# Chapter 2

# THE IP5 OFFICES

Patents are recognized throughout the world as a measure of innovative activity. The EPO, the JPO, the KIPO, the SIPO and the USPTO are the largest IP Offices in terms of the volume of patent applications they handle. The following figure shows the prominent role played by the IP5 Offices in terms of the number of patents in force at the end of 2010. The data are based on the most recent worldwide patent information available from the WIPO Statistics Database.<sup>8</sup>

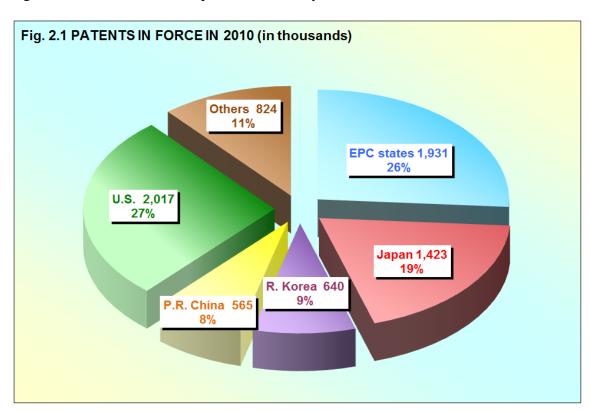


Fig. 2.1 shows the number of patents in force by bloc in 2010.

At the end of 2010, 89 percent of the 7.4 million patents in force were valid in one of the IP5 Offices jurisdictions.

<sup>8</sup> <a href="http://www.wipo.int/ipstats/en/statistics/patents/">http://www.wipo.int/ipstats/en/statistics/patents/</a>. Data for patents in force for 2010 are missing for some countries in the WIPO data. Where available, the most recent previous year's data were substituted for missing 2010 data.

### **EUROPEAN PATENT OFFICE**

The EPO is the only central patent granting authority for Europe, providing patent protection in up to 40 European countries on the basis of a single patent application and a unitary grant procedure. This represents a market of more than 610 million people.

At the end of 2011, the 38 members of the underlying European Patent Organization were:

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

Two other states have agreements with the EPO to allow applicants to request an extension of European patents to their territory:

## Bosnia-Herzegovina and Montenegro

The EPO has also developed a new scheme called validation agreements, allowing the protection of a European patent beyond the borders of the Organization. A first agreement signed with Morocco should come soon into force. Discussions with other countries are on their way.

The mission of the EPO is to support innovation, competitiveness, and economic growth across Europe through a commitment to high quality and efficient services delivered under the EPC. 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 the behalf of Patent offices of several member states – including France, Italy, the Netherlands, Belgium - state of the art searches for the purpose of national procedures. The EPO is also major actor in the patent information area, developing tools and data bases.

### Highlights of 2011

In 2011, the EPO established a new strategic framework aiming at boosting efficiency and controlling costs while at the same time maintaining and enhancing the quality of the EPO products. The strategy focuses on five major areas: Information Technology (IT), human resources, buildings, quality and cooperation. A five year plan was developed for each of these areas which are translated into several concrete projects with clear timetables.

Progress was made in 2011 on major projects such as patent classification and machine translation, as well as on preparing for the possible introduction of the unitary patent system for European Union (EU) member states.

#### **Grant Procedure**

All EPO activities dealing with search, examination, opposition or appeals are performed internally and not outsourced. The decision to grant or refuse a patent is taken by a board of three examiners. In Table 2.1, production figures for search (European, PCT and national searches), for examination (European and PCT Chapter II), for opposition and for appeal in the European procedure are given for the years 2010 and 2011. There was a further increase in demand in 2011 as represented by the overall number of patent filings.

**Table 2.1: EPO PRODUCTION INFORMATION** 

PRODUCTION FIGURES	2010	2011	Change	% Change
Patent filings (Euro-direct & PCT international phase)	235,700	244,437	8,737	4%
Searches carried out				
European (including PCT supplementary)	100,010	104,638	4,628	5%
PCT international	73,686	75,274	1,588	2%
On behalf of national Offices and other	27,818	26,227	-1,591	-6%
Total production search	201,514	206,139	4,625	2%
Examination - Opposition (final actions)				
European examination	114,991	110,331	-4,660	-4%
PCT Chapter II	7,128	7,529	401	6%
Oppositions	2,309	2,234	-75	-3%
Total final actions examination-opposition	124,428	120,094	-4,334	-3%
European patents granted	58,108	62,112	4,004	7%
Appeals settled				
Technical appeals	1,959	1,874	-85	-4%
Petitions for reviews and referrals	28	22	-6	-21%
Other appeals	39	27	-12	-31%
<b>Total decisions</b>	2,026	1,923	-103	-5%

In 2011, the number of searches completed increased by 2 percent to about 206,100 while the number of final actions in examination at the EPO, including the PCT work, decreased by 3 percent to about 120,100. This change reflects a lower number of decisions by applicants to withdraw applications, and a higher number of published granted patents. Altogether, the Office production increased compared to 2010. The EPO continues to issue a search report with written opinion on first filings within 6 months. About 1,920 decisions in appeal were completed by the EPO boards of appeal in 2011. On average in 2011, a patent granted by the EPO designated 23 countries at the time of grant (21 in 2010).

IP5 Statistics Report 2011 Chapter 2

The EPO fast track procedure, Program for Accelerated Prosecution of European Patent Applications (PACE), can be required without any additional fee and is open for any field of technology. PACE is requested for 6 to 7% of the patent applications every year. In 2011, the EPO received 14,500 PACE requests (5,700 searches, 8,800 examinations).

### **Patent Information**

The EPO is a producer of patent information products and services. It has established databases that are available not only for internal use, but also for dissemination by national Offices. The EPO maintains a comprehensive collection of patent-related literature, making available more than 600 million records containing about 80 million patent documents, within 120 specialized databases. The main database Espacenet is freely accessible 24 hours a day. Efforts have been made for improvement of these databases by focusing on machine translation of patents in order to reduce language barriers, as well as by improving the electronic search tools used by EPO examiners and more than 45 Patent offices world-wide, in particular its search engine called EPOQUE.

A new system, *Patent Translate*, has been developed in partnership with Google Inc., aiming at covering by the end of 2014, the 28 languages of the EPC states, Chinese, Japanese, Korean and Russian to bring considerable benefits to companies, inventors and scientists around the world. The new service was launched on February 29, 2012 and as of October 2012, 13 language pairs built from and into English are freely accessible (Danish, Dutch, French, Finnish, German, Greek, Hungarian, Italian, Norwegian, Polish, Portuguese, Spanish and Swedish).

### **International and European Cooperation**

The EPO continues to be engaged in different types of cooperation programs in and outside Europe: including IP5, Trilateral Cooperation and several bilateral agreements.

The EPO provides supports to Patent offices in Europe through cooperation activities within the European Patent Network, focusing on three main areas: information technology; training; patent awareness and patent information. The European Patent Academy has a very active role.

The EPO is playing an important supporting role in the creation of a Unitary Patent in the EU. It is intended that this will be a European patent granted by the EPO under the EPC to which unitary effect would be given after grant at the patentee's request. The EPO will become responsible for managing several tasks in relation to the Unitary Patent.

The EPO has a long experience in cooperation activities with many patent offices. It was further strengthened by several bilateral strategic agreements concluded in 2011 with important partners such as Brazil, P.R. China and Russia. A cooperation agreement was signed with the Office for Harmonization in the Internal Market responsible for registering trademarks and designs in the EU, in order to better coordinate the efforts to

promote the use of IP rights in Europe. A similar agreement was signed with WIPO at the global level.

Substantial progress was made on the Cooperative Patent Classification (CPC) developed in cooperation with the USPTO. At the end of 2011, together with the JPO and the USPTO, the EPO launched an important harmonization project to implement a new tool called *Common Citation Document* that is aimed at creating synergies and efficiencies.

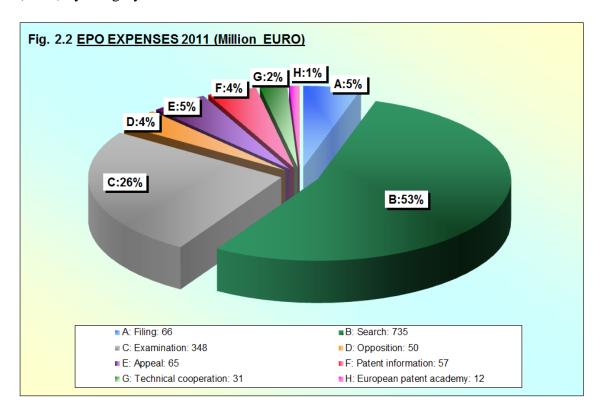
## **EPO Budget**

The EPO is financially autonomous and does not receive any subsidies from the Contracting States of the Organization. Expenses are to be covered entirely out of revenue mainly from patent fees paid by applicants and patentees. In 2011, the EPO budget amounted to 1.6 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) is kept by the Contracting States of the Organization where the European patent is validated after the central grant process.

On the expenses side, in addition to salaries and allowances usually supported by a Patent office, the EPO also has to finance other social staff expenses such as pensions, sickness, long-term care as well as education costs for the children of the employees. The EPO is responsible for a community of about 30,000 persons (mostly active staff, pensioners and their families).

Fig. 2.2 shows EPO expenses under the International Finance Reporting Standards (IFRS) by category in 2011.



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

## **EPO Staff**

In 2011, 44 examiners were recruited. By the end of the year, the staff totalled 6,726 from 32 different European nationalities. There were 3,949 examiners in search, examination and opposition; and 158 members of Board of Appeal. They have to master the three official languages of the EPO (English, French and German) in their daily work. EPO examiners are trained during three years following their recruitment before being considered as fully productive.

### **More information**

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

www.epo.org

### JAPAN PATENT OFFICE

## **Development of Intellectual Property Policy**

The "New Growth Strategy ~ Blueprint for Revitalizing Japan ~ " that was forged by the Cabinet on June 18, 2010, mentions the importance of promoting the utilization of IP to encourage innovation and the "The Intellectual Property Promotion Plan 2011" established by "The Intellectual Property Policy Headquarters," headed by the Prime Minister. This states four main strategies by which IP can support new challenges in the global network era: (1) furthering international standardization; (2) enhancing competitiveness in IP innovations; (3) creating the most advanced digital network; and (4) promoting "Cool Japan." Among these strategies, the second strategy clearly refers to enhancing the competitiveness of the Japanese "Intellectual Property System" and promoting the use of "knowledge" produced in Japan, along with enhancing competitiveness based on IP and international standardization. With this in mind, the JPO is working to provide a much more user-friendly IP System for a wide range of entities such as Small and Medium Size Enterprises (SMEs) and universities, while appropriately responding to the changes in the environment surrounding the IP System.

#### **Efforts Related to Patents**

The JPO has made various efforts for achieving its long-term target for reducing first action pendency to 11 months by 2013, as indicated in the "Intellectual Property Strategic Program 2004" formulated by the Intellectual Property Strategy Headquarters in 2004. These efforts include the following.

# 1. Efforts to Speed Up Patent Examination

Methods to Expedite Patent Examination

1) Ensuring the Necessary Number of Examiners

While the JPO is working to raise the efficiency of the examination process, it still will need to increase the number of patent examiners so as to greatly enhance its examination capability in terms of examination. The JPO has significantly increased the number of examiners by hiring around 490 fixed-term examiners in five years, from FY 2004 to FY 2008. Moreover, since FY 2009, the fixed-term examiners who completed the five-year term were re-hired to maintain the JPO's examination capabilities.

2) Increasing and Enhancing Outsourcing of Prior Art Document Searches

The number of prior art document searches outsourced in FY 20119 decreased by

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<sup>&</sup>lt;sup>9</sup> The fiscal year begins in April at the JPO

1.6 percent to 242,000, of which dialogue-style outsourcing<sup>10</sup> with a high level of examination efficiency accounted for 89 percent, or 214,000 searches. Although the number of prior art document searches outsourced decreased due to the decrease in the number of patent backlogs, the number of dialogue-type outsourcing has been increasing. It is expected that examination efficiency will further improve by the JPO making use of dialogue-type outsourcing.

# 2. Efforts to Obtain Stable Rights

In order for companies to safely utilize their own intellectual property rights in the global market and to perform business activities, it is essential that patent rights be granted as stable and valid patent rights all over the world. Stable rights, to be valid in the world, require that there are no reasons anywhere for invalidation, that a clear line between other rights is set, and that the rights are not unnecessarily restrictive.

Therefore, it is important to deepen understanding of many factors such as technologies subject to examination and related technical fields. In addition, it is important to conduct accurate prior art document searches including national and overseas documents, and implement quality control of patent examination in a way that the results notified to applicants are based on high-quality examination procedures. In addition, it is necessary to review the examination standards, etc. where necessary in response to the opinions of users and the results of appeals/trials and judgments from the viewpoint of international system harmonization.

## a. Efforts for International Work Sharing

Following the global increase in the patent applications amidst the ongoing globalization of economic and business activities, and the increasing importance of intellectual property along with such globalization, the number of duplicate applications, i.e., the same invention being filed in multiple offices is increasing. In line with this increase, the examination workload at each office has also been increasing. Under this situation, the JPO is promoting work-sharing of patent examinations with various IP offices, using the framework of the Patent Prosecution Highway (PPH), to improve the accuracy and efficiency of examinations worldwide under the aim of creating an environment where applicants can tightly protect their intellectual property worldwide. Applicants can obtain considerable benefits from this program.

The first benefit is improved patent quality. Since examiners in the JPO and the USPTO examine the application based on the same claims in principle, the foreseeability of acquisition of a patent becomes higher for the applicant and it is possible to acquire a more stable right and the grant rate becomes higher comparison with the ordinal patent applications as well.

<sup>&</sup>lt;sup>10</sup> "Dialogue-style outsourcing" is an outsourcing method in which the patent examiner receives a report on the prior art search result from the searcher, together with an oral presentation by the searcher based on the report in order to raise the understanding of the examiner on the details of the invention and prior art documents.

The second benefit is accelerated examination. For example, in the JPO, the average first action pendency was about 25.9 months in 2011, while the examination pendency of PPH applications, from the acceptance of the PPH request up to the commencement of the examination was about 1.7 months in 2011.

The third benefit is reduced costs to acquire rights. It can be assumed that once a reason for refusal has already been sent by one office, it is not necessary for all the other offices to send notifications. As a result, average number of Office Actions would be less rather than the ordinal patent applications, thereby reducing the cost. This enables the applicants to save costs when acquiring patents, allowing more investments to be made in additional R&D activities.

(JP-Fast Information Release Strategy (JP-FIRST))

The JPO began implementing JP-FIRST in 2008, taking account of the patent system of the JPO. The JP-FIRST allows the Office of Second Filing (OSF) to make more use of examination results of the JPO, the Office of First Filing (OFF). This strategy is expected to enable Japanese applicants to acquire appropriate patent rights in foreign offices. Providing the results of the first action by the JPO earlier, alleviates the amount of examination workload at all offices overall. Therefore, promoting the utilization of these results in foreign offices is important.

### 3. Initiatives to Achieve Future Patent Strategies

The international environment surrounding intellectual property is drastically changing because of economic globalization and the expansion of emerging markets such as Asia. Japanese companies expand their intellectual property strategies on a global basis. Under such a situation, the number of applications filed by Japan to overseas offices has greatly increased. In addition, the regions where the applicants filing tendency have changed, from the Trilateral Offices (the JPO, the EPO and the USPTO) to the IP5 offices, namely the Trilateral Offices plus the KIPO and the SIPO. Additionally, with P.R. China becoming the second largest economic power, surpassing Japan, the number of lawsuits in P.R. China has rapidly increased along with the large increase in number of patent applications.

In view of these circumstances, the JPO formulated and publicized the "International Intellectual Property Strategies" in July 2011 with the aim of improving the international IP infrastructure so that Japanese companies can smoothly conduct businesses all over the world.

**Table 2.2: JPO NUMBER OF PATENT EXAMINERS** 

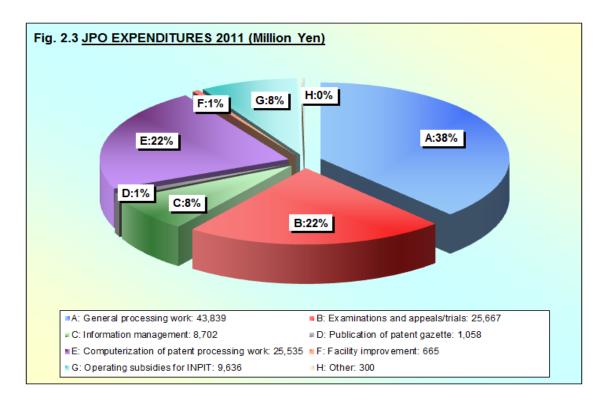
Examiners	FY 2010	FY 2011	Change	% Change
Regular	1,213 (+11)	1,221 (+8)	8	1%
Fixed-term	490	490	0	
Total	1,703 (+11)	1,711 (+8)	8	0%

**Table 2.3: JPO PRODUCTION INFORMATION** 

PRODUCTION FIGURES	2010	2011	Change	% Change
Applications filed				
Domestic	290,081	287,580	-2,501	-1%
Foreign	54,517	55,030	513	1%
Total	344,598	342,610	-1,988	-1%
Examination				
Requests	255,192	253,754	-1,438	-1%
First actions	377,089	363,876	-13,213	-4%
Final actions	374,891	364,712	-10,179	-3%
Grants				
Domestic	187,237	197,594	10,357	6%
Foreign	35,456	40,729	5,273	15%
Total	222,693	238,323	15,630	7%
Appeals/Trials				
Demands for Appeal against examiner's decision of refusal	27,889	26,663	-1,226	-4%
Demands for Trial for invalidation	237	269	32	14%
PCT activities				
International searches	29,993	35,633	5,640	19%
International preliminary examinations	1,952	2,198	246	13%

# JPO Budget

Fig. 2.3 shows JPO expenditures by category in 2011.



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

# **JPO Staff Composition**

As of the end of FY 2011, the total number of staff at the JPO was 2,895. This includes 490 fixed-term patent examiners.

Examiners:	Patent / Utility model:	1,711
	Design:	51
	Trademark:	148
Appeal exam	iners:	387
General staff	•	598
Total:		2,895

## **More information**

Further information can be found on the JPO's Homepage: www.jpo.go.jp

### KOREAN INTELLECTUAL PROPERTY OFFICE

#### **Mission Statement**

The KIPO is the government agency in charge of IP matters in Korea. Its mission statement is as follows:

To contribute to technological innovation and industrial development by facilitating the creation, commercialization and utilization of intellectual property and by strengthening the protection of intellectual property.

The KIPO strives to fulfil its mission by implementing diverse policies focused on timely, high-quality examinations.

### **Statistical Overview of 2011**

The KIPO received 178,924 patent applications in 2011, and its requests for international searches soared from 22,707 in 2010 to 25,666 in 2011. R. Korea increased PCT applications by 8.0 percent in 2011 to 10,447. International applications under the PCT by Korean applicants have steadily increased annually primarily due to a clear understanding of the advantages of the PCT system, rising awareness of the importance of Intellectual Property Rights (IPR), and continued efforts to consolidate patent rights abroad.

The number of international searches received by the KIPO totalled 25,666 in 2011, a 13.0 percent rise from 22,707 in 2010. Of these, the number of requests submitted by Korean applicants reached 9,950, a 12.7 percent increase from 2010. The number of requests made by foreign applicants, including those of the U. S., amounted to 15,716 or 13.3 percent more than 2010. The number of requests made by applicants of the U.S. accounted for 59.1 percent of all international searches received by the KIPO and 96.5 percent of all foreign international searches.

The number of international preliminary examinations requests (IPEA) received by the KIPO in 2011 was 226, a 16.3 decrease from 270 in 2010. This is a continuation of a decreasing trend. Since 2002, the time limit for all PCT applications to move from international stage filing to national phase entry was increased from 20 to 30 months. Since 2004, for all PCT applications a first opinion on patentability is given by the ISA. Both of these changes removed special advantages previously possessed only after requesting an IPEA.

The number of international search reports of international patent applications under the PCT increased by 10.3 percent from 2010 to 22,988 in 2011. Conversely, PCT international preliminary examination reports plunged by 30.9 percent from 2010 to 224.

### **International Cooperation**

The KIPO has implemented PPH with nine countries. In July 2011, the PPH with Spain went into effect. The other eight countries are: Japan, the U.S., Denmark, the United Kingdom, Canada, Russia, Finland, and Germany. It also established its first PCT-PPH with the U.S. in 2011.

The KIPO was actively engaged in bilateral cooperation activities during 2011, with more than 20 meetings with other offices around the world. Some of the areas of cooperation included work sharing, examiner programs, and IP automation.

The KIPO also continues implementing activities to support developing countries and the least developed countries in cooperation with international organizations such as the WIPO.

## **IP Office Automation System**

In 1999, the KIPO launched the KIPOnet system, an internet-based e-filing and work processing system for the filing and receipt, examination, registration, trial, and publication of applications for patent, utility model, design, and trademark rights. The constant improvement of this system has led to the development of the 3rd generation KIPOnet (KIPOnet III) beginning in 2009. The latest version of the system, launched on January 1, 2012, reflects the amendments of the Patent, Trademark and Industrial Design Protection Acts in order to cope with the international harmonization and simplification of IP rights and the R. Korea- U.S. Free Trade Agreement. KIPOnet III provides a more simplified e-filing software suite and Easy-Web filing system, both of which support an automated search function for similar prior patents of each application. In addition, KIPOnet III has incorporated the Intelligent Search System, which enables automatic prior art searches of similar technologies for each application during examination as well as a drawing interpretation function which links the names of each part of a drawing(s) to their corresponding symbol.

The KIPO is continuously fortifying the protection of information by building various management and security related systems. This year, the KIPO introduced the latest IT technology called cloud technology, which restricts the processing and saving of all work data to only a central server, in order to prevent the leakage of IP-related documents and information.

### **Providing Comprehensive IP Support to SMEs**

To provide support for IP creation by SMEs, the KIPO has established 31 regional IP centers nationwide where patent, brand, and design experts provide consultations on various IP issues. In addition, the KIPO provided 176 sessions of IPR training for 3,740 people over the past year to foster IP manpower at SMEs. The KIPO plans to continue these efforts throughout 2012.

### **IP Policies**

In 2008, the KIPO's IPR examination policy underwent a paradigm shift. The focus shifted from high-speed examinations to a customer-oriented approach to examination and trial systems.

### 1) Customized three-track patent examination

The three-track patent examination system was launched on October 1, 2008. It enables customers to select an examination track that suits their patent strategy. They can choose an accelerated, regular, or customer-deferred examination. The accelerated track helps customers acquire patent rights expeditiously so that they can secure an exclusive position in the market. The customer-deferred track, on the other hand, gives customers ample time to prepare for the commercialisation of the invention.

### 2) Super-accelerated examinations for green technology

A super-accelerated examination system for green technology was introduced in October 2009. The aim of this system is to ensure that the examination results for green technology are provided more expeditiously than the accelerated track (that is, within a month of the request). The system, which was researched and developed in accordance with the national strategy of "low carbon, green growth", is limited to technologies that are either designated in environmental laws or classified as green by the government (in the form of financial aid or certification). Other prerequisites for a super-accelerated examination include a prior art search report from one of the designated prior art search organisations and a statement (on the application form) on the purpose of the super-accelerated examination.

## 3) Three-track patent trial system

In the KIPO's former preferential patent trial system, some types of cases took priority over general cases. However, in November 2008, the KIPO adopted a patent trial system with three separate tracks: a regular track, an accelerated track, and a super-accelerated track. The super-accelerated trial proceeds as follows: after both parties have applied for a super-accelerated trial, an oral hearing is held within a month of the deadline for submitting a written reply, and a trial decision is made within two months of the oral hearing. Thus, the parties are informed of the trial decision within four months of requesting the trial. An accelerated trial generally takes six months, and a regular trial takes about nine months.

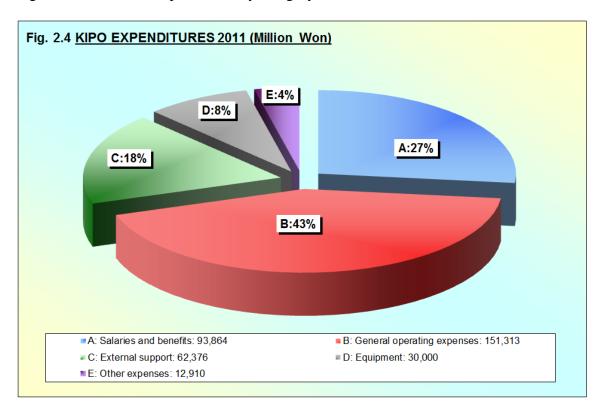
**Table 2.4: KIPO PRODUCTION INFORMATION** 

PRODUCTION FIGURES	2010	2011	Change	% Change
Applications filed				
Domestic	131,805	138,034	6,229	4.7%
Foreign	38,296	40,890	2,594	6.8%
Total	170,101	178,924	8,823	5.2%
Examination				
Requests	143,071	149,987	6,916	4.8%
First actions	125,633	174,283	48,650	38.7%
Final actions	110,356	151,184	40,828	37.0%
Grants				
Domestic	51,404	72,258	20,854	40.6%
Foreign	17,439	22,462	5,023	28.8%
Total	68,843	94,720	25,877	37.6%
Applications in appeal	9,270	9,664	394	4.3%
PCT activities				
International searches	20,810	23,166	2,356	11.3%
International preliminary examinations	324	224	-100	-30.9%

# **KIPO Budget**

In 2011, the KIPO had a total expenditure of 350,463 million won. Twenty-seven percent of the expenditure was allocated to salaries and benefits, 43 percent to general operating expenses, 18 percent to external support, 8 percent to equipment, and 4 percent to other expenses.

Fig. 2.4 shows KIPO expenditures by category in 2011.



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

# **KIPO Staff Composition**

At the end of 2011, the KIPO had a total staff 1,576. The breakdown is as follows.

## Examiners

Patents and Utility Model	794
Designs and Trademarks	134
Appeal examiners	99
Other staff	549
Total	1,576

### **More information**

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

http://www.kipo.go.kr/

### STATE INTELLECTUAL PROPERTY OFFICE OF THE P.R. CHINA

## **Organizational Structure and Personnel**

The SIPO has seven functional departments, a supervision department, a retired personnel department, and subsidiaries as the Patent Office, the Patent Reexamination Board, some public institutions and social organizations. In total, the SIPO has 8,284 full-time employees.

The Patent Office, an organization under the SIPO with 16 departments 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 3,169 at present, among which 2,112 employees are examiners for invention patents, 270 employees are for utility models and designs, 297 employees are for preliminary examination and work-flow management. Moreover, 275 employees work in support departments (i.e. patent documentation, automation, examination affairs administration) and 215 employees are responsible for general administration. The Patent Examination Cooperation (Beijing) Center, an institution under the Patent Office, was founded in 2001 to share the responsibility of patent examination, and has 3,026 staff members at present. In 2011, the Patent Examination Cooperation (Jiangsu) Center and the Patent Examination Cooperation (Guangdong) Center were established to meet the needs resulting from the trend of a rapid increase in patent filings. Currently, the two Patent Examination Cooperation Centers outside of Beijing are still under development.

The Patent Reexamination Board, affiliated directly with the SIPO, has a staff of 275, and is responsible for processing requests for patent reexamination and invalidation of patent rights.

#### **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 respectively, counted from the date of filing.

### **International Cooperation**

In 2011, the SIPO actively took part in international affairs concerning intellectual property rights, publicized the IP policies and achievements of P.R. China, and deepened cooperation with various IP institutions and organizations.

The cooperation of the IP5 and the SIPO-JPO-KIPO cooperation increased. The SIPO

continued to expand bilateral cooperation with the number of partners growing steadily and the content of cooperation becoming more profound. The SIPO signed several bilateral cooperation agreements in 2011 with important IP partners such as the EPO and the USPTO. The main objective is to further enhance the level of mutual cooperation in order to promote work-sharing among the offices which could reduce unnecessary duplication of work and increase examination efficiency.

# **Patent Applications Received in 2011**

In 2011, the SIPO received 1,633,347 applications for the three kinds of patents representing an increase of 34 percent compared with the previous year. 526,412 applications were for invention patents, an increase of 35 percent compared with the year before, 585,467 for utility model patents, an increase of 43 percent, and 521,468 for design patents, an increase of 24 percent.

### **Patents Granted in 2011**

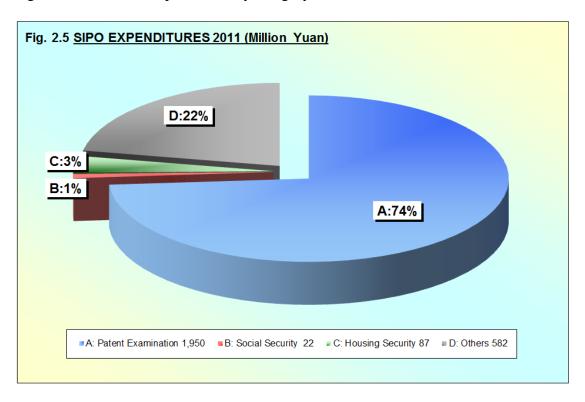
In 2011, the SIPO granted 960,513 patents reflecting an increase of 18 percent compared with the previous year. 172,113 were for invention patents, an increase of 27 percent compared with the year before, 408,110 for utility model patents and 380,290 for design patents, increasing by 18 percent and 13 percent respectively.

**Table 2.5: SIPO PRODUCTION INFORMATION** 

PRODUCTION FIGURES	2010	2011	Change	% Change
Applications filed				
Domestic	293,066	415,829	122,763	42%
Foreign	98,111	110,583	12,472	13%
Total	391,177	526,412	135,235	35%
Examination				
First actions	262,526	292,157	29,631	11%
Final actions	237,304	271,202	33,898	14%
Grants				
Domestic	79,767	112,347	32,580	41%
Foreign	55,343	59,766	4,423	8%
Total	135,110	172,113	37,003	27%
Re-Examination and Invalidation				
Requests for Re-Examination	12,299	12,850	551	4%
Requests for Invalidation	509	566	57	11%
PCT activities				
International Search Reports	10,453	14,553	4,100	39%
International Preliminary Examination Reports	393	325	68	-17%

# **SIPO Budget**

Fig. 2.5 shows SIPO expenditures by category in 2011.



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

# **SIPO Staff Composition**

At the end of 2011, the SIPO had a total staff of 8,284. The breakdown is as follows.

SIPO Functional Department	88
Patent Office: Examiners: Invention	2,112
Utility Model & Design	270
Preliminary Examination and Flow Management	297
Supporting Departments	275
General Administration	215
Total	3,169
Patent Re-Examination Board	275
Other Subordinate Unites Under the Office	4,752
Total	8,284

## **More information**

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

www.sipo.gov.cn

### UNITED STATES PATENT AND TRADEMARK OFFICE

#### **Mission Statement**

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

Fostering innovation and competitiveness and economic growth, domestically and abroad to deliver 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 the United States' technological progress and achievement.

As an agency of the U.S. Department of Commerce, the primary services provided by the USPTO are examining patent and trademark applications and disseminating patent and trademark information. 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.

### **USPTO Strategic Plan**

A well-run USPTO is critical to the nation's continued economic prosperity. The 2010-2015 Strategic Plan communicates the USPTO's priorities and directions, and serves as the foundation for programmatic and management functions. The Plan is designed to strengthen the capacity of the USPTO, to improve the quality of patents and trademarks that are issued, as well as to shorten the time it takes to obtain a patent. The Plan outlines a focused, specific set of goals and the steps that must be taken to reach those goals.

- 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**

On September 16, 2011, President Obama signed into law (P.L. 112-29) the Leahy-Smith AIA. The AIA promotes innovation by improving patent quality, clarifying patent rights, reducing the application backlog, reducing domestic and global patenting costs, providing greater certainty in patent rights, and offering effective alternatives to costly patent litigation. The AIA transitions the U.S. from a first-to-invent to a first-inventor-to-file system, allows for third party submission of prior art, provides enhanced proceedings for post-grant patent reviews, and authorizes establishment of the USPTO satellite offices beyond the Alexandria, VA/Washington, D.C. area.

The AIA also grants the Agency fee-setting authority enabling the USPTO to set and adjust fees to reflect the actual costs of the services it provides. The AIA also defines a new applicant classification – micro entity. For many years the USPTO has offered a small entity discount of 50 percent on many patent fees. The AIA allows the Agency to offer a 75 percent discount for qualifying micro entities on fees for filing, searching, examining, issuing, appealing, and maintaining patent applications and patents. The AIA authorizes the USPTO to offer prioritized examination for non-provisional applications for an original utility or plant patent. Prioritized examination allows applicants who submit a request and pay an additional fee to have their applications accorded special status and placed on the examiner's special docket, thereby receiving accelerated examination throughout its entire course of prosecution.

# **Patent Quality and Timeliness**

The USPTO made significant progress in FY 2011<sup>11</sup> in meeting its goal of providing timely and quality patents. While less-than-planned spending authority has greatly impacted the USPTO's ability to decrease patent pendency and the backlog, the Patent organization continued to respond to these challenges and obstacles by launching new and innovative initiatives to achieve its strategic goals. Despite budget constraints suspending routine programs such as examiner hiring, overtime, and training, the Patent organization succeeded in making progress by focusing on new methods and processes to increase efficiencies and strengthen effectiveness through collaboration, communication, and transparency.

In FY 2011, the USPTO reduced the unexamined patent application backlog to its lowest level in five years, a remarkable achievement given a 5.3 percent application growth rate in FY 2011. Another significant milestone the Agency surpassed in FY 2011 was the issuance of patent number 8 million. The USPTO granted the first patent under the current numbering system in 1836, and while it took 75 years to get to patent number 1 million, it has only taken the Agency six years to go from 7 million patents to 8 million.

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<sup>&</sup>lt;sup>11</sup> The fiscal year begins in October at the USPTO.

## **International Cooperation and Work-sharing**

The USPTO continues to promote international cooperation by emphasizing work sharing among Patent offices as a key to efficient management of office workloads, reduction of backlogs and pendency, and improvement of the international patent system. The USPTO's primary work sharing vehicle – the PPH – has proven to be a major success, producing significant efficiency gains in terms of higher allowance rates, fewer office actions per disposal, and substantially lower percentages of appeals and continuation applications. This translates into measurable cost savings for applicants, and provides them with additional flexibility when developing their IP strategy. In 2011 the USPTO received twice as many PPH requests as were received in the preceding four years combined. These work-sharing programs reduce re-work, increase collaboration, and provide consistency between IP offices. In FY 2011, the USPTO expanded work-sharing efforts by starting new pilots, extending existing pilots, and expanding other pilots with a number of IP offices.

The USPTO and the EPO continue to promote international cooperation and worksharing through the established activities of the dedicated IP5 Working Group and the Common Hybrid Classification Project. Beginning in January 2013, both offices will use the CPC system which has a similar classification structure and rules to the IPC. This will improve patent searching, enhance examiner efficiency, and will facilitate worksharing and harmonizing classification systems.

In order to promote improved IP protection and enforcement, the USPTO through its Global IP Academy, expanded its programs for IP rights training, capacity building, and technical assistance offerings for other IP Offices. The USPTO also continued to work closely with the White House's IP Enforcement Coordinator to implement the Administration's IP enforcement plan, including improving the *USPTO IP Attaché Program* and establishing a U.S. Government-wide database of training and capacity building efforts.

**Table 2.6: USPTO PRODUCTION INFORMATION** 

<b>USPTO Production Information</b>	2010	2011	Change	% Change
Applications filed				
Utility (patents for invention) <sup>12</sup>	490,226	503,582	13,356	3%
Plant	992	1,139	147	15%
Reissue	1,180	1,151	-29	-2%
Total Utility, Plant, Reissue	492,398	505,872	13,474	3%
Design	29,059	30,467	1,408	5%
Provisional	142,274	153,630	11,356	8%
Total	663,731	689,969	26,238	4%
PCT Chapter I Searches	45,732	50,037	4,305	9%
PCT Chapter II Examination	1,452	1,448	-4	0%
First actions (includes utility, plant, and reissue applications)	445,245	579,088	133,843	30%
Grants (total)	219,614	224,505	4,891	2%
U.S. residents	107,792	108,626	834	1%
Foreign	111,822	115,879	4,057	4%
Japan	44,814	46,139	1,325	3%
EPC states	32,473	32,774	301	1%
R. Korea	11,671	12,262	591	5%
P.R. China	2,657	3,174	517	19%
Others	20,207	21,530	1,323	7%
Applications in appeal and interference proceedings (includes utility, plant, and reissue applications)				
Ex Parte Cases Received	14,022	13,365	-657	-5%
Ex Parte Cases Disposed	7,461	7,861	400	5%
Inter Partes Cases Declared	48	73	25	52%
Inter Partes Cases Disposed	54	54	0	0%
Patent Cases in Litigation (includes utility, plat, and reissue applications)				
Cases filed	150	136	-14	-9%
Cases disposed	150	111	-39	-26%
Pending cases (end of calendar year)	166	197	31	19%

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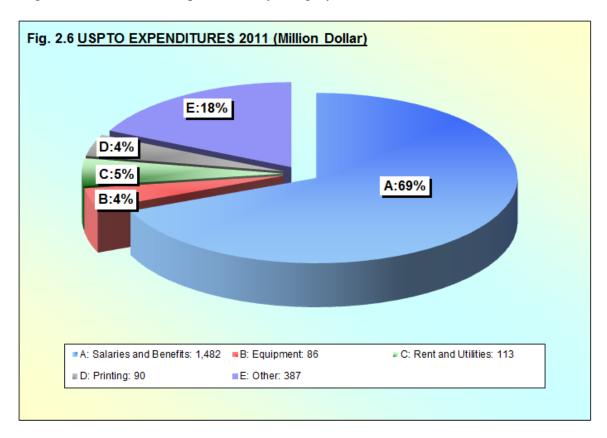
 $<sup>^{12}</sup>$  Unless otherwise noted, the USPTO statistics presented elsewhere in this report are limited to utility patent applications and grants.

# **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 2011, USPTO expenditures totalled \$2,160.9 million. Agency-wide, 12 percent of expenditures was allocated to IT security and associated IT costs.

Goal 1 - Optimize Patent Quality and Timeliness	\$1,915.3 million
Goal 2 - Optimize Trademark Quality and Timeliness	\$196.4 million
Goal 3 - Provide Domestic and Global Leadership to Improve IP	\$49.2 million
Policy, Protection and Enforcement Worldwide	φ <del>4</del> 9.2 mmmon

Fig. 2.6 shows USPTO expenditures by category in 2011.



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

# **USPTO Staff Composition**

At the end of FY 2011, the USPTO work force was composed of 10,210 federal employees. Included in this number are 6,690 Utility, Plant, and Reissue patent examiner staff and 95 Design examiners; 378 Trademark examiner attorney staff, and 3,047 managerial, administrative and technical support staff.

## **More Information**

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

#### THE FIVE IP OFFICES COOPERATION

The IP5 is the name given to a forum of the five largest intellectual property offices in the world (EPO, JPO, KIPO, SIPO and USPTO) that has been established to improve the efficiency of the examination process for patents worldwide.

The IP5 Offices account for the vast majority of all patent applications filed worldwide and for most of all work carried out under the PCT.

As the world sees economic barriers between nations fade away, innovators want their intellectual creations protected concurrently in multiple major markets. Hence, applications for the same technology are filed at more than one patent office. It is estimated that about 250,000 applications for the same inventions are filed each year in two or more of the IP5 Offices. The solution to the backlog problem is to reduce, to the maximum extent possible, the duplication of work which takes place at each office for a family of patent applications. This is all summarized by the concept of work-sharing.

## **Work-sharing vision**

The IP5 Offices have agreed that, consistent with the vision of the IP5 framework, worksharing among the offices could reduce unnecessary duplication of work and thus contribute to prompt and accurate examination providing that the parameters of work sharing are fulfilled. These parameters are access, notification, and the reusability of work products. At the same time, work-sharing could allow different offices to examine family applications' documentation and allow mutual use of information concerning examination results. This would improve the predictability of the outcome for the applicant when essentially the same application is filed in different offices, thereby reducing the risks associated with commercializing an invention related to a pending patent. Providing that examination quality is guaranteed, work-sharing will serve as an effective approach for the IP5 to jointly enhance work efficiency and reduce work backlogs.

### The PCT, FLASH, JP-FIRST and PPH

The PCT is very successful international framework and plays a significant role in worksharing. With nearly 182,000 applications filed annually, the PCT provides for a solid work-sharing basis. Its use as a work-sharing platform will be enhanced further by the five offices.

In parallel, the IP5 Offices have agreed in the context of their own circumstances to continue and take forward on-going work-sharing projects, including the PPH, First Look Application Sharing (FLASH) and JP-FIRST.

The PPH is an applicant-driven work sharing program in which all IP5 Offices participate, be it on a Trilateral (EPO, JPO, USPTO) basis within the PCT or on an

individual basis between certain patent offices. It was launched in 2006 as a pilot between the JPO and the USPTO.

The PPH speeds up the examination process for corresponding applications filed in participating countries by allowing examiners to re-use search and examination results.

Under the PPH program, an applicant receiving a ruling from the OFF that at least one claim is patentable may request that the OSF fast track the examination of corresponding claims in corresponding applications filed in the OSF. The PPH will leverage fast-track examination procedures already available in the OSF to allow applicants to obtain patents faster and more efficiently. For example, the OSF can use the OFF's work products – such as allowances or search reports – to streamline patent processing. Since the OSF is leveraging positive work products from the OFF, the PPH program results in additional patent processing efficiencies such as fewer communications required between the Offices and applicants. These efficiencies translate into measureable benefits to users, lowering the prosecution costs on PPH applications.

The JP-FIRST is an acceleration scheme at the JPO where a patent application at the OFF having a second filing at another foreign office including the IP5 offices is accelerated in order to produce the results in a timely manner for the OSF. The EPO offers an acceleration program (PACE) to applicants free of charge should an acceleration become necessary for an applicant. The USPTO is conducting an acceleration pilot known as FLASH with the EPO and the JPO.

## **The 10 Foundation Projects**

Work-sharing also has two prerequisites, quality and timeliness, which the ten Foundation Projects have been established to address.

Work-sharing not only requires new tools to be developed, but can only be made possible through normalized practice and operations. There are ten Foundation Projects that have been established by the IP5 Offices to support the progress of work-sharing both by building the hard environment (i.e. tools) and the soft environment (i.e. standards).

The concept of building an environment suitable for work-sharing naturally implies the creation of an information systems infrastructure to allow the offices to utilize the search and examination result information of the partner offices, and the implementation of working practices which enable the sharing and reutilization of such information by examiners. This would include an increase in transparency and coordination of the different search systems and strategies, classification scheme and philosophies, education systems, quality management systems, statistical analysis parameters and examination procedures.

Cooperation in establishing a common documentation, common classification, and common search capability, supported throughout by machine translation, will give examiners from all IP5 Offices access to prior art documentation in all relevant IP5

IP5 Statistics Report 2011 Chapter 2

languages, thereby ensuring the completeness and validity of the search, enhancing patent examination quality, and guaranteeing the stability of patent rights. Access to the results of other IP5 Offices will be optimized through the IP5 cooperation.

More information on the Foundation Projects can be found under www.fiveipoffices.org/projects.html

#### **Statistical activities**

One of the Foundation Projects is dedicated to the statistical parameters for examination. Common statistical parameters for examination will enhance communication among the IP5 Offices, improve transparency of practice, elevate trust of others' work, encourage harmonization and offer decision-making and evaluation information support for worksharing. Through coordinating the key differences in statistical parameters for examination among the IP5 Offices, improving current parameters for the purpose of work sharing, shaping common statistical parameters for examination, the IP5 Offices may realize comparative analysis of data formed on a more uniform statistical basis, thus enhancing the pertinence and efficiency of work sharing as well as promoting harmonization.

The IP5 Offices continue to actively cooperate in other statistical projects. This is most visible via the publication of the present report. Other activities relate to the exchange of methodologies and results for various routine activities as well as specific internal projects.

Together with the statistical report, statistical data are made available on the IP5 web site under

www.fiveipoffices.org/stats.html