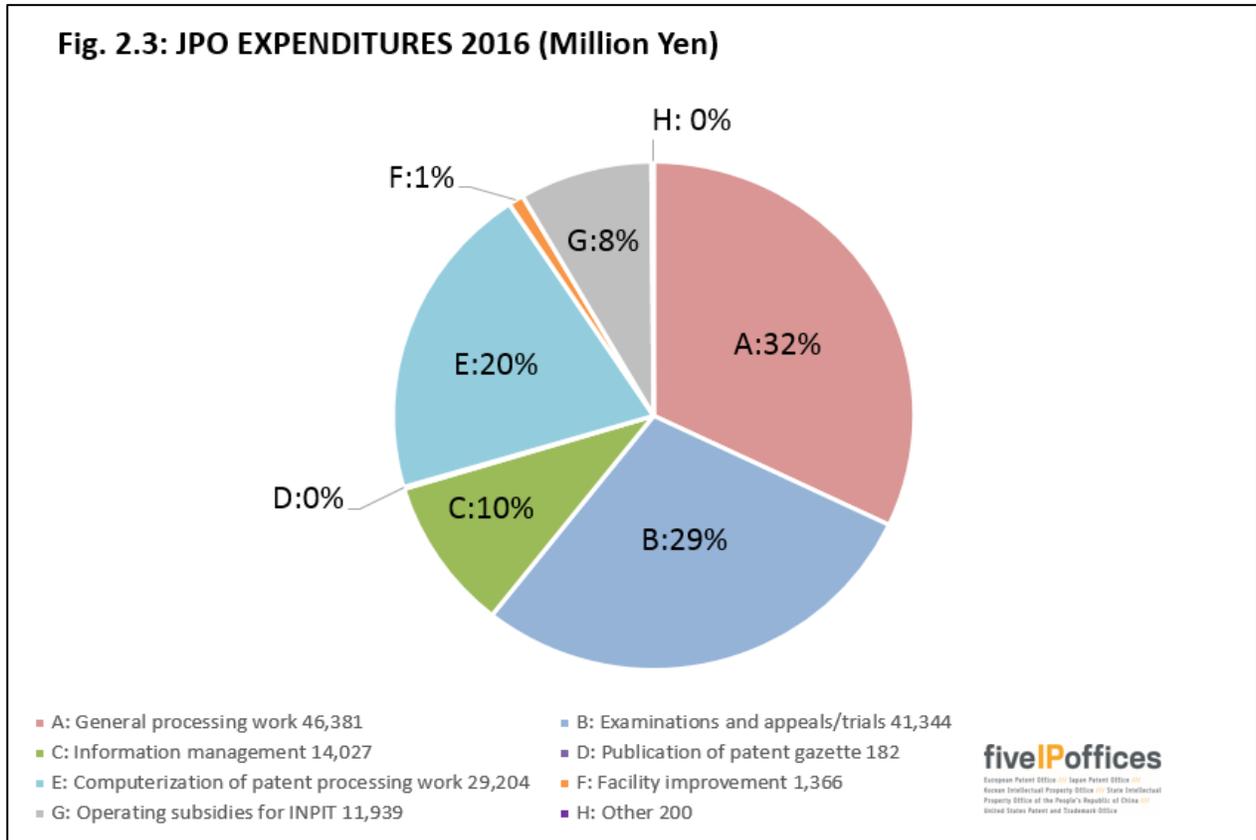
JPO PRODUCTION FIGURES	2015	2016	Change	% Change
Applications filed (by Origin of Application)				
Domestic	258,839	260,244	1,405	0.5%
Foreign	59,882	58,137	-1,745	-2.9%
Total	318,721	318,381	-340	-0.1%
Applications filed (by Types of Application)				
Divisional Applications ²²	28,242	29,717	1,475	5.2%
Converted Applications ²³	91	104	13	14.3%
Regular Applications	290,388	288,560	-1,828	-0.6%
Total	318,721	318,381	-340	-0.1%
Examination				
Requests	241,412	240,455	-957	-0.4%
First Actions	235,809	246,879	11,070	4.7%
Final Actions	241,904	251,877	9,973	4.1%
Grants				
Domestic	146,749	160,643	13,894	9.5%
Foreign	42,609	42,444	-165	-0.4%
Total	189,358	203,087	13,729	7.3%
Appeals/Trials				
Demand for Appeal against refusal	21,860	18,898	-2,962	-13.5%
Demand for Trial for invalidation	231	140	-91	-39.4%
PCT activities				
International searches	43,571	44,321	750	1.7%
International preliminary examinations	2,515	2,021	-494	-19.6%

²² 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.

²³ 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. 2.3 shows JPO expenditures by category in 2016.



A description of the items in Fig. 2.3 can be found in Annex 1.

JPO Staff Composition

As of the end of FY 2016, the total number of staff at the JPO was 2,804. This includes 496 fixed-term patent examiners.

Examiners: Patent / Utility model:	1,702
Design:	48
Trademark:	137
Appeal examiners:	383
General staff:	534
Total:	2,804

More information

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

www.ipo.go.jp

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 and utilization. On the international front, the KIPO strengthened its cooperation with foreign IP offices and other international organizations it regularly interacts with.

Examination Service

In 2016, KIPO maintained its reduced first office action pendency while policy focus remained on examination quality. To ensure each examiner was allocated with an adequate number of examination cases, KIPO increased outsourcing of prior art searches to ease examination work load. KIPO also promoted diverse forms of collaborative examinations by introducing consultative examinations among the examiners and public examinations in which outside experts were invited to partake in the necessary examinations. In line with the goal to maintain the current first office action pendency, the annual average first office action pendency period in 2016 was recorded at 10.6 months for patent and utility model rights, 4.8 months for trademarks and 4.7 months for design rights.

1) Further outsourcing of prior art searches

To maintain the level of first office action pendency, a total of 86,811 cases of patent and utility models applications, which was 47.2% of all examination cases handled in 2016, were subject to prior art searches. A total of 85,082 cases of trademark applications, which was 39.6% of all trademark applications submitted in 2016, and 30,061 cases of design applications, that is, 43.4% of all design applications submitted in 2016, were sent to independent agencies for prior trademark and design searches.

2) Consultative examination among examiners

Consultative examination among examiners are conducted to detect any missing holes in the prior art searches carried out by an examiner in charge of a case. Also, for cases involving convergent technologies, examiners specializing in different technology fields consulted each other for best examination results.

3) Crowdsourcing examination

Crowdsourcing examinations are being performed in cases where it is difficult to search the prior art of the concerned technical field because an overwhelming amount of field data exists. Industry specialists, academics and researchers joined hands to set up an examination consultative board for

each technology sector. The examiner in charge presents the application to the consultative board and then field experts provide opinions and advice on technical reference materials.

In Table 2.3, production figures for applications, examination, grants and PCT activities of patents are given for the years 2015 and 2016.

Table 2.3: KIPO PRODUCTION INFORMATION

KIPO PRODUCTION FIGURES	2015	2016	Change	% Change
Applications filed				
Domestic	167,273	163,423	-3,850	-2.3%
Foreign	46,421	45,407	-1,014	-2.2%
Total	213,694	208,830	-4,864	-2.3%
Applications filed (by Types Application)				
Divisional Applications ²⁴	7,586	10,030	2,444	32.2%
Converted Applications ²⁵	62	56	-6	-9.7%
Others	206,046	198,744	-7,302	-3.5%
Total	213,694	208,830	-4,864	-2.3%
Examination				
Requests	176,346	172,948	-3,398	-1.9%
First actions	164,773	174,792	10,019	6.1%
Final actions	149,620	172,053	22,433	15.0%
Grants				
Domestic	76,318	82,400	6,082	8.0%
Foreign	25,555	26,475	920	3.6%
Total	101,873	108,875	7,002	6.9%
Appeals/Trials				
	9,112	6,796	-2,316	-25.4%
Request for Appeal against refusal	6,227	5,616	-611	-9.8%
Request for Trial for invalidation	2,885	1,180	-1,705	-59.1%
PCT activities				
International searches	27,958	28,107	49	0.4%
International preliminary examinations	232	209	-23	-9.9%

²⁴ A divisional application is filed to divide a patent application (known as the parent application) into two or more applications.

²⁵ A patent applicant may convert an application for utility model registration to a patent application within the scope of matters stated in the description or drawing initially attached to the patent application.

Promoting the Creation and Utilization of IP

1) Regional IP Centers (RIPC)

To promote awareness of the importance of IPRs and to encourage more inventions, creation as well as utilization of IPRs at the regional level, KIPO operates 29 regional IP Centers nationwide.

The regional IP Centers are run with regional and central government support and serve as an IPR support channel. In 2016 alone, 6,856 cases of domestic and international IPR registrations, along with 208 cases of customized patent maps, and 55 cases of brand development in non-English speaking markets, were supported through the regional IP Centers.

The IP Centers in 8 major provinces and cities (Gangwon, Gwangju, Daegu, Busan, Incheon, Jeonju, Jeju and Cheonan) operate an 'IP creation zone' where a variety of IPR training is conducted and outstanding ideas are identified and cultivated. In 2016, 980 people received training at the Centers, 606 ideas were identified and ultimately 181 cases became registered IPRs.

The IP talent sharing project invites patent lawyers, designers and university students to volunteer their IP related talents to society. In 2016, the IP talent sharing project became a nationwide project, bringing together and partnering up 259 talent volunteers with 149 recipients in 216 talent sharing projects. 83 cases of IP consultation, 45 cases of design development support, 33 cases of brand development support, 20 cases of prior art searches, 19 cases of IP training, and 16 other cases (i.e. writing up specifications) were performed.

2) IP-DESK

KIPO operates IP-DESKs to protect and further promote IPRs belonging to Korean companies doing business overseas. Recently, additional IP-DESKs were added in areas where Korean companies are frequently embroiled in IPR disputes. In 2014, KIPO set up an IP-DESK in Frankfurt, Germany and an IP-DESK in Tokyo, Japan was then added in 2015. In 2016, KIPO set up an IP-DESK in Xi'an, China, which is an economic hub of western China. As of December 2016, KIPO were operating a total of 12 IP-DESKs in 6 countries.

IP-DESKs provide Korean companies, whether active in or preparing to enter foreign markets, with consultations on registering and protecting IPRs and resolving IPR disputes. In addition, KIPO hold seminars to share information on how to prevent infringements. KIPO also held seminars to help IPR-related government officials of China, Thailand, and Vietnam to enhance their capabilities of enforcing protection against counterfeit goods. And KIPO is making efforts to develop cooperative channels with foreign IPR related organizations in order to protect the IPRs of Korean companies operating overseas.

Global IP Cooperation

With KIPO's examination capacities and IP system management experience, KIPO continues to share its IP administrative expertise with other countries. KIPO and the Turkish Patent Institute worked together on a consulting project for Turkey to obtain approval as a new PCT international searching authority. In another consulting project, KIPO has agreed to work with the United Arab Emirates (UAE) Ministry of Economy to set up an IP organization and IP legal system in the UAE.

KIPO also continues to expand examination cooperation projects with foreign IP authorities. The number of countries carrying out the PPH with Korea has increased to 26 countries in 2016 from 24 in 2015.

A new examination cooperation program, Collaborative Search Program (CSP), which first began with the US in 2015, was launched with China in December 2016. In the past, examination cooperation programs referred to one patent office referencing prior art search results already performed by another patent office. The CSP takes this one step further and enables two patent offices to start the examination process by sharing relevant prior art search information. This induces examination results to be more consistent across different countries.

As a part of Official Development Assistance (ODA) activities, KIPO developed a patent automation system for the African Regional Intellectual Property Organization (ARIPO). The system, which began operation in April 2015, allows for a paperless work process, including electronic services for application submission, fee payments, and patent information searches.

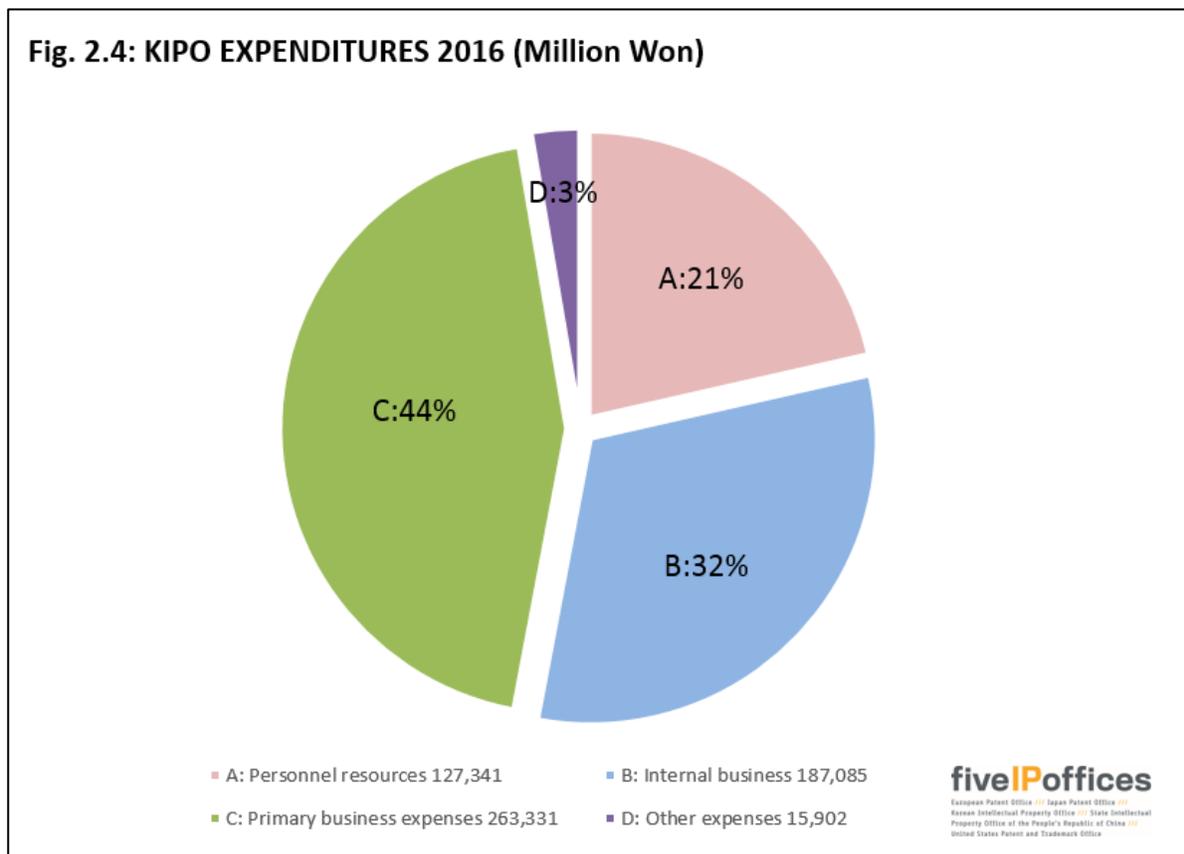
In 2015, Mongolia and Myanmar were selected to receive IP informatization assistance. As a result, KIPO conducted consulting services to diagnose their current IT infrastructures and further enrich their patent automation systems.

In February 2016, KIPO signed a Memorandum of Understanding (MOU) with the UAE agreeing to cooperate on constructing the patent information system of the UAE, and in August 2016, KIPO dispatched an IP information system specialist. Also, KIPO and the UAE agreed to pursue administrative support for the next two years.

Also, in cooperation with ODA related organizations, KIPO shared its experiences and know-how with the Kazakhstan IP office. Concurrently, KIPO and the Kazakhstan IP office signed an MOU on information cooperation and conducted consultations about establishing and enhancing patent administrative information system for the Kazakhstan IP office in 2016.

KIPO Budget

Fig. 2.4 shows KIPO expenditures by category in 2016.



A description of the items in Fig. 2.4 can be found in Annex 1.

KIPO Staff Composition

At the end of 2016, the KIPO had a total staff 1,592. The breakdown is as follows.

Examiners	
Patents and Utility Model	836
Designs and Trademarks	162
Appeal examiners	106
Other staff	488
Total	1,592

More information

Further information can be found on KIPO's Homepage:

www.kipo.go.kr

STATE INTELLECTUAL PROPERTY OFFICE OF THE P.R. CHINA

Main Responsibilities

Organizing and coordinating IPR protection work nationwide and improving the construction of IPR protection system; standardizing the basic orders of patent administration; drawing up the policies of foreign-related IP work; working out the development programs for the patent work nationwide, drafting patent working plans, examining and approving special working plans, taking up the responsibility of the construction of the national public service system of patent information, promoting the spread and utilization of patent information with related departments and undertaking the work of patent statistics; laying down the criteria of affirming the exclusive rights of patents and integrated circuit layout designs and appointing organizations to manage the work of right affirmation; publicizing and popularizing patent laws, regulations and policies; and drafting plans of IP-related education and training according to regulations.

Statistical Overview of 2016

1) Patent Examination Status

In accordance with the Patent Law of the People's Republic of China, the SIPO 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 Received in 2016

In 2016, the SIPO received nearly 3.47 million applications for the three kinds of patents. Among these applications, there were 1.34 million applications for invention patents, an increase of 21 percent compared to the previous year, 1.48 million applications for utility model patents and 0.65 million applications for design patents.

3) Patents Granted in 2016

In 2016, the SIPO granted 0.4 million patents for invention, with an increase of 12.5% compared to the previous year, 0.9 million patents for utility model and 0.45 million patents for industrial design.

In Table 2.4, production figures for applications, examination, grants, reexamination and invalidation, PCT activities are given for the years 2015 and 2016. The data in table 2.4 concentrate only on patents for invention.

Table 2.4: SIPO PRODUCTION INFORMATION

SIPO PRODUCTION FIGURES	2015	2016	Change	% Change
Applications filed				
Domestic	968,251	1,204,981	236,730	24.4%
Foreign	133,613	133,522	-91	-0.1%
Total	1,101,864	1,338,503	236,639	21.5%
Examination				
First actions	661,265	681,931	20,666	3.1%
Final actions	557,625	675,341	117,716	21.1%
Grants				
Domestic	263,436	302,136	38,700	14.7%
Foreign	95,880	102,072	6,192	6.5%
Total	359,316	404,208	44,892	12.5%
Re-examination and invalidation				
Re-examination requests	12,678	13,107	429	3.4%
Invalidation requests	3,724	3,969	245	6.6%
PCT activities				
International searches	27,925	39,775	11,850	42.4%
International preliminary examinations	436	427	-9	-2.1%

4) Examination Period

The SIPO 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 2016, the examination period for invention patents remained stable at 22.0 months.

Informatization and Documentation

In order to support the national technological innovation, the national economic growth and the patent examination, the SIPO 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) Building Information Resources for Patent Documentation

With 30 years efforts, the SIPO has established a rich pool of information resources including Patent Documentation Library and Non-patent Document Library. By the end of December 2016, SIPO had more than 523 kinds of patent documentation; 148 non-patent literature databases, most of which were internet online databases, covering more than 20,000 periodicals in full-text data base, over 2,300,000 books, 6,400,000 academic dissertations, 90,000 conference papers, and more than 200,000 standard documents. At present, the SIPO has become one of the patent institutions with the richest patent information resources in the world. In recent years, the SIPO also steadily carried

forward the introduction and implement of the CPC system. From 2016, the classification of IPC and CPC was conducted for national new invention applications in all fields, and 7 amendments proposals were successfully set up in the WIPO, with one proposal passed by the WIPO.

2) Information Construction

In 2016, the Chinese Electronic Patent Examination System (referred to as MEN System) upgraded the electronic system hardware, enhanced patent application service ability, realized the fixed years for annual patent fee reduction extending from 3 years to 6 years and provided more convenience for applicants. The Patent Search and Service System (referred to as MSM System) was further improved, the searching data were further expanded, the average responding rate of critical searching service operation interface was increased more than 1.8 times and the examiners' searching ability and efficiency were steadily enhanced. The Chinese Electronic Patent Cooperation Treaty System (referred to as MCEPCTM System) introduced emergency system, realizing uninterruptedly accepting PCT electronic applications.

The construction work of three kinds of intelligent examination systems was started. The China Patent Acceptance and Preliminary Examination System was established, realizing automatic examination for preliminary stage cases, automatic sending office actions and newly adding online handling mode for patent application. The third phase of Design Intelligent Searching System was put into practice. A new Office Automation System was put into practice. The system construction of our office comprehensive training management, planning and budgeting management, and project library management was finished.

The SIPO continued to deepen international informatization cooperation. The data exchange work with 26 nations, regions and organizations was broadly developed, satisfying the requirements of patent examination and public service. Bilateral and multilateral communications were deeply developed with 21 countries, regions and organizations, and external popularization for our office informatization system was promoted. IP5 Global Dossier Legal Status Project and Industrial Design 5 (ID5) Priority Exchange Program both led by our office were steadily promoted. The strategic partnership with the European Patent Office was consolidated. The Patent Searching and Analysis System opened advanced user accounts for 23 countries and regions (5 newly added).

International Cooperation

In 2016, the SIPO participated actively in creating a new situation of IP international cooperation, kept on deepening friendly cooperation with the WIPO and Intellectual property institutions from various countries and districts, continuously expanding the new partnership. 36 various types of multi, bilateral cooperation agreements and joint declarations were signed, producing fruitful work in IP international cooperation.

Under the witness of the heads of the two countries, Commissioner Shen Changyu representing Chinese government signed Protection Cooperation Agreement between China and Uzbekistan. Premier Li Keqiang witnessed the signature of the cooperation agreement in IP field between China

and Kyrgyzstan.

In Beijing, the SIPO held the Belt and Road high level IP conference, cooperating with the State Administration for Industry and Commerce (SAIC), State Copyright Bureau, Ministry of Commerce, Beijing Municipal People's Government and the WIPO. This was the first high level IP conference for the countries under the proposal of "the Belt and Road" Initiative raised in 2013, opening a new chapter of intellectual property cooperation in the area.

The SIPO actively participated in Sino-U.S. dialogue such as Sino-U.S. Strategic and Economic Dialogue, Sino-U.S. Innovation Dialogue, Sino-U.S. Joint Commission on Commerce and Trade, actively took part in China Europe IP Dialogue, Sino-UK, Sino-France Economic and Financial Dialogue on Policy Outcome Consultation, Intergovernmental Committee of China and Italy, and attended the mechanism meetings and consultation between Sino-U.S., Sino-Europe, Sino-Switzerland, Sino-Russia, Sino-Brazil IP Working Conference and so on. The SIPO also took part in negotiations on related intellectual property chapters in the China-Japan-South Korea Free Trade Area and Regional Comprehensive Economic Partnership (RCEP), China-Georgia Free Trade Agreement and China-EU Economic and Trade Cooperation Agreement.

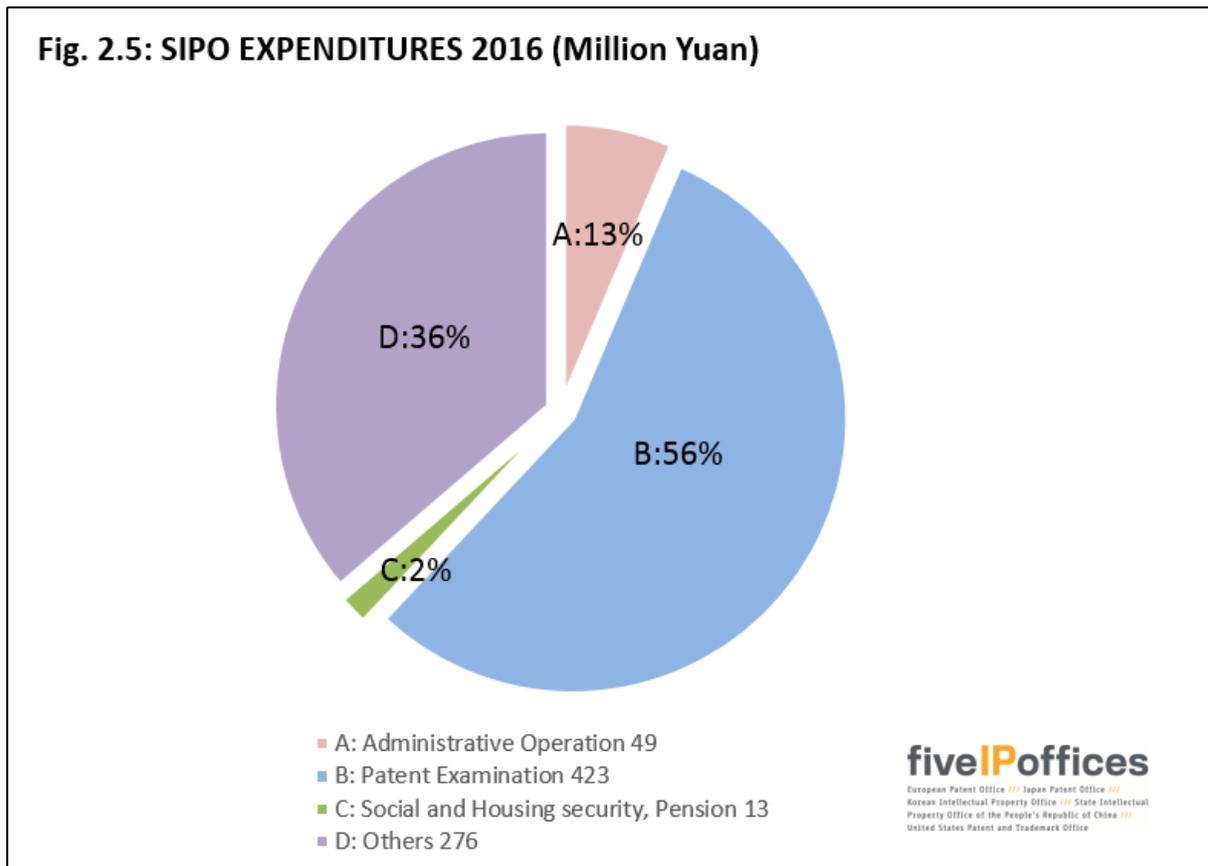
The SIPO kept on deepening friendly cooperation with the WIPO, and 23 high level meetings were held, in which in-depth views on intellectual property rights were exchanged. Training classes for developing countries of the WIPO in China were held for the first time, and the WIPO Chinese platform for distance education was started. The SIPO communicated with the WIPO in many fields, supporting the construction of the SIPO international talent team. The SIPO continued to contribute to the WIPO China Trust Fund, further increasing in the amount, effectively cooperating and promoting the development work under the framework of the WIPO.

The SIPO continued in-depth participation in the conferences of the IP5 and the Industrial Designs 5 (ID5) Offices Cooperation, including China, the United States, Europe, Japan and Korea and played an active role. In 2016, the Annual ID5 Offices Cooperation Conference was successfully held in Beijing. Commissioner Shen Changyu attended the meeting, and signed ID5 Joint Statement of Cooperation in 2016 with the other four Offices. The IP cooperation in China, Japan and Korea, BRICS countries, China-ASEAN, and China Mongolia and Russia was reinforced and developed.

Bilateral cooperation has achieved new results. The traditional friendship between China and the European Patent Office was further consolidated, and the strategic partnership continued to deepen. Cooperation with the European Intellectual Property Office proceeded smoothly. The friendly cooperative relations in the IP field of all nations were further enhanced, especially deepening the cooperation and communication with the countries along "the Belt and Road" Commissioner Talks were held with IP institutions of the EPO, European Intellectual Property Office, Eurasian Patent Office, the UK, France, Germany, Denmark, Switzerland, Poland, Russia, Czech Republic, Latvia, Albania, Republic of Lithuania, Moldova, Georgia, Japan, Korea, Turkey, Kyrgyzstan, Uzbekistan, Mongolia, Singapore, Pakistan, Canada, Peru, Chile, Morocco, etc.

SIPO Budget

Fig. 2.5 shows SIPO expenditures by category in 2016.



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

SIPO Staff Composition

The SIPO has 7 functional departments (vice bureau level). So far it has 15 subordinate units, 2 enterprises and 3 social organizations.

The Patent Office is a public institution directly under the SIPO, which was responsible for receiving and examining patent applications, granting patents according to law and handling other administrative matters entrusted by the SIPO. Seven Patent Examination Cooperation Centers shared the responsibility of some patent examination work (the Beijing Center was founded in 2001; the Jiangsu Center and the Guangdong Center were founded in 2011; the Henan Center was founded in 2012; while the Hubei Center, the Tianjin Center and the Sichuan Center were founded in 2013.)

The Patent Re-examination Board was moved from the internal department of the Patent Office to the department directly under the SIPO in 2003. It was mainly responsible for examining re-examination requests against patent rejection and Integrated Circuits (IC) layout design registration

application decision from the SIPO, processing patent re-examination and invalidation requests and examining revocation cases regarding IC layout designs. By the end of December, 2016, the SIPO had 14,770 registered staff, among which more than 10,000 were examination related employees.

More information

Further information can be found on the SIPO's Homepage:
www.sipo.gov.cn/

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 in order 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 major business lines, Patents and Trademarks.

The USPTO’s Strategic Plan for Fiscal Years 2014-2018 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 plan is designed to continue strengthening the capacity of the USPTO, improve the quality of issued patents and registered trademarks and shorten the time it takes to get a patent. This plan will continue to enhance and accelerate the innovation and job growth needed to transform the U.S. economy, foster competitiveness, and drive the creation and growth of U.S. businesses. 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, Protection, and Enforcement Worldwide.
- Management Goal: Achieve Organizational Excellence.

Agency News

FY 2016 marked the fifth anniversary of the America Invents Act (AIA). Since then, the USPTO has opened offices in Detroit, Denver, Dallas, and Silicon Valley, fulfilling the AIA requirement to establish a nationwide presence. The USPTO collaborated with bar organizations and law schools across the country to provide pro bono patent assistance for under-resourced independent inventors and small businesses in all fifty states, consistent with the AIA requirement for nationwide pro bono coverage. The AIA introduced a provision under which an applicant can secure an expedited review of a patent application for a modest fee. The USPTO completes these Track One examinations in less than a year, and the number of applicants choosing Track One has nearly doubled in the past five years. The AIA established the Patent Trial and Appeal Board and new post-grant proceedings to challenge patent validity. The Board has received more than 5,000 petitions over the last four years, three times more than anticipated. It has also met every statutory deadline for reaching a decision in these cases, either on institution or final resolution.

In FY 2016 great strides were made in reducing the unexamined patent application backlog, decreasing the backlog from 553,221 at the end of FY 2015 to 537,655 at the end of FY 2016, which represents a decline of 2.8 percent below FY 2015. Between the end of FY 2015 and the end of FY 2016, average first action pendency decreased by 1.1 months and total pendency by 1.3 months.

The USPTO is going further with publicly available open data. At the open data portal (developer.uspto.gov) bulk data can be easily downloaded and libraries of visualizations, and Application Programming Interfaces are accessible. This portal is created to improve the discoverability, accessibility, and usability of public patent and trademark data to harness the power of data. The Developer Hub component establishes a shareable, and "social" platform, for anyone in this community to showcase unique ways they are using the data, combining it with other data sets, such as economic and geographic data. Through this forum users can leverage the power of the crowd to unlock the data to answer questions about trends in technology and innovation but also to provide input on other types of data sets the USPTO should release.

As part of the USPTO's continued commitment to fiscal responsibility, financial prudence and operational efficiency the agency reviews fee levels on at least a biennial basis. On January 14, 2017, the Trademark Fee Setting and Adjusting Final Rule took effect. The fee changes had three objectives: better align fees with costs, ensure the integrity of the register, and promote the efficiency of the process. The fees for applications, processing fees, and Madrid protocol fees when conducted on paper have all been increased to encourage electronic filing and better cover the higher cost of processing work submitted on paper. Extension of Time, Petitions to the Director, and Dividing an Application fees were increased to encourage timeliness. Trademark Trial and Appeal fees were increased and Extension of Time to Oppose fees were established to improve efficiency.

At the end of FY 2016, 10,567 employees agency-wide were working from home at least one day per week, translating to 83 percent of the USPTO workforce. This is an increase of 469 teleworking employees from last fiscal year. Including situational teleworkers, the USPTO had a total of 10,879

teleworkers at the end of FY 2016. Between FY 2015 and FY 2016, the percentage of positions eligible to telework increased from 93 percent to 94 percent (200 positions eligible to telework).

International Cooperation and Work Sharing

The USPTO is continuing application-level worksharing with other IP offices. The USPTO has agreed to the provisions of the Global PPH system and is sharing work and accelerating examination on allowed applications through the Global PPH system or bilateral PPH agreements with thirty different IP Offices. In addition, the USPTO continues to administer two bilateral collaborative search pilots, one with the JPO and a second with the KIPO, to determine whether collaborative search and its evaluation to commonly filed claims prior to final determination can improve the examination process and provide more consistent results across offices. The pilots will determine whether the offices can control, to a sufficient extent, the sharing of search information between offices such that applications are not receiving an unnecessary delay in examination.

At the start of FY 2016, the USPTO signed a Memorandum of Understanding (MOU) with the EPO to advance the international adoption of the Cooperative Classification Patent (CPC) system while improving collaboration between the two offices. The USPTO signed an MOU with the Intellectual Property Office of Singapore (IPOS) which will increase international prior art searches under the PCT. IPOS now acts as an available ISA and IPEA for certain patent applications filed with the USPTO under PCT. The USPTO signed an MOU with the Intellectual Property Office of the Philippines (IPOPIL) to expand existing collaboration between the two offices and strengthen cooperation by sharing best practices and undertaking joint activities to improve operations and harmonization of patent application processing. At the end of FY 2016, the USPTO and Israel Patent Office (ILPO) signed a bilateral agreement for ILPO's participation in the CPC system.

USPTO provides educational and training programs for domestic and foreign government officials, small and medium-sized enterprises (SMEs), universities, and other sectors of the public. In FY 2016, the Office conducted a total of 143 such training programs. IP capacity-building programs were offered throughout the year to patent, trademark, and copyright officials; judges; prosecutors; police; customs officials; foreign policymakers; examiners; and IP rights owners and users, as well as to college students and faculty in IP-related programs of study. In FY 2016 training was provided to a total of 7,073 individuals, including 4,975 foreign government officials, 585 members of academic groups, and 1,513 individuals associated with U.S. SMEs. Participants from 114 countries participated during FY 2016. The slate of courses in FY 2016 was reduced from prior years, in part, due to global or cultural circumstances, which changed the participant count for FY 2016. Going forward, the USPTO's education of foreign government officials will increasingly leverage the Office's e-Learning initiative to engage participants throughout the year in a nimble and modern "blended learning strategy." The USPTO hosts distance-learning modules available in five different languages and covering six different areas of IP protection. They have received more than 56,000 unique visitors since they were first made available online in FY 2010.

In coordination with various U.S. trading partners, the USPTO in FY 2016 provided a series of workshops to combat trademark counterfeiting and copyright piracy. Participants included customs

officials, police, prosecutors, judges, and officials from IP Offices in Southeast Asia, Central America, Europe, the Middle East, and South and Central Asia. In addition, the USPTO conducted a workshop on the protection and enforcement of trade secrets for officials from Southeast Asian countries.

In December 2015, the USPTO hosted the inaugural meeting of the ID5 (Industrial Design Five) Forum, bringing together for the first time representatives of the world's five largest industrial design offices. This group discussed ways of improving consistency in industrial design registration policies, promoting interoperable procedural frameworks, and better protecting emerging designs, such as graphical user interfaces, animations, and other new technology designs.

Table 2.5 includes production figures for application filings, PCT searches and examinations, first actions, grants, applications in appeal and interference, and patent cases in litigation for the years 2015 and 2016.

Table 2.5: USPTO PRODUCTION INFORMATION

USPTO Production Information	2015	2016	Change	% Change
Applications filed				
Utility(patents for invention) ²⁶	589,410	605,571	16,161	2.7%
Domestic	288,335	295,327	6,992	2.4%
Foreign	301,075	310,244	9,169	3.0%
Plant	1,140	1,177	37	3.2%
Reissue	1,049	1,087	38	3.6%
Total Utility, Plant, Reissue	591,599	607,835	16,236	2.7%
Design	39,097	42,571	3,474	8.9%
Provisional	170,371	166,565	-3,806	-2.2%
Total	801,067	816,971	15,904	2.0%
Requests for Continued Examination(RCE) ²⁷	169,430	191,820	22,390	13.2%
PCT Chapter I Searches	21,740	21,360	-380	-1.7%
PCT Chapter II Examination	1,610	1,211	-399	-24.8%
First actions(includes utility, plant, and reissue applications)	633,336	568,923	-61,413	-10.2%
Grants (total)	298,407	303,049	4,642	1.6%
U.S. residents	140,969	143,723	2,754	2.0%
Foreign	157,438	159,326	1,888	1.2%
Japan	52,409	49,800	-2,609	-5.0%
EPC states	47,529	47,910	381	0.8%
S. Korea	17,924	19,494	2,346	8.8%
P.R. China	8,116	10,462	1,570	28.9%
Others	31,460	31,660	200	0.6%
Applications in appeal and interference proceedings				
Ex-parte Cases Received	8,055	9,059	1,004	12.5%
Ex-parte Cases Disposed	12,289	15,034	2,745	22.3%
Inter-partes Cases Contested	234	64	-170	-72.6%
Inter-partes Cases Disposed	222	157	-65	-29.3%
Patent Cases in Litigation				
Cases filed	374	650	276	73.8%
Cases disposed	320	451	131	40.9%
Pending cases (end of calendar year)	373	540	167	44.8%

²⁶ Unless otherwise noted, the USPTO statistics presented elsewhere in this report are limited to utility patent applications and grants.

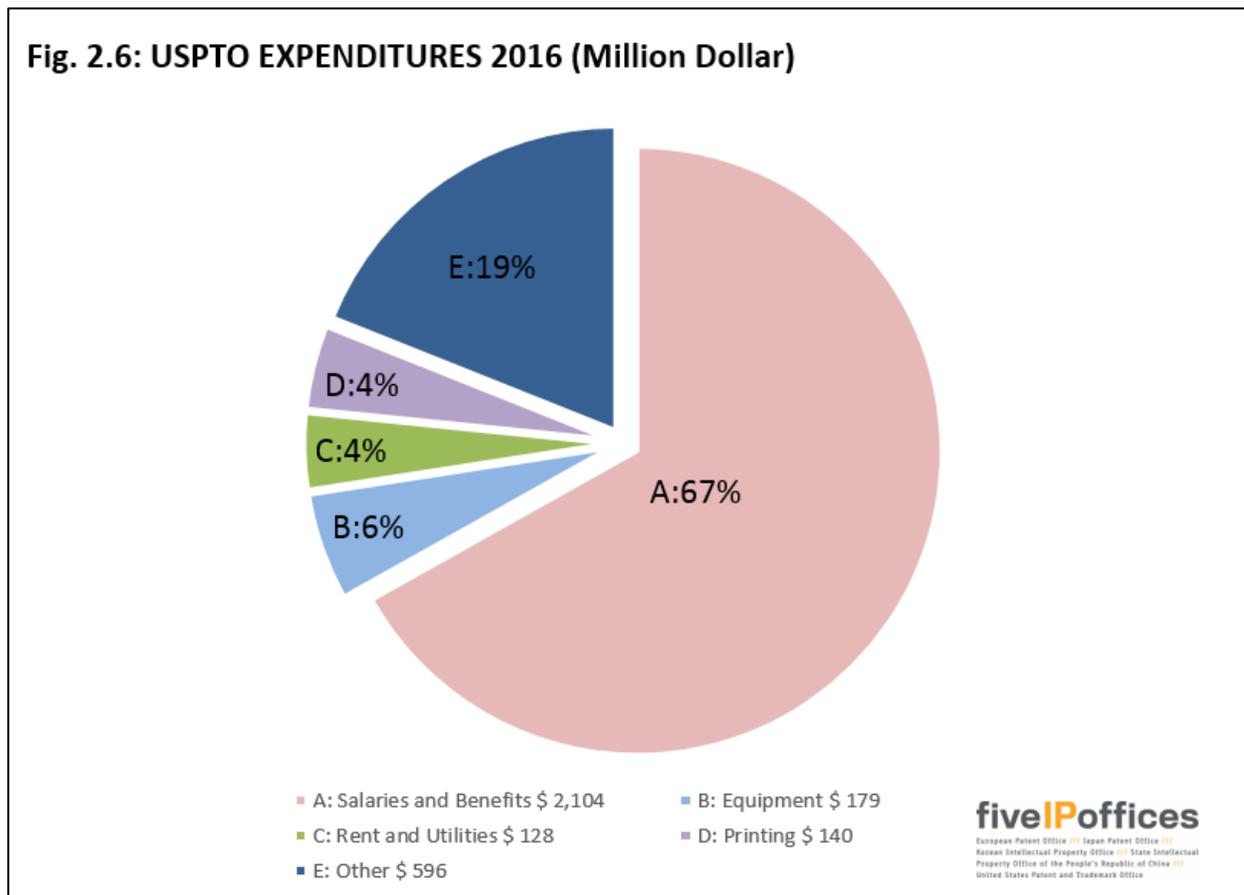
²⁷ A Request for Continued Examination is a USPTO procedure under which an applicant may obtain continued examination of an application by filing a submission and paying a specified fee, even if the application is under a final rejection, appeal, or a notice of allowance.

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 2016, USPTO expenditures totalled \$3,146.6 million. Agency-wide, 19.9 percent of expenditures were allocated to IT security and associated IT costs.

Goal 1 - Optimize Patent Quality and Timeliness	\$2,828.6 million
Goal 2 - Optimize Trademark Quality and Timeliness	\$261.3 million
Goal 3 - Provide Domestic and Global Leadership to Improve IP Policy, Protection and Enforcement Worldwide	\$56.7 million

Fig. 2.6 shows USPTO expenditures by category in 2016.



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

USPTO Staff Composition

At the end of FY 2016, the USPTO work force was composed of 12,725 federal employees. Included in this number are 8,160 Utility, Plant, and Reissue patent examination staff; 191 Design examination staff; 570 Trademark examiner attorney staff, and 3,804 managerial, administrative and technical support staff.

More information

Further information can be found on the USPTO's website:

www.uspto.gov