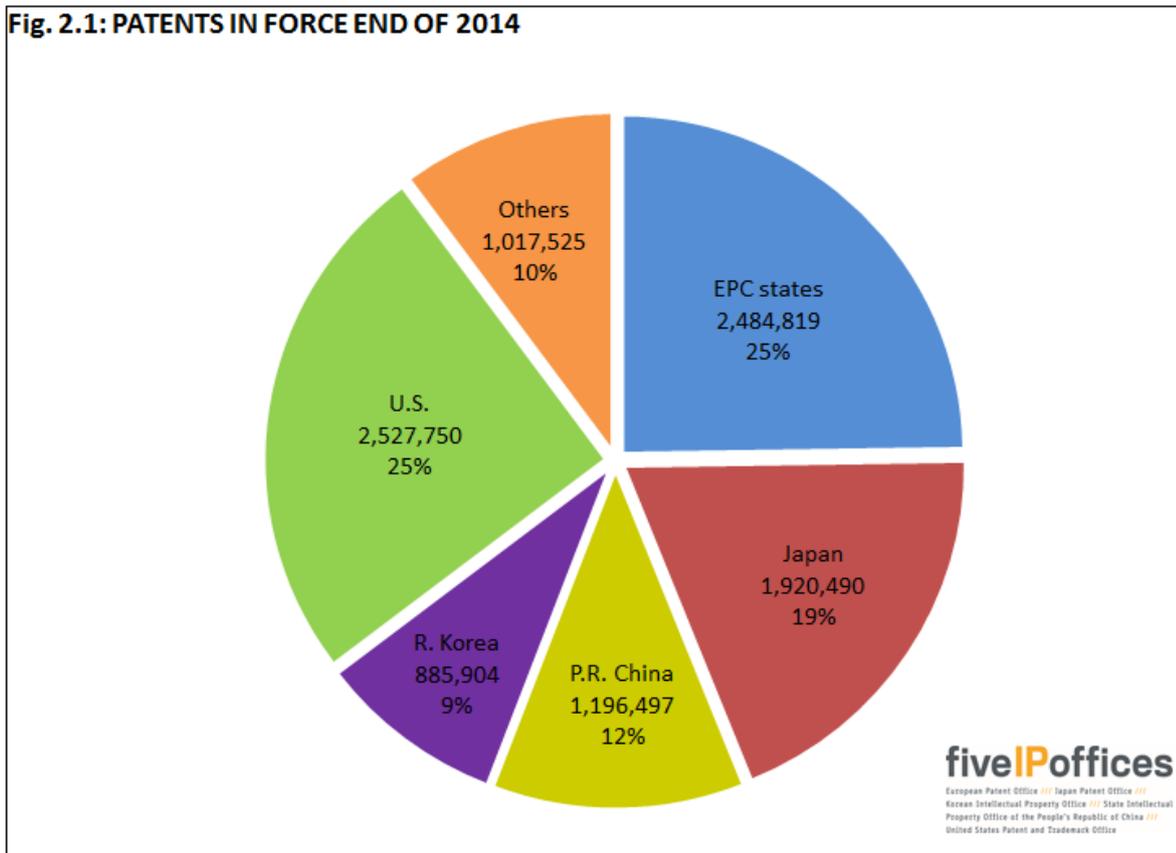


## Chapter 2

# 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 believed 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. Fig. 2.1 shows the number of patents in force worldwide at the end of 2014. The data are based on the most recent worldwide patent information available from the WIPO Statistics Database<sup>11</sup>.



At the end of 2014, 90 percent of the 10.0 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.

<sup>11</sup> [www.wipo.int/ipstats/en/statistics/patents/](http://www.wipo.int/ipstats/en/statistics/patents/). Data for patents in force for 2014 are missing for some countries in the WIPO data. Where available, the most recent previous year's data were substituted for missing 2014 data.

The Patent Prosecution Highway (PPH) leverages acceleration procedures available at each office, while enabling participating offices to share available work results. It is a framework in which an application found to be patentable/allowable by the Office of Earlier Examination (an office which has examined a patent application first) will be subject to accelerated examination with simple procedures, upon the request of the applicant, in a participating Office of Later Examination (an office which will then process the corresponding application). The advantages of utilising the PPH include shortening the periods of first action and final disposition, reducing the number of office actions, and raising the rate of patent grants. Along with these, there are cost reduction effects concerning handling intermediate documents. Above all the PPH allows applicants to access acceleration prosecution before a given office under less stringent conditions, on the basis of a patentability assessment made by another office. The number of PPH participating offices has expanded to 36 and the cumulative number of requests for PPH in the world reached over 100 thousand by the end of December 2015<sup>12</sup>.

The IP5 and “Global” PPH are the two most significant multilateral PPH frameworks that were both launched in January 2014. With the IP5 Offices working towards the further unification and simplification of the PPH participation conditions, the PPH is expected to become a more useful system in the future.

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<sup>12</sup> PPH statistics and other information are available at the PPH Portal Site [www.jpo.go.jp/ppph-portal/statistics.htm](http://www.jpo.go.jp/ppph-portal/statistics.htm), that is maintained by JPO.

## 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 2015, the 38 members of the underlying European Patent Organisation 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 territory.

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

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 territory of protection of European patents was 42 countries, covering a population of about 650 million people.

### Highlights of 2015

2015 was a very positive year for the EPO. To keep up with the growing demand for our services (applications increased by some 5 percent on 2014), the EPO has implemented a number of internal reforms to modernise its structure, increase efficiency, and enhance high quality standards. These efforts paid off in 2015, resulting in a major increase in our performance (6 percent more patents were granted).

In 2015, the EPO increased its production (search, examination and opposition) by 14 percent. The number of searches completed by the EPO was up by 10 percent to about 245,700, while the number of final actions in examination and oppositions increased to about 132,700 actions

including the PCT international phase work. The number of published granted patents was about 68,000. Some 2,340 decisions were completed by the EPO Boards of Appeal in 2015.

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 2015, as 85 percent of the searches completed were on target, which is underlined by the strong reduction of the number of cases awaiting examination (see Table 4.3). 90 percent of the PCT international phase search reports were ready on time for publication with the application by WIPO.

The validation agreements with Morocco and the Republic of Moldova entered into force on March 1<sup>st</sup> 2015 and on November 1<sup>st</sup> respectively. Under the terms of the agreements, European patent applicants and proprietors will be able to validate the legal effects of their European patents and applications on the territory of these countries, even though they are not EPO member states.

In 2015, the EPO obtained ISO 9001 certification for its patent information and post-grant activities, extending the certification to the entire patent process.

Every year the EPO carries out user satisfaction surveys on its search, examination and patent administration services. 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 our internal processes in these areas. The result for 2015 shows a further increase to 79% satisfaction for search and examination. In 2015 the Intellectual Assets Magazine (IAM) survey ranked the EPO as the best of the five largest patent offices for quality. This was the fourth consecutive IAM survey in which EPO was ranked 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 part of its co-operation in the IP5, the Global Dossier service offers a free online file inspection straight from the EPO website for patent applications filed with all IP5 Offices. The service provides Chinese, Japanese and Korean patent application files in their original language, as well as machine-translated versions in English. Portugal, Norway and Switzerland started using the Cooperative Patent Classification (CPC) in 2015, bringing the number of offices using the CPC up to 20. With the signature of a Memorandum of Understanding, Mexico also committed itself to adopting the CPC..

The EPO is the world's largest PCT authority. It carries out nearly 40 percent of all PCT searches, and nearly 60 percent of PCT substantive examinations (see Chapter 5). Introduced in November 2014, the system called "PCT Direct" was extended to all the other receiving offices of the PCT. This links first filings handled by the EPO with the subsequent PCT applications for which the EPO acts as ISA independently of the place where the PCT international phase application was filed. In conjunction with the PPH, it allows a fast track prosecution in other PPH offices, especially outside Europe.

Since the 26 participating EU member states reached political agreement on the unitary patent in late 2012, steady progress has been made. In 2015 Europe moved closer to this much-awaited

reform. At the end of 2015, the member states adopted a complete secondary legal framework including the budgetary and financial rules on the fees distribution between member states. Finally, the Unified Patent Court rules of procedure were adopted. By mid-September 2016, 11 countries had ratified the Agreement on the Unified Patent Court: Austria, Belgium, Bulgaria, Denmark, Finland, France, Luxembourg, Malta, Portugal, Sweden and the Netherlands. To enter into force the Agreement needs to be ratified by at least 13 states, including the three largest participating countries in terms of patents in force.

## 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 2014 and 2015. There was a further increase in demand in 2015 as represented by the overall number of patent applications filed.

The EPO fast track procedure, Programme for Accelerated Prosecution of European Patent Applications (PACE), can be requested without any additional fee and is open for any field of technology. In 2015, the number of PACE requests increased by 13 percent to 23,390 (7,890 searches, 15,500 examinations). PACE was requested for about 7 percent of the European searches and almost 10 percent of the European examinations.

**Table 2.1: EPO PRODUCTION INFORMATION**

<b>EPO PRODUCTION FIGURES</b>	<b>2014</b>	<b>2015</b>	<b>Change</b>	<b>% Change</b>
<b>Patent filings (Euro-direct &amp; PCT international phase)</b>	274,367	278,867	4,500	1.6%
<b>Patent applications (Euro-direct &amp; Euro-PCT regional phase)</b>	151,981	160,022	8,041	5.3%
<b>Searches carried out</b>				
European (including PCT supplementary)	111,852	136,460	24,608	22.0%
PCT international	84,696	84,910	214	0.3%
On behalf of national Offices and other	26,755	24,367	-2,388	-8.9%
<b>Total production search</b>	<b>223,303</b>	<b>245,737</b>	<b>22,434</b>	<b>10.0%</b>
<b>Examination - Opposition (final actions)</b>				
European examination	115,595	121,242	5,647	4.9%
PCT Chapter II	7,987	9,258	1,271	15.9%
Oppositions	2,143	2,190	47	2.2%
<b>Total final actions examination-opposition</b>	<b>125,725</b>	<b>132,690</b>	<b>6,965</b>	<b>5.5%</b>
<b>European patents granted</b>	<b>64,613</b>	<b>68,421</b>	<b>3,808</b>	<b>5.9%</b>
<b>Appeals settled</b>				
Technical appeals	2,300	2,287	-13	-0.6%
Other appeals	60	48	-12	-20.0%
<b>Total decisions</b>	<b>2,360</b>	<b>2,335</b>	<b>-25</b>	<b>-1.1%</b>

## 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, bringing the total number of documents in this database to more than 94 million by the end of 2015. These databases are available through services such as Espacenet and Open Patent Service from the EPO and also via numerous commercial providers. For users interested in performing statistical analyses of patent data, the EPO's PATSTAT databases and the new PATSTAT online services launched in 2015 are the most relevant.

Users can translate the full text and abstracts of patents in Espacenet between English and 31 other languages (covering all EPO member states languages, as well as Chinese, Japanese, Korean, and Russian). Translation from and into French or German is also available for EPO member states languages. 15,000 - 20,000 translations are made on a daily basis, which, based on the information available, makes it the most heavily used automated patent translation tool in the world. Espacenet and Patent Translate are free of charge.

## 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 initiated 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 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 Israel, Canada, Mexico and Singapore in 2015. Similarly, in the course of 2015, the EPO laid the groundwork for the expansion of its PPH network, e.g. with Australia.

The EPO hosts the Common Citation Document (CCD) which in 2015 contained over 200 million citations. Currently, it contains enriched citation data from EPO search reports, Chinese and Swiss (2010 onwards) as well as Croatian (2012 onwards) search reports. More countries are expected to become available in the context of the Quality at Source project, such as Estonia, Spain, Lithuania and Portugal.

The EPO provides support to patent offices in Europe through cooperative activities within the EPN. Under the current EPN Co-operation Roadmap 2012-2015, this focuses on three main areas: information technology, training and patent awareness via patent information.

## Economic Studies

During 2015, the Economic and Scientific Advisory Board (ESAB) issued statements on patent aggregation and its impact on competition and innovation policy and on economic effects of a

possible grace period for inventors, should it ever be introduced in Europe. There was also further cooperation with the United Nations Environmental Programme regarding Green Patents.

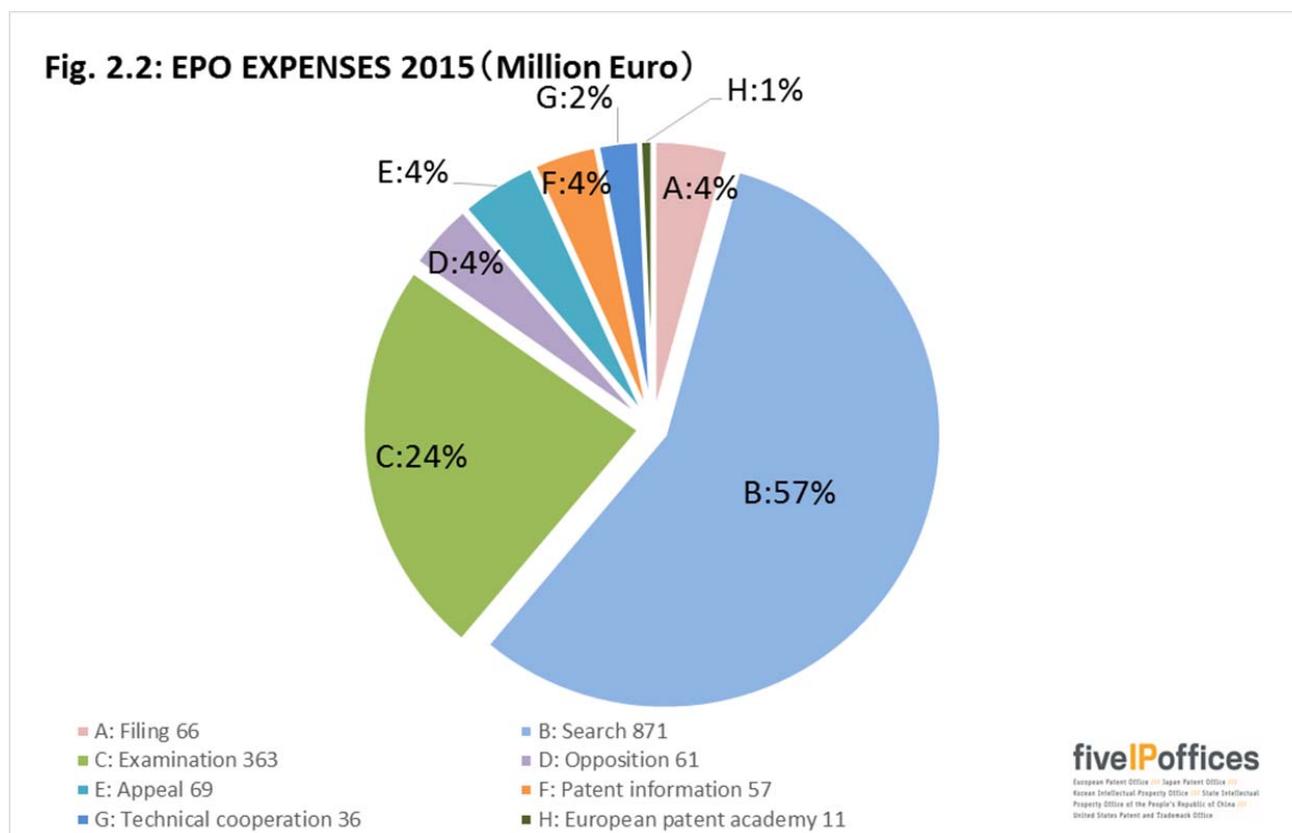
#### **EPO Budget**

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 2015, 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.

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 22,600 persons (most are active staff, pensioners, and their respective family members).

Fig. 2.2 shows EPO expenses<sup>13</sup> under the International Finance Reporting Standards (IFRS) by category in 2015.



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

### EPO Staff

At the end of 2015, the EPO staff totalled about 6,800 employees from 34 different European countries<sup>14</sup>. 127 examiners were recruited during the year. The total number of search, examination, and opposition examiners reached a record figure of 4,227. Boards of appeal are composed of 167 members. Staff complement in other areas was reduced.

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](http://www.epo.org)

<sup>13</sup> The EPO uses the word "expenses" in accordance with the IFRS reporting approach.

<sup>14</sup> For more details, see the 2015 EPO social report at [www.epo.org/about-us/annual-reports-statistics.html](http://www.epo.org/about-us/annual-reports-statistics.html).

## JAPAN PATENT OFFICE

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

Since FY2014, the following year after FA11 was achieved, the JPO has been moving toward realization of the "World's Fastest and Utmost Quality in Patent Examination," taking into account changing circumstances surrounding the patent system and newly raised issues.

To this end, the JPO has been implementing various measures with the 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 FY2015, continuing from FY2014, 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 FY2016 budget, the seats of 16 permanent examiners and 100 fixed-term examiners were requested. The JPO will continue to make efforts including securing the necessary number of patent examiners in order to ensure further improving and strengthening the patent examination system.

##### b) Outsourcing Preliminary Prior Art Search

The JPO has been promoting the speeding up of examination through utilizing private sector vitality by outsourcing prior art searches, which examiners are primarily responsible for, to registered search organizations. There are eleven registered search organizations as of December 2015. In FY2015, about 156,000 applications<sup>15</sup> were outsourced, out of which, for about 102,800 applications, nearly two thirds of the total, the coverage of search was expanded even to foreign patent documents.

#### 2) Measures toward Enhancement in Examination Quality

##### a) Measures for Quality Management

In April 2014, the JPO announced the "Quality Policy on Patent Examination" as fundamental principles of quality management. In August 2014, the JPO released the "Quality Management Manual for Patent Examination" (Quality Manual) that documents and outlines the quality management system including quality management and its implementation system.

##### b) Subcommittee on Examination Quality Management

In August 2014, the JPO established the Subcommittee on Examination Quality Management that consists of external experts under the Intellectual Property Committee of the Industrial Structure Council, the Ministry of Economy, Trade and Industry, for the purpose of receiving objective validation and evaluation regarding the implementation system of examination quality management at the JPO and its implementation status, and then reflecting the results on the

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<sup>15</sup> The number of documentary-based reports was 339, while the number of communication-based reports, where searchers have face-to-face meeting with examiners aiming for efficient understanding of the claimed invention in the application and prior arts, was about 155,700.

examination quality management system. In FY2015, the JPO received the results of official evaluations by the Subcommittee on the implementation system and implementation status of its quality management based on the evaluation items and criteria that were established in FY2014, as well as suggestions for improvement.

c) Infrastructure 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 infrastructure in good condition. In order to allow users to efficiently search national and foreign patent documents, the JPO revises and reclassifies search indexes on a regular basis in order to make the JPO's File Index (FI) updated and complied with the latest International Patent Classification (IPC). In FY2015, FI classification with 250 main groups and F-terms with 19 themes were revised. The JPO has also been working on improving infrastructure for searching standards-related documents, and as a result of such efforts, the JPO has stored standards-related documents owned by ISO (International Organization for Standardization) within the JPO's internal database in FY2015.

3) Association and Cooperation with Overseas Offices

a) Patent Prosecution Highway

The PPH is a framework in which an application judged to be patentable by the Office of First Filing (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 that is in cooperation with the Office of First Filing for this program. The PPH was advocated by the JPO in 2006, and was launched between Japan and the US for the first time in the world. Since then, the number of PPH participating offices has expanded, and in 2015, the JPO started the PPH with Czech Republic, Egypt, Romania and Estonia.

b) International Examiner Exchange Program

For the purpose of promoting work-sharing of patent examinations among the IP offices based on appropriate mutual understanding of prior art search and examination practice, disseminating the JPO's examination practice and examination results to foreign IP offices, harmonizing patent examinations at a higher level of quality and patent classifications, promoting the JPO's initiatives, etc., the JPO has been implementing the International Examiner Exchange Program where examiners communicate directly and to build up a good work relationship with each other. The JPO has implemented a short term or a mid-to-long term Examiner Exchange Program with 25 IP offices and organizations in total during the period from April 2000 to the end of December 2015. In 2015, the JPO dispatched 53 examiners mainly to emerging countries including the ASEAN countries, India and Brazil in addition to the five major IP offices, as well as received 22 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 US-JP Collaborative Search Pilot Program (hereinafter, referred to as "US-JP Collaborative Search"), starting from August 1, 2015. US-JP Collaborative Search Pilot Program is an initiative concerning inventions applied for patents in both Japan and the U.S. for which examiners in both the JPO and the USPTO conduct their own searches and share search results along with their opinions

before sending a first office action to the applicant. Based on the search results and opinions provided from both Offices, the examiners in each Office independently but contemporaneously notify the first examination results at an earlier stage. The following effect would be expected through this initiative: "Users could predict the timing, more accurately, when they can acquire patent rights on their inventions for which they file patent applications in both Japan and the US since both the JPO and the USPTO examiners issue a first action contemporaneously at an earlier stage." Also, "it would be possible to grant stronger and more stable patent rights to applicants since both the JPO and the USPTO examiners conduct prior art search for the a group of identical applications in a collaborative manner.

## 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 2014 and 2015.

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 235,809 First Actions and 241,687 Final Actions in FY 2015. In addition, during FY 2015, the JPO granted 189,358 patents.

Table 2.2: JPO PRODUCTION INFORMATION

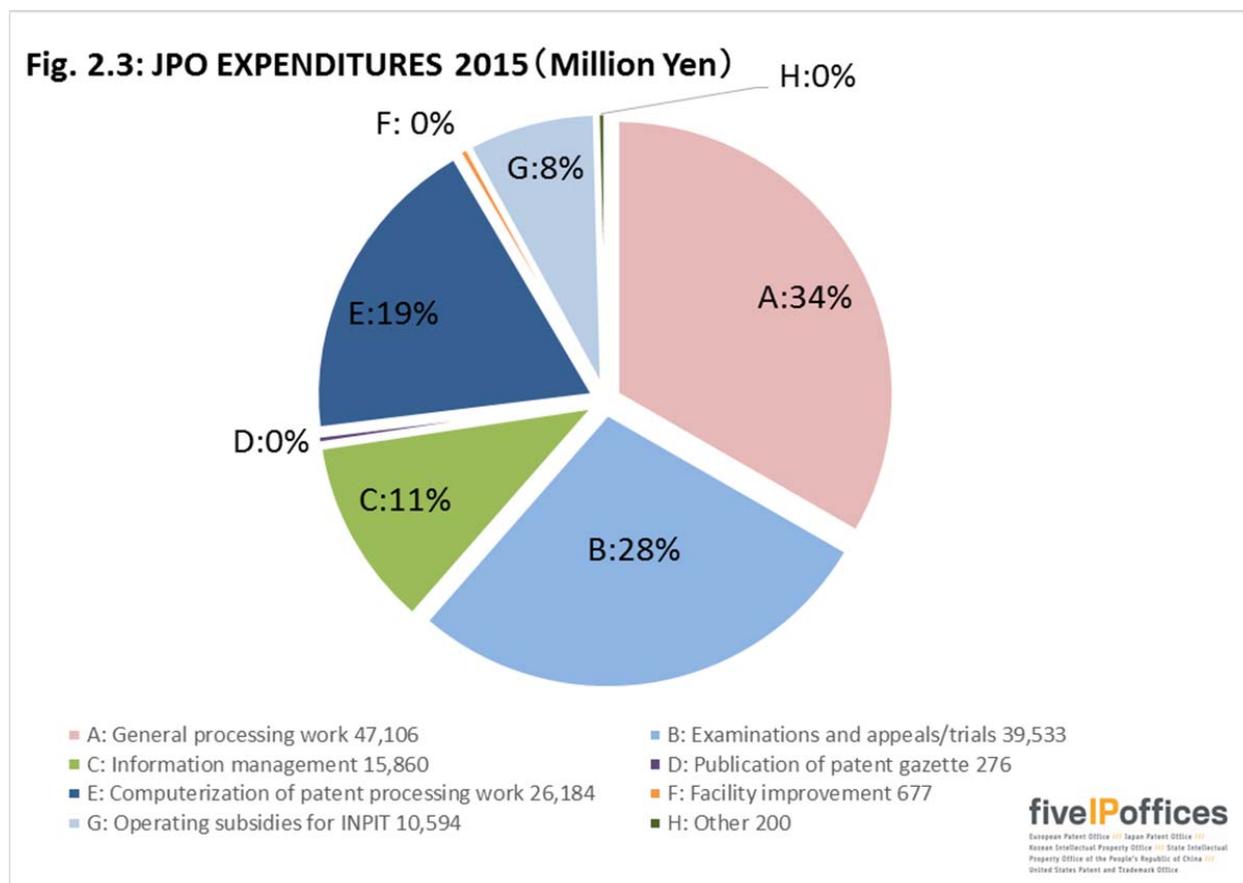
JPO PRODUCTION FIGURES	2014	2015	Change	%
<b>Applications filed (by Origin of Application)</b>				
Domestic	265,959	258,839	-7,120	-2.7%
Foreign	60,030	59,882	-148	-0.2%
<b>Total</b>	<b>325,989</b>	<b>318,721</b>	<b>-7,268</b>	<b>-2.2%</b>
<b>Applications filed (by Types of Application)</b>				
Divisional Applications <sup>16</sup>	27,878	28,242	364	1.3%
Converted Applications <sup>17</sup>	103	91	-12	-11.7%
Regular Applications	298,008	290,388	-7,996	-2.7%
<b>Total</b>	<b>325,989</b>	<b>318,721</b>	<b>-7,268</b>	<b>-2.2%</b>
<b>Examination</b>				
Requests	245,535	241,412	-4,123	-1.7%
First Actions	255,001	235,809	-19,192	-7.5%
Final Actions	296,740	241,904	-54,836	18.5%
<b>Grants</b>				
Domestic	177,750	146,749	-31,001	-17.4%
Foreign	49,392	42,609	-6,783	-13.7%
<b>Total</b>	<b>227,142</b>	<b>189,358</b>	<b>-37,784</b>	<b>-16.6%</b>
<b>Appeals/Trials</b>				
Demand for Appeal against refusal	25,710	21,858	-3,852	-15.0%
Demand for Trial for invalidation	215	227	12	5.6%
<b>PCT activities</b>				
International searches	40,079	43,571	3,492	8.7%
International preliminary examinations	2,190	2,515	325	14.8%

<sup>16</sup> 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.

<sup>17</sup> 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 2014.



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

## JPO Staff Composition

As of the end of FY 2015, the total number of staff at the JPO was 2,821. This includes 494 fixed-term patent examiners.

Examiners:	Patent / Utility model:	1,702
	Design:	48
	Trademark:	138
Appeal examiners:		387
General staff:		546
Total:		2,821

## More information

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

[www.jpo.go.jp](http://www.jpo.go.jp)

## 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 2015

#### 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 them is 10 years, counted from the date of filing.

#### 2) Patent Applications Received in 2015

In 2015, SIPO received 2,798,500 applications for the three kinds of patents, increasing 19 percent compared to 2014. Among these applications were 1,101,864 for invention patents, 1,127,577 for utility model patents, and 569,059 for design patents.

#### 4) Patents Granted in 2015

In 2015, SIPO granted 1,718,192 patents, among which 359,316 were for invention patents, showing an increasing of 54.1 percent compared to the previous year, and 876,217 for utility model patents and 482,659 for design patents.

In Table 2.3, production figures for applications, examination, grants, re-examination and invalidation, PCT activities are given for the years 2014 and 2015. The data in table 2.3 concentrate only on invention patents.

Table 2.3: SIPO PRODUCTION INFORMATION

SIPO PRODUCTION FIGURES	2014	2015	Change	% Change
<b>Applications filed</b>				
Domestic	801,135	968,251	167,116	20.9%
Foreign	127,042	133,613	6,571	5.2%
<b>Total</b>	<b>928,177</b>	<b>1,101,864</b>	<b>173,687</b>	<b>18.7%</b>
<b>Examination</b>				
First actions	534,733	661,265	126,532	23.7%
Final actions	430,661	557,625	126,964	29.5%
<b>Grants</b>				
Domestic	162,680	263,436	100,756	61.9%
Foreign	70,548	95,880	25,332	35.9%
<b>Total</b>	<b>233,228</b>	<b>359,316</b>	<b>126,088</b>	<b>54.1%</b>
<b>Re-examination and invalidation</b>				
Re-examination requests	24,452	12,678	-11,774	-48.2%
Invalidation requests	3,422	3,724	302	8.8%
<b>PCT activities</b>				
International searches	25,614	27,925	2,311	9.0%
International preliminary examinations	344	436	92	26.7%

#### 4) Examination Period

In 2015, the average examination periods for invention patents applications was 21.9 months. SIPO adopted time-sliced segment management in the whole examination procedure for examination period management by objectives to ensure well-distributed and reasonable examination period. In 2015, the average examination periods for utility model and design applications were within 2.9 months and 3.0 months as counted from the date of filing, further shorted compared with the year 2014.

#### Informatization and Documentation

In 2015, on the stable operation of the Chinese Electronic Patent Examination System (E-System) and the Patent Search and Service System (S-System), SIPO continued to improve the system and optimize the function by launching 26 supporting projects, which enhanced the system capability and satisfied the operation of Patent Office, Patent Re-examination Board, 7 Patent Examination Cooperation Centers, 6 IP Rapid Activist and Assistance Centers, 32 Patent Application Receiving Offices and the increasing demands and service of public users. CEPCT system was improved by optimizing the function and enhancing the continuous service ability, and the rate of PCT electronic application rose from 30 percent at the beginning of the year to 60 percent by the end of year. The Design Intelligent Search System of China (D-System)(Third Stage) was put into practice.

By the end of 2015, SIPO had more than 450 kinds of patent documentation, newly increasing 9 countries (including Brazil) English full text patent literature data for public service; SIPO had 156

non-patent literature databases, most of which were internet online databases, covering more than 20,000 electronic periodicals, over 1,200,000 electronic books, 2,690,000 academic dissertations, 2,530,000 conference papers, more than 200,000 standard documents.

### International Cooperation

In 2015, SIPO participated actively in IP international affairs, conscientiously implemented the coordination function of foreign-related intellectual property rights, and completed a number of works successfully.

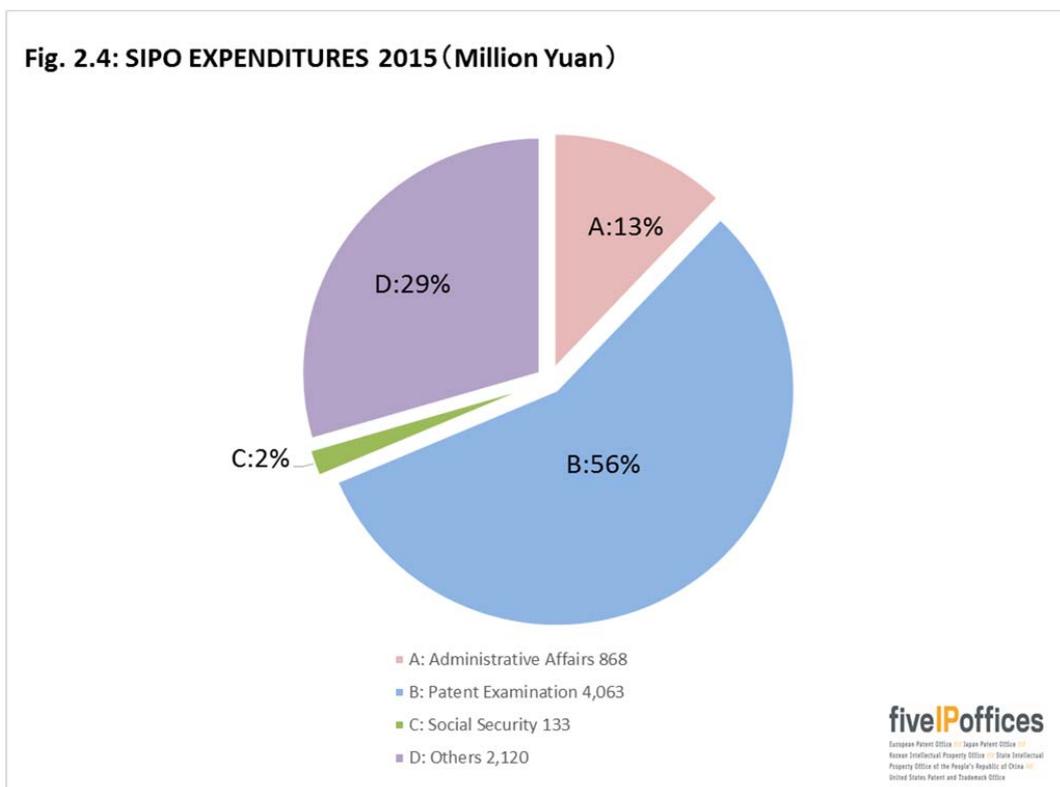
Memorandum of understanding between the State Intellectual Property Office of the People's Republic of China and the World Intellectual Property Organization on voluntary donation was signed with the WIPO, marking the establishment of WIPO China Trust Fund.

The 8th IP5 heads meeting was successfully held in Suzhou. SIPO attended the first Industrial Design 5 Form and its related activities, and signed an Agreed Statement on Administering a New Industrial Design Framework.

SIPO further enhanced cooperation with all nations and institutions in the patent affairs of training, examination, classification, documents, automation, etc. Until now, SIPO has signed 20 PPH pilot agreements, among which 19 pilot projects had started and the pilot project with Hungary would start on March 1, 2016.

### SIPO Budget

Fig. 2.4 shows SIPO expenditures by category in 2015.



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

## SIPO Staff Composition

The SIPO has seven functional departments, a party committee of institution, a supervision department, a retired personnel department. Subordinated to SIPO are the Patent Office, the Patent Re-examination Board and other Subordinate public institutions, 2 enterprises and 4 social organizations. In total, the SIPO has 14,003 full-time employees.

The Patent Office, an organization under the SIPO with 16 departments, 7 Subordinate public institutions and one affiliated enterprise, is mainly responsible for receiving and examining patent applications, granting patents and handling other administrative matters entrusted by the SIPO. It has a staff of 2,937 currently, among which 1,812 employees are examiners for invention patents, 248 employees are for utility models and designs, 272 employees are for preliminary examination and work-flow management. Moreover, 344 employees work in support departments (i.e. patent documentation, automation, examination affairs administration) and 261 employees are responsible for general administration. Seven Patent Examination Cooperation Centers, as the institutions under the Patent Office, who share the responsibility of patent examination, among which the Beijing Center was founded in 2001 and has 2,724 employees at present, the Jiangsu Center was founded in 2011 and has 1,505 employees, the Guangdong Center was founded in 2011 and has 1,471 employees, and the Henan Center was founded in 2012 and has 894 employee. The Hubei, Tianjin, and Sichuan Center were all founded in 2013 and have 835, 582, and 543 staff members respectively. China Patent Technology Exploitation Enterprises, which is the only wholly owned enterprise under the Patent Office, has 452 employees.

The Patent Re-examination Board is a public institution separated from the Patent Office in 2003 to report directly to SIPO. With a staff of 292, the Board is responsible for processing patent re-examination and invalidation requests.

SIPO has 6 other directly subordinated public institutions, 4 social organizations and one enterprise, with a total staff of 1,677.

At the end of 2015, the SIPO had a total staff of 14,003. The breakdown was as follows.

SIPO Functional Department	91
Patent Office: Examiners:	
Invention	1,812
Utility Model & Design	248
Preliminary Examination and Flow Management	272
Supporting Departments	344
General Administration	261
Total	2,937
Patent Re-examination Board	292
Other Subordinate Units under the Office	10,683
Total	14,003

## More information

Further information can be found on the SIPO's Homepage:  
[www.sipo.gov.cn/](http://www.sipo.gov.cn/)

## 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

#### 1) Reducing First Action pendency

As technological development continues to increase, the KIPO is reducing its first office action pendency for IPRs in order to afford its customers timely protection.

In 2015, first office action pendency was 10.0 months for patents and utility models, 4.7 months for trademarks, and 4.4 months for designs. Compared to 2014, this was a reduction of 1.0 month for patents and utility models, 0.7 month for trademarks, and 1.1 month for designs.

With IPR application submissions continuously on the rise, KIPO's goal for 2016 is to maintain its current average first office action pendency through improved outsourcing of prior art searches and the recruitment of additional examiners.

#### 2) Enhancing examination quality

The KIPO shifted its examination paradigm from the existing system—in which examiners simply give their reasons for refusal—to a more customer-oriented examination system that helps applicants acquire high-quality patents by boosting interactive communication with examiners regarding the proper scope of the inventions. Services include:

##### A) Preliminary examination

Preliminary examination was first introduced in 2014, enabling applicants and patent examiners to communicate with each other prior to first office actions in order to discuss the overall direction of the examination and resolve any possible reasons for rejection. In 2015, preliminary examination became available in all cases of accelerated examination.

##### B) Review of pre-amendments

The process of reviewing pre-amendments was introduced in 2015 as a way of informing applicants of whether reasons for rejection can be resolved prior to the final amendment.

##### C) Collective examination

Collective examination is a customized service in which, at the applicant's request, separate applications involving patent, design, and/or trademark rights for a single product are examined

simultaneously. In 2015, the service was further expanded to include new technologies resulting from national R&D projects.

In Table 2.4, production figures for applications, examination, grants and PCT activities of patents are given for the years 2014 and 2015.

**Table 2.4: KIPO PRODUCTION INFORMATION**

KIPO PRODUCTION FIGURES	2014	2015	Change	% Change
<b>Applications filed</b>				
Domestic	164,073	167,273	3,200	2.0%
Foreign	46,219	46,421	202	0.4%
<b>Total</b>	<b>210,292</b>	<b>213,694</b>	<b>3,402</b>	<b>1.6%</b>
<b>Applications filed (by Types of Application)</b>				
Divisional Applications <sup>18</sup>	7,725	7,586	-139	-1.8%
Converted Applications <sup>19</sup>	84	62	-22	-26.2%
Others	202,483	206,046	3,563	1.8%
<b>Total</b>	<b>210,292</b>	<b>213,694</b>	<b>3,402</b>	<b>1.6%</b>
<b>Examination</b>				
Requests	169,894	176,346	6,452	3.8%
First actions	166,915	164,773	-2,142	-1.3%
Final actions	177,289	149,620	-27,669	-15.6%
<b>Grants</b>				
Domestic	97,294	76,318	-20,976	-21.6%
Foreign	32,492	25,555	-6,937	-21.3%
<b>Total</b>	<b>129,786</b>	<b>101,873</b>	<b>-27,913</b>	<b>-21.5%</b>
<b>Applications in appeal</b>	<b>7,335</b>	<b>9,112</b>	<b>1,777</b>	<b>2.4%</b>
<b>PCT activities</b>				
International searches	30,128	27,958	-2,170	-7.2%
International preliminary examinations	250	232	-18	-7.2%

<sup>18</sup> A divisional application is filed to divide a patent application (known as the parent application) into two or more applications.

<sup>19</sup> 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

KIPO currently operates 30 Regional IP Centers (RIPC) across Korea to further promote the spirit of invention, enhance overall IPR awareness, encourage IPR creation throughout the region, and improve the region's business competitiveness via IPRs. The centers serve as important strategic hubs that coordinate IP creation and utilization activities throughout the country.

The centers responded to 11,407 requests for patent consultations, 3,953 requests for brand consultations, 2,637 requests for design consultations, and held 28 invention promotion events. Korea's IP Creative Zones supported patent applications for 204 ideas and trained 938 inventors on everything from idea development to patenting and commercialization.

Furthermore, the KIPO extended its IP talent-sharing project nationwide in order to match 207 talent donors with 131 aid recipients for a total of 185 instances of talent sharing.

An examination of this talent sharing showed that design development support accounted for 56 cases, followed by 47 IP application consultations, 27 cases of brand development support, 19 IP management consultations, 6 IP trainings, etc.

### 2) Fostering the Star IP Company Project

The KIPO is working to nurture the potential of Korea's Star IP companies as a method for improving IP creation and utilization among Small and Medium-Sized Enterprises (SMEs). The Star IP Company Project involves identifying regional SMEs with impressive growth potential and, over a three-year period, assisting them with transforming their ideas into patents through the use of customized patent maps, as well as brand and design development. Through this Project, the KIPO provides professional consultations on IP management strategies in order to foster regional business standouts. Since 2010, the Office has nurtured a total of 1,066 promising SMEs into Star IP companies: 108 in 2010, 203 in 2011, 157 in 2012, 151 in 2013, 227 in 2014 and 220 in 2015. In 2015, the Office provided intensive customized support to Star IP companies.

## Global IP Cooperation

### 1) Bilateral cooperation

In 2015, the KIPO actively worked to promote bilateral cooperation with foreign IPR authorities by holding more than 20 meetings with the heads of other IP Offices.

As a result of a bilateral meeting between the commissioners of KIPO and the USPTO, Korea and the US agreed to further expand and strengthen cooperative relations through pilot projects pertaining to the Collaborative Search Program (CSP), exchanges of IP experts, and annual meetings for information technology experts. KIPO and SIPO agreed to host a joint seminar on strengthening the IPR capabilities of universities and to exchange administrative judges in order to share information on IP disputes. China, Japan, and Korea jointly agreed to exchange IP examination quality management information, and KIPO has regularly worked with the EPO/OHIM to host bilateral meetings for strengthening cooperative relations. In celebration of the 130th anniversary of diplomatic ties between their two countries, the patent offices of Korea and France agreed to jointly host IPR-related events scheduled for 2016.

With Sweden, the KIPO worked to develop the “Asia Patent Information Search Service” which, starting in 2016, will provide search services for Asian patent information that was previously very difficult for Europeans to access. 2015 was also the year the Office began providing PCT international search services to Saudi Arabia.

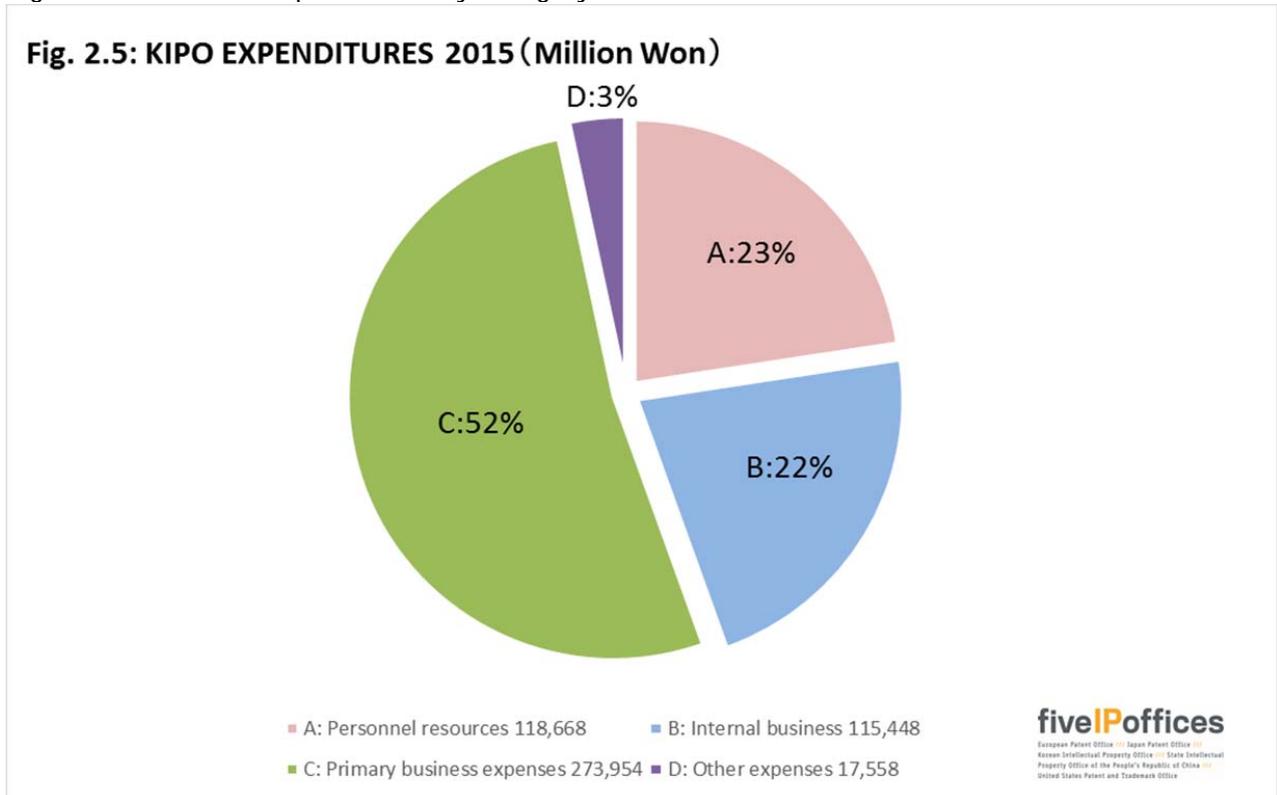
Also in 2015, the number of countries participating in Patent Prosecution Highways with Korea increased to 24—up from 21 in 2014.

### 2) Collaboration with WIPO Academy

On April 20<sup>th</sup> 2015, during the 15th meeting of the WIPO Committee on Development and Intellectual Property (CDIP), the KIPO hosted a launch ceremony for IP IGNITE, an IP educational platform that serves as an audio-visually enhanced version of WIPO Academy’s Distance Learning-101 (DL-101). Within its 12 modules, IP IGNITE covers everything from basic IP fundamentals to advanced information on international IP law and WIPO-administered treaties. Its easy-to-understand storytelling methods and flash animation make studying IP more enjoyable.

KIPO Budget

Fig. 2.5 shows KIPO expenditures by category in 2015.



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

KIPO Staff Composition

At the end of 2015, the KIPO had a total staff 1,600. The breakdown is as follows.

Examiners	
Patents and Utility Model	843
Designs and Trademarks	159
Appeal examiners	106
Other staff	492
Total	1,600

More information

Further information can be found on KIPO's Homepage:

[www.kipo.go.kr](http://www.kipo.go.kr)

## 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 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 Organization Excellence.

## Agency News

FY 2015 marked the two hundred and twenty-fifth anniversary of the Patent Act when President George Washington signed the bill that laid the foundation of the modern American patent system. This was the first time in American history that the law gave inventors rights to their creations. The USPTO celebrated this milestone in a year filled with contemporary accomplishments, most significantly surrounding patent quality. The USPTO launched the Enhanced Patent Quality Initiative, a substantive, multi-faceted effort to produce the highest quality work products, to provide exceptional customer service, and to measure performance through the most rigorous quality metrics.

The USPTO continued to make great strides in reducing the unexamined patent application backlog and patent pendency. The backlog of unexamined applications was reduced from 605,646 at the end of FY 2014 to 553,221 at the end of FY 2015, a year-on-year reduction of 8.7 percent.

Average first action pendency and total pendency also continued to decline. Average first action pendency decreased to 17.3 months, and total pendency was reduced to 26.6 months over the same period. The USPTO is on track to attain its long-term goal of 10-month first action pendency and 20-month total pendency by FY 2019.

FY 2015 has also been a time of progress for the Agency's four regional offices. The USPTO had the grand openings for the permanent locations of the Silicon Valley California regional office in October 2015 and the Texas regional office in November 2015. These locations, in addition to the headquarters in Virginia and the Michigan and Colorado regional offices, provide inventors, entrepreneurs, and small businesses assistance in every U.S. continental time zone. Staff in these offices work closely with intellectual property services, start-ups and job-growth accelerators in their regions.

Likewise, the Trademarks business unit continued to excel. Despite record levels of new trademark applications, the Agency exceeded its target performance levels in FY 2015. Moreover, trademark fee reductions for new filings and maintenance of registrations saved applicants and registrants more than \$21.6 million in user fees over the past year. Those fee reductions were available to applicants who agreed to forgo paper correspondence, thereby leading to a more efficient and cost-effective examination process.

Lastly, FY 2015 was another year of improved technological capabilities, which provided further reliability and enhancements to the telework program, a vital part of the USPTO that both saves millions of dollars each year by allowing continued operations during shutdowns of the physical office and contributes to USPTO's consistent ranking as one of the "Best Places to Work in the Federal Government."

### International Cooperation and Work Sharing

The USPTO continued working with international IP offices to generate work sharing efficiencies. On January 1<sup>st</sup> 2015, the USPTO successfully transitioned to the Cooperative Patent Classification (CPC) system from the United States Patent Classification system. Searching based on CPC provides a more comprehensive search result set by expanding the documents available for viewing and retrieval.

The U.S. ratified the Hague Agreement concerning the international registration of industrial designs. Critically important for American businesses and entrepreneurs, the treaty, which took effect on May 13<sup>th</sup> 2015, enables U.S. applicants pursuing protection for industrial designs to file a single application with either the USPTO or WIPO.

The USPTO continues to work with other IP offices and industry groups on modernization of the global patent system. One element of this is the Global Dossier, the first component of which is to provide secure online access to the file histories of related applications from participating Offices. Beginning in spring 2015, USPTO examiners had access to the dossier information of the related IP5 applications. In June 2015, the USPTO became a providing Office, allowing access to U.S. dossiers through the IP5 Global Dossier User Interfaces. The USPTO also expanded work sharing bilaterally by initiating a priority document exchange agreement with SIPO as well as a work sharing agreement with the Brazilian Institute of Intellectual Property.

The USPTO, through the Global Intellectual Property Academy (GIPA), provides IP educational programs for U.S. government officials, domestic small- and medium-sized enterprises (SMEs), universities, and the public. In FY 2015, GIPA conducted 106 training programs for foreign government and 35 programs targeted to U.S. SMEs.

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 2014 and 2015.

Table 2.5: USPTO PRODUCTION INFORMATION

USPTO Production Information	2014	2015	Change	% Change
<b>Applications filed</b>				
Utility(patents for invention) <sup>20</sup>	578,802	589,410	10,608	1.8%
Domestic	285,096	288,335	3,239	1.1%
Foreign	293,706	301,075	7,369	2.5%
Plant	1,063	1,140	77	7.2%
Reissue	1,265	1,049	-216	-17.1%
<i>Total Utility, Plant, Reissue</i>	<b>581,130</b>	<b>591,599</b>	<b>10,469</b>	<b>1.8%</b>
Design	35,378	39,097	3,719	10.5%
Provisional	170,143	170,371	228	0.1%
<b>Total</b>	<b>786,651</b>	<b>801,067</b>	<b>14,416</b>	<b>1.8%</b>
Requests for Continued Examination(RCE) <sup>21</sup>	171,126	169,430	-1,696	-1.0%
<b>PCT Chapter I Searches</b>	<b>22,142</b>	<b>21,740</b>	<b>-402</b>	<b>-1.8%</b>
<b>PCT Chapter II Examination</b>	<b>1,243</b>	<b>1,610</b>	<b>367</b>	<b>29.5%</b>
<b>First actions(includes utility, plant, and reissue applications)</b>	<b>593,723</b>	<b>633,336</b>	<b>39,613</b>	<b>6.7%</b>
<b>Grants (total)</b>	<b>300,677</b>	<b>298,407</b>	<b>-2,270</b>	<b>-0.8%</b>
U.S. residents	144,621	140,969	-3,652	-2.5%
Foreign	156,056	157,438	1,382	0.9%
Japan	53,848	52,409	-1,439	-2.7%
EPC states	47,733	47,529	-204	-0.4%
S. Korea	16,469	17,924	1,455	8.8%
P.R. China	7,236	8,116	880	12.2%
Others	30,770	31,460	690	2.2%
<b>Applications in appeal and interference proceedings</b>				
Ex-parte Cases Received	9,585	8,055	-1,530	-16.0%
Ex-parte Cases Disposed	9,489	12,289	2,800	29.5%
Inter-partes Cases Contested	238	234	-4	-1.7%
Inter-partes Cases Disposed	247	222	-25	-10.1%
<b>Patent Cases in Litigation</b>				
Cases filed	132	374	242	183.3%
Cases disposed	254	320	66	26.0%
Pending cases (end of calendar year)	158	373	215	136.1%

<sup>20</sup> Unless otherwise noted, the USPTO statistics presented elsewhere in this report are limited to utility patent applications and grants.

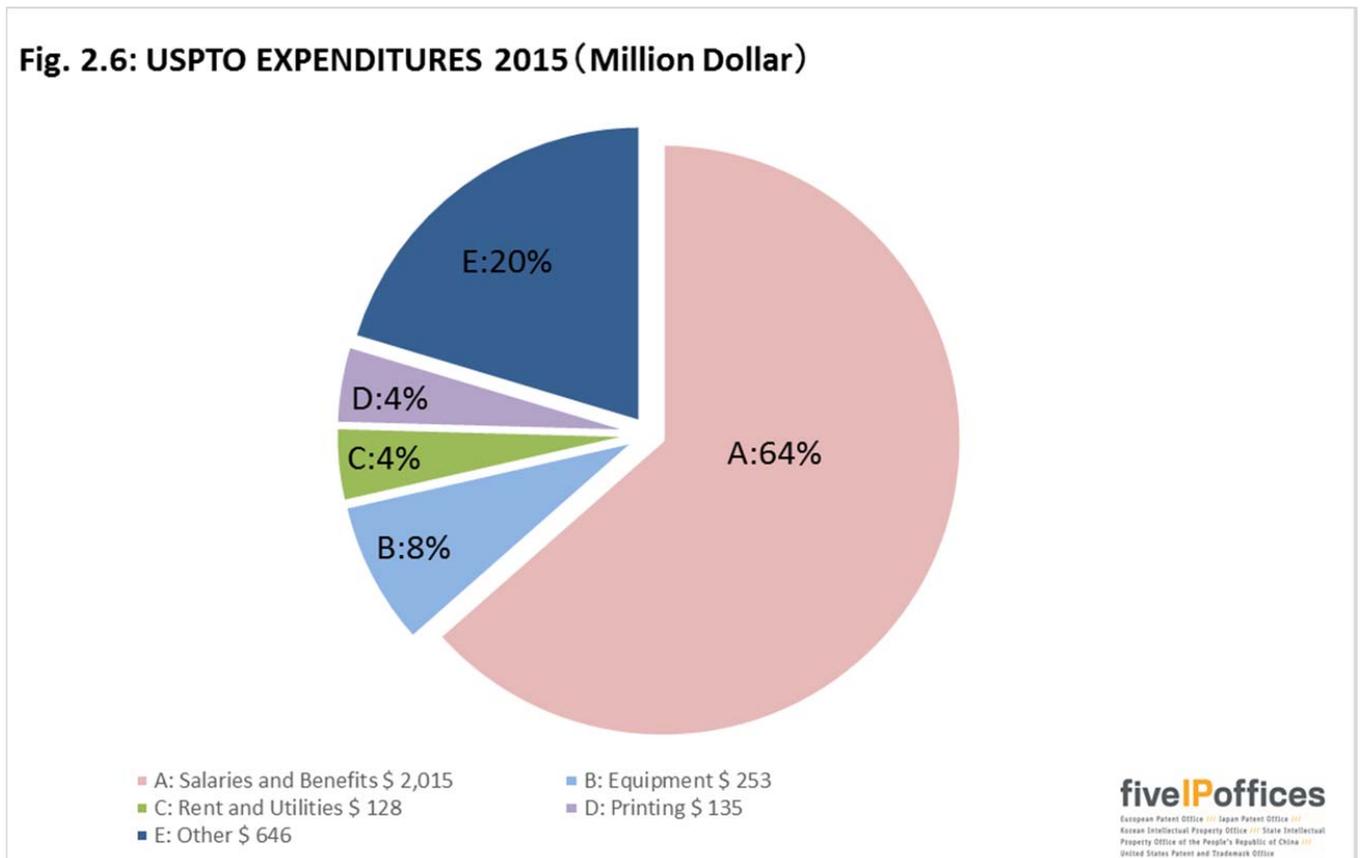
<sup>21</sup> A Request for Continued Examination is a USPTO procedure under which an applicant may obtain continued examination of an application by filing a submission and paying a specified fee, even if the application is under a final rejection, appeal, or a notice of allowance.

**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 2015, USPTO expenditures totaled \$3,176.1 million. Agency-wide, 21.9 percent of expenditures were allocated to IT security and associated IT costs.

Goal 1 - Optimize Patent Quality and Timeliness	\$2,804.3 million
Goal 2 - Optimize Trademark Quality and Timeliness	\$ 312.3 million
Goal 3 - Provide Domestic and Global Leadership to Improve IP Policy, Protection and Enforcement Worldwide	\$ 59.5 million

Fig. 2.6 shows USPTO expenditures by category in 2015.



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

### USPTO Staff Composition

At the end of FY 2015, the USPTO work force was composed of 12,667 federal employees. Included in this number are 8,977 Utility, Plant, and Reissue patent examination staff and 184 Design examination staff; 456 Trademark examiner attorney staff, and 3,050 managerial, administrative and technical support staff.

### More information

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

[www.uspto.gov](http://www.uspto.gov)