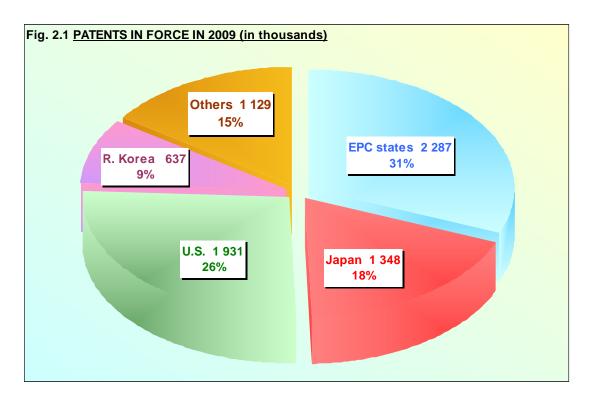
# Chapter 2

# THE FOUR OFFICES

Patents are recognized throughout the world as a measure of innovative activity. EPO, JPO, KIPO and USPTO are among the largest IP Offices in terms of the volume of patent applications they handle. The following figure shows the prominent role played by the Four Offices in terms of the numbers of patent in force at the end of 2009. The data are based on the most recent information on worldwide patents available from the WIPO Patent Statistics and from some other Offices.



It appears that, at the end of the year 2009, 85 percent of the 7.3 million patents in force<sup>17</sup>, were valid in the Four Offices jurisdictions.

<sup>17</sup> Data for 2009 are missing for some countries in WIPO data, in which case data for 2009 in each annual report of such countries or WIPO data for 2007 or 2008 were substituted as the best available estimates for 2009.

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## **EUROPEAN PATENT OFFICE**

As the main patent granting authority for Europe, EPO is an example of economic and political cooperation, providing patent protection at the end of 2010 in up to 40 countries on the basis of a single patent application and a unitary grant procedure. This represents a market of about 610 million people. EPO receives currently more than 50 percent of all the patent applications filed in the area of the EPC contracting states.

At the end of 2010, the 38 members of the underlying European Patent Organisation were:

Albania	Austria	Belgium	Bulgaria	Croatia
Cyprus	Czech Republic	Denmark	Ellas	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		

Other states have agreements with EPO to allow applicants to request an extension of European patents to their territory. At the end of 2010, such extensions of European patents could be requested for:

Bosnia-Herzegovina Montenegro

On May 1, 2010, Albania became the 37th member of the European Patent Organisation. On October 1, 2010, Serbia became the 38<sup>th</sup> member of the European Patent Organisation. On March 1, 2010, the extension agreement with Montenegro entered into force.

In July 2010, Mr Benoît Battistelli became the sixth president of EPO. Two new vice presidents were also appointed later in the year.

### **Grant Procedure**

The mission of EPO is to support innovation, competitiveness, and economic growth across Europe through a commitment to high quality and efficient services delivered under the EPC, particularly by granting European patents. EPO also acts as a receiving, searching, and examining authority under the PCT. A further task is to perform, on the behalf of patent offices of certain member states, state of the art searches for the purpose of national procedures.

To keep the European patent system fit for purpose in the long term, EPO prepared a set of adjustments that were to be implemented as from Spring 2010. The effect was to enhance the quality of incoming applications, to improve the coordination between search and substantive examination and to tighten some time limits. On the longer

perspective, further projects are elaborated to affect the patent system in its global dimension, in cooperation with European and non-European patent Offices.

One of the changes affected divisional applications within Rule 36 of the EPC. A new time limit was imposed of twenty-four months from first communication in examination, or before the expiry of a time limit of twenty-four months from any first objection by the Office regarding on the requirements for the examination. This limit came into effect fully for all pre-existing applications on October 1, 2010. Because of the new time limit, there were a number of additional divisional filings made in 2010 with respect to earlier applications.

The adjustments also related to pre-search communications between examiner and applicant, obligatory responses to the search opinion prior to entry into substantive examination, a requirement for applicants to identify and indicate the basis for amendments and a clearer restriction of examination only to the subject matter that had been searched.

There was a recovery in demand following the end of the worldwide economic recession of 2009. The overall number of filed applications increased markedly in 2010 compared to 2009. 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 2009 and 2010.

In 2010, the Office production was 11 percent higher than in 2009. The number of searches completed was almost unchanged at about 201 500. While the examination work under the PCT further reduced, the number of final actions in examination at EPO increased by 10 percent to about 125 700. As will be shown below in Chapter 4, this is reflected in an increased number of grant actions. In 2010, about 2 030 decisions in appeal were completed (similar to 2009). On average in 2010, a patent granted by EPO was designating 21 countries (19 in 2009).

**Table 2.1: EPO PRODUCTION INFORMATION** 

PRODUCTION FIGURES	2009	2010
Patent filings (Euro-direct & PCT international phase)	211 324	235 029
Searches carried out		
European (including PCT supplementary)	99 105	100 010
PCT international	81 463	73 686
On behalf of national Offices and other	22 941	27 818
Total production search	203 509	201 514
Examination - Opposition (final actions)		
European examination	102 178	114 991
PCT Chapter II	9 601	8 410
Oppositions	2 314	2 309
Total final actions examination-opposition	114 093	125 710
Appeals settled		
Technical appeals	1 893	1961
PCT protests	25	3
Other appeals	61	67
Total decisions	1 979	2031

### **Patent Information**

EPO is a producer of patent information products and services and has set up databases that are available not only for internal use, but also for dissemination by national offices.

The Global Patent Index product that was introduced at the end of 2009 was used widely and effectively in 2010.

In October 2010, EPO and the USPTO agreed to develop a joint classification system, to be known as the Cooperative Patent Classification (CPC), with the intention to simplify the use of patent information.

In November 2010, EPO signed a Memorandum of Understanding with Google Inc. regarding the intention to agree on the development of the best machine translation method for patents.

## **Other International Cooperation**

In December 2010, an agreement was signed with Morocco on the validity of European patents in that country, although this agreement has not yet entered into force.

The Five IP Offices continued to work on their joint initiative on changes to the global patent system<sup>18</sup>. The ten cooperative Foundation Projects are run by three working groups. Cooperation was enhanced in 2010 via progress in all ten projects. Meetings were held between heads and deputy heads of the Five Offices during the course of the year.

There has been further progress on the Patent Prosecution Highway (PPH) projects, with a new such system set up between EPO and JPO in January 2010.

## **EPO Budget**

EPO is financially autonomous and makes its financial statements since 2006 in accordance with International Financial Reporting Standards (IFRS). Expenses are to be covered entirely out of revenue, mainly from patent fees paid by applicants and patentees.

Fees related to the patent grant process, such as filing, search, examination, appeal fees as well as renewal fees for European patent applications (i.e. before grant) are paid to EPO directly. Renewal fees for European patents (i.e. after grant) are collected by the designated contracting states and determined by national law. From these renewal fees, 50 percent is kept by the national Offices and 50 percent is transferred to EPO.

Under IFRS, procedural fees are not recorded automatically as revenue in the accounting year in which they are received, but instead are treated as deferred income, to be included as revenue in the year during which the relevant task is actually performed. A similar concept is applied also for all other types of income. In 2010, the total operating income amounted to EUR 1 432 million.

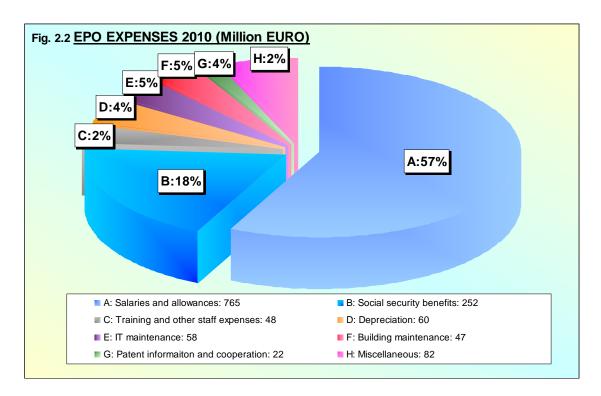
On the expenses side, in addition to salaries, allowances and training, staff expenses include entitlements for post-employment social benefits as far as these are built up during the accounting year, including pensions as well as sickness and long-term care costs.

In conformity with IFRS, all expenses were recorded following the accrual principle, irrespective of whether or not cash disbursements took place in the period under consideration. For the same reason, depreciation for buildings, IT equipment and other tangible and intangible assets are shown under expenses. Operating expenses totalled EUR 1 334 million.

The financial result for 2010 still suffered to some extent from problems related to the recent worldwide recession and closed with a deficit of EUR 67 million.

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<sup>&</sup>lt;sup>18</sup> www.fiveipoffices.org



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

## **EPO Staff**

In 2010, 64 examiners were recruited. By the end of the year, the staff complement reached a total of 6 778, including 3 966 examiners in search, examination, opposition, and 157 members of Board of Appeal.

### **More information**

Further information can be found on the EPO's website: http://www.epo.org/

## JAPAN PATENT OFFICE

### **Development of Intellectual Property Policy**

"The Intellectual Property Promotion Plan 2010" established by "The Intellectual Property Policy Headquarters," headed by the Prime Minister, states the three main strategies:

- 1) Acquisition of international standard in specific strategic fields,
- 2) Growth strategy with the strengthening of content as its core and
- 3) Measures for enhancing intellectual property policy from a cross-industrial point of view.

In particular, the enhancement of support measures for venture and Small and Medium Size Industries (SME) businesses, the construction of a place for industry-government academia joint creation, the improvement of cooperation of universities with the industry, and the promotion of international harmonisation of the patent system as a particular measures.

## Recent Improvements to Japan's IP System

The year 2010 is a memorable year marking the 125th anniversary of the establishment and proclamation of the Patent Monopoly Act which was enacted in 1885 (18<sup>th</sup> year of the Meiji era) in Japan. During the past 125 years, from the early stage of Japan's industrial development to the present day in which Japan is a leading global economic power, the industrial property rights (IPR) system has played an important role in Japan.

The recent environment surrounding IPR systems has been changing to a great extent in light of the development of the open innovation accompanying globalized corporate activities and advanced technology. Playing a central role in IPR policy, the JPO has instituted a succession of innovation enhancement measures to increase the growth potential of the Japanese economy while coping with the change surrounding IPR systems and striving to create an IPR system that will meet the demands of this new age.

#### **Efforts related to Patents**

With respect to global applications, the network of the PPH, which was first introduced to the world by the JPO, has steadily been expanding and, as of December 2010, included 13 countries/organisations engaged in PPH programs with Japan.

### **Promotion of Quality Management of Patent Examination**

The JPO has maintained and improved the quality of patent examination through both

- 1) "Quality Control" performed for each patent application at each Art Unit and
- 2) "Quality Management" exercised from a cross-sectional point of view.

## 1) "Quality Control" of Examination for Each Patent Application

Each Art Unit at which applications of each technical field are examined strives to perform the "Quality Control" of examinations for proper examinations of individual cases based on the Examination Guidelines by unifying application of the judgment standards between each examiner through consultations between several examiners, checks of the content by a director, etc.

## 2) Cross-sectional "Quality Management"

Furthermore, the JPO sets a quality management system to continuously improve the examination quality based on a concept of the quality management cycle (PDCA cycle <sup>19</sup>) of patent examination. Under this concept, examination results are post-measured and analyzed objectively, and then the results are reflected on the implementation plan to maintain and improve examination quality. In April 2010, the JPO established "Quality Management Section" in the Administrative Affairs Division, and the quality management system was enhanced further.

To be specific, the Quality Management Section conducts the internal review on individual case by the third party in the JPO, collects user reviews, and analyzes related statistical information. In addition, these results of the analyses are utilized for considerations on measures to improve examination quality by related sections, and the feedback is given to the Art Units for supporting the Quality Control at each Art Unit.

### Further efforts toward expeditious and efficient patent examination

JPO has employed 98 fixed-term patent examiners each fiscal year (FY<sup>20</sup>) from FY2004 to FY2008, to give a total of 490 as of the end of FY2008, added to regular examiners. The number of the fixed-term patent examiners remained unchanged in 2010 and is to be kept for some more years.

Ahead of the other countries, JPO has established a paperless system for all procedures, from filing an application to receiving an examiner's decision. This enabled JPO to be the world's first patent office to outsource prior art searches to private sectors, enhancing efficiency to a significant degree.

<sup>20</sup> The fiscal year begins in April at JPO.

<sup>&</sup>lt;sup>19</sup> Management cycle to maintain and improve the quality and promote the improvement of works suggested by Dr. Deming, an American statistician, in the 1950's: The process of Plan, Do, Check and Act is implemented in order for continuously improving a system by utilizing the results of Check.

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

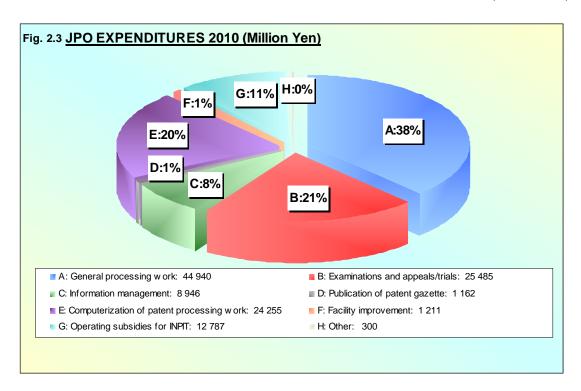
Examiners	FY 2009	FY 2010
Regular	1 202 (+12)	1 213 (+11)
Fixed-term	490	490
Total	1 692 (+12)	1 703 (+11)

**Table 2.3: JPO PRODUCTION INFORMATION** 

PRODUCTION FIGURES	2009	2010
Applications filed		
Domestic	295 315	290 081
Foreign	53 281	54 517
Total	348 596	344 598
Examination		
Requests	254 368	255 192
First actions	361 439	377 089
Final actions	354 792	374 891
Grants		
Domestic	164 459	187 237
Foreign	28 890	35 456
Total	193 349	222 693
Appeals/Trials		
Demands for Appeal against examiner's decision	24 137	27 889
of refusal	27 137	21 009
Demands for Trial for invalidation	257	237
PCT activities		
International searches	28 927	29 993
International preliminary examinations	2 173	1 952

## JPO Budget

(Unit: Million Yen)



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

## JPO Staff Composition

As of the end of FY 2010, the total number of staff at JPO was a total of 2 903 staff. This includes 490 fixed-term patent examiners.

Examiners:	Patent / Utility model:	1 703
	Design:	52
	Trademark:	149
Appeal examiners:		387
General staff	:	612
Total:		2.903

## More information

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

## KOREAN INTELLECTUAL PROPERTY OFFICE

#### **Mission Statement**

The Korean Intellectual Property Office (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, commercialisation and utilisation of intellectual property and by strengthening the protection of intellectual property.

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

### **Major Developments in 2010**

KIPO received 170 101 patent applications in 2010, and its requests for international searches soared from 5 898 in 2006 to 22 707 in 2010. At the same time, KIPO implemented various measures to make its IP system more customer-oriented. One example is a set of revisions to the Rules for Collecting Patent Fees, which came into effect in January and December 2010; the rules revised to enhance the convenience of customers by enabling them to pay their patent fees by credit card or in instalments.

KIPO also implemented various measures to ensure that its examination service is of the highest quality. For instance, it recently amended approximately 39 percent of its examination standards on the basis of comparative research on the examination standards and practices of five major intellectual property offices. It has also made translations of its patent examination standards available to overseas applicants and agents.

## **International Cooperation**

KIPO has implemented PPH agreements with eight nations. The first PPH was set up with Japan in 2007; The others include the United States in 2008; Denmark, the United Kingdom, Canada, and Russia in 2009; and Finland and Germany in 2010.

Between September 2009 and December 2010, Korea and the United States implemented a project called Strategic Handling of Applications for Rapid Examination (SHARE<sup>21</sup>). The SHARE project, which was trialled separately from the PPH, dealt exclusively with applications pertaining to fuel cells and semiconductors.

<sup>21</sup> The program is designed to provide mechanisms for exchanging information and best practices, with the ultimate goal of advancing worksharing between the Offices.

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#### **IP Policies**

In 2008, 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.

The customized examination system began to stabilize in 2010. In that year, KIPO received the following number of applications: 20 832 for preferential examinations, 953 deferred examinations, and 229 for super-accelerated examinations.

### 3) Three-track patent trial system

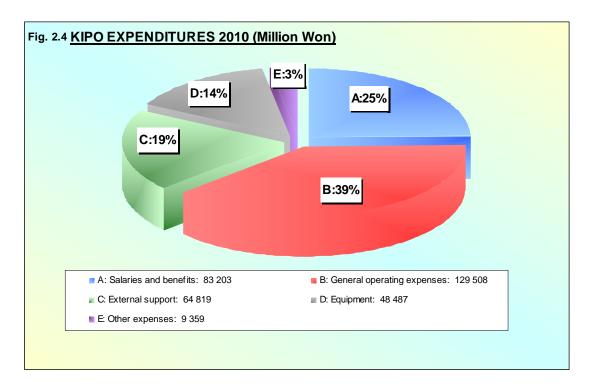
In KIPO's former preferential patent trial system, some types of cases took priority over general cases. However, in November 2008, KIPO adopted a patent trial system with three separate tracks: a regular track, an accelerated track, and a super-accelerated track. The super-accelerated trial proceeds 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	2009	2010
Applications filed		
Domestic	127 316	131 805
Foreign	36 207	38 296
Total	163 523	170 101
Examination		
Requests	132 773	143 071
First actions	94 300	125 633
Final actions	89 272	110 356
Grants		
Domestic	42 129	51404
Foreign	14 603	17439
Total	56 732	68 843
Applications in appeal	10 561	9 270
PCT activities		
International searches	16 926	20 810
International preliminary examinations	362	324

## **KIPO Budget**

In 2010, KIPO had a total expenditure of 335 376 million won. Twenty-five percent of the expenditure was allocated to salaries and benefits, 39 percent to general operating expenses, 19 percent to external support, 15 percent to equipment, and 3 percent to other expenses.



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

# **KIPO Staff Composition**

At the end of 2010, KIPO had a total staff 1 548. The breakdown is as follows.

## Examiners

Patents	712
Designs	36
Trademarks	95
Appeal examiners	99
Other staff	606
Total	1 548

## **More information**

Further information can be found on KIPO's website: http://www.kipo.go.kr/

### 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.

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 the useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries" USPTO is on the cutting edge of the United States' technological progress and achievement.

As an Agency of the U.S. Department of Commerce (DOC), the primary services provided by USPTO are examining patent and trademark applications and disseminating patent and trademark information. 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 USPTO are vested in the Under Secretary of Commerce for Intellectual Property and Director of USPTO, who consults with the Patent Public Advisory Committee and the Trademark Public Advisory Committee. USPTO operates with two major business lines, Patents and Trademarks.

## **USPTO Strategic Plan**

In 2010 USPTO released the 2010-2015 Strategic Plan and implementation has already begun. A well-run USPTO is critical to the nation's continued economic prosperity. The USPTO 2010-2015 Strategic Plan is designed to strengthen the capacity of 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 USPTO 2010-2015 Strategic 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 Organisational Excellence.

### **Patent Quality and Timeliness**

It is critical that USPTO strengthen the examination capacity of USPTO, improve the quality of patents issued, and provide optimal timing for obtaining a patent. Enhancing quality for all, and allowing faster examination for those applicants who need it, will increase value for the entire IP system and for America.

FY 2010 was a remarkable year for the Patent organization. Despite the continued effects of the economic downturn, the Patent organization successfully launched new and innovative initiatives to meet strategic goals. Many routine programs, such as replacement hiring and funding workload-related contracts, were suspended due to budget constraints. Yet the USPTO's commitment to making progress focused on ways to be more efficient and effective in business processes, human capital management, policy, and managing workload.

A market-driven approach to patent application processing was introduced and methods were devised for providing applicants more control over examination timing. The Office moved forward on refining optimal timeliness and patent quality measures, and recognized the ultimate solution will need to blend applicant needs with efficient patent application processing. The challenges of timely application processing are being met by a combination of increasing examiner capacity, improving efficiency, and leveraging work sharing programs. A quality patent removes risks to patent holders and strengthens the entire IP system.

## **Intellectual Property Protection**

USPTO plays a significant leadership role in promoting effective domestic and international protection and enforcement of IP rights. The Office is working to formulate a data-driven U.S. Government (USG) IP policy and to develop unified standards for international IP. USPTO is also working closely with the White House's U.S. IP Enforcement Coordinator to help formulate a robust and effective Administration IP enforcement plan.

The Office of the Chief Economist was created and an initiative was launched to collect and analyze data on the role IP plays in the promotion of innovation. USPTO placed additional focus on the IP Attaché Program to assist in improving the protection and enforcement of IP. Through the Global Intellectual Property Academy, the Office continues to provide high-level IP rights training, capacity building programs, and technical assistance training to IP officials from around the world. USPTO continues to work with Congress and the courts to improve the state of U.S. IP law.

Progress was achieved towards the goal of providing domestic leadership to improve IP policy, protection, and enforcement worldwide by developing a national IP strategy that is integrated into the Administration's innovation strategy, monitoring and providing policy guidance on key IP issues in cases; providing domestic education outreach and capacity building; and engaging USG agencies and Congress on legislation that improves the IP system. Similarly, progress was also made toward the goal of promoting effective international protection and enforcement of IP rights by leading efforts at the WIPO and other intergovernmental/international organizations to

improve international IP rights systems; improving enforcement in, and providing capacity building and technical assistance to, key countries/regions; improving efficiency and cooperation in global IP system; providing technical expertise in negotiation and implementation of bilateral and multilateral agreements; and increasing the effectiveness of IP attachés in prioritized countries/regions.

**Table 2.5: USPTO PRODUCTION INFORMATION** 

<b>USPTO Production Information</b>	2009	2010
Applications filed		
Utility (patents for invention)	456 437	490 226
Plant	959	992
Reissue	1 019	1 180
Total Patents of Invention	458 415	492 398
Design	25 806	29 059
Provisional	133 803	142 274
Total	618 024	663 731
PCT Chapter I Searches	46 670	45 732
PCT Chapter II Examination	1 930	1 452
First actions	466 403	445 245
Grants (total)	167 349	219 614
U.S. residents	82 382	107 792
Foreign	84 967	111 822
Japan	35 501	44 814
EPC states	23 677	32 473
R. Korea	15 372	11 671
Others	10 417	22 864
Applications in appeal and interference proceedings		
Ex Parte Cases Received	14 773	14 022
Ex Parte Cases Disposed	7 071	7 461
Inter Partes Cases Declared	54	48
Inter Partes Cases Disposed	60	54
Patent Cases in Litigation		
Cases filed	179	149
Cases disposed	73	150
Pending cases (end of calendar year)	143	142

## **USPTO Budget**

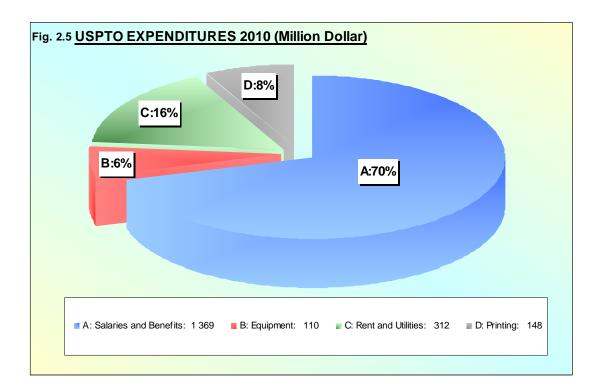
USPTO utilizes an activity based information methodology to allocate resources in and indirect costs that support programs and activities within each of the three strategic goals. In FY 2010<sup>22</sup>, USPTO expenditures totalled \$1 939 million. Agencywide, 9.5 percent of expenditures was allocated to information technology (IT) security and associated IT costs.

Goal 1 - Optimize Patent Quality and Timeliness \$1 707 million
Goal 2 - Optimize Trademark Quality and Timeliness \$183 million

Goal 3 - Provide Domestic and Global Leadership to Improve IP Policy, Protection and Enforcement Worldwide

(Unit: Million Dollar)

\$49 million



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

## **USPTO Staff Composition**

At the end of FY 2010, the USPTO work force was composed of 9 507 federal employees. Included in this number are 6 128 Utility, Plant, and Reissue patent examiner staff and 97 Design examiners; 378 Trademark examiner attorney staff, and 2 904 managerial, administrative and technical support staff.

#### **More Information**

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

<sup>&</sup>lt;sup>22</sup> The fiscal year begins in October at USPTO.