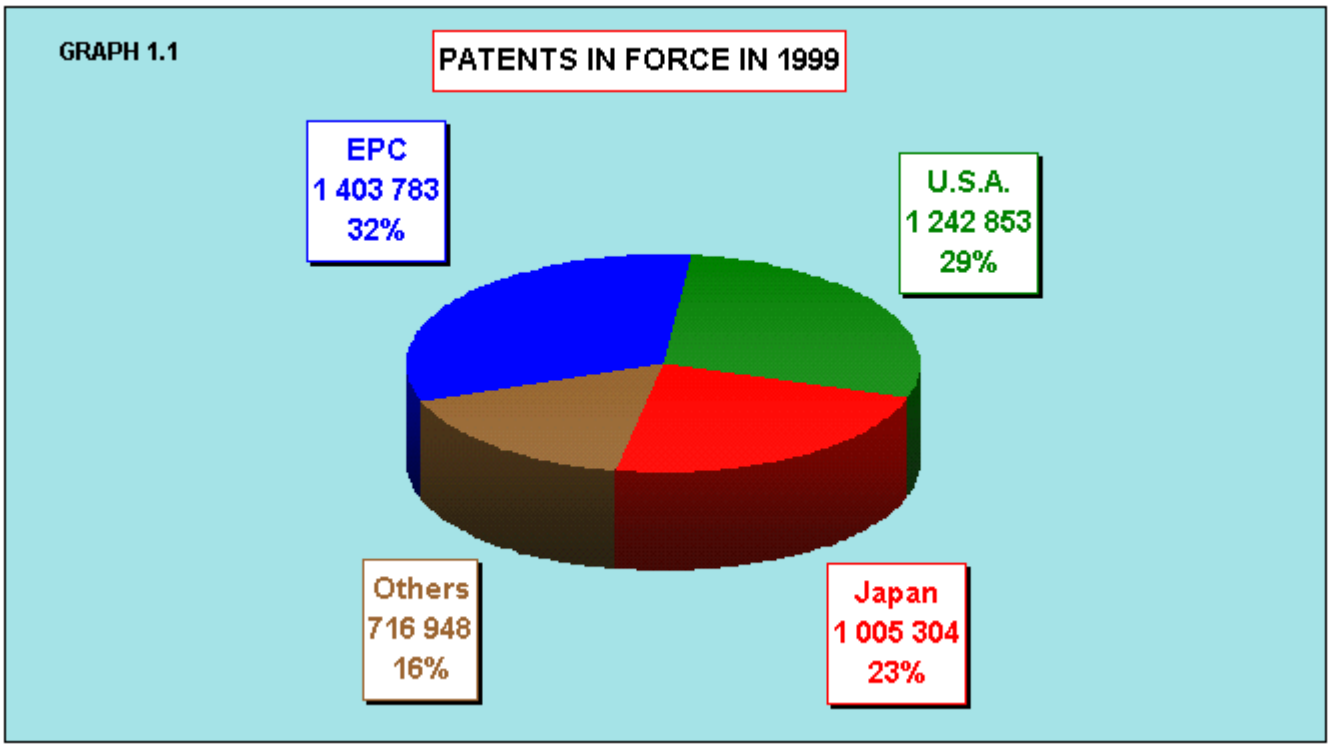
1 INTRODUCTION

There are various different types of intellectual property rights. They can be categorized as:

- patents of invention;
- utility model patents;
- industrial design patents;
- trademarks, and
- copyrights.

This report concentrates on the first kind, patents of invention. These patent rights are well used throughout the world. At the end of the year 1999, a total of about 4.4 million patents were in force. The contracting states of the European Patent Convention (EPC contracting states), the JPO and the USPTO, together cover about 84% of the total patents worldwide. In the EPC contracting states patents are granted either by the national offices or by the EPO.



EUROPEAN PATENT OFFICE

The European Patent Office (EPO) - the main patent granting authority for Europe - is a product of successful economic and political co-operation, providing patent protection in up to 26 European countries on the basis of a single patent application and a unitary grant procedure. The mission of the EPO is to support innovation, competitiveness and economic growth for the benefit of the citizens of Europe.

At the end of the year 2000, the following 20 states were members of the underlying European Patent Organisation:
Austria, Belgium, Cyprus, Switzerland, Germany, Denmark, Spain, Finland, France, The United Kingdom, Greece, Ireland, Italy, Liechtenstein, Luxembourg, Monaco, The Netherlands, Portugal, Sweden, and Turkey.

The following states agreed with the EPO to allow extension of European patent applications and patents to their territory:
Albania, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Romania and Slovenia.

Together these states build a market of about 485 million people.
The following states have been invited to accede to the European Patent Convention in July 2002: Bulgaria, the Czech Republic, Estonia, Hungary, Poland, Romania, Slovakia and Slovenia.
Two other states, Latvia and Lithuania, have also applied to join the European Patent Organisation.

Grant Procedure

The main task of the EPO is to grant European patents according to the European Patent Convention (EPC). Moreover, the EPO acts as receiving, searching and examining authority under the Patent Cooperation Treaty. 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 and to carry out searches on request of third parties.

The European Patent Organisation has prepared the ground for a wide-ranging reform of the European patent system. At a diplomatic conference in 2000, the contracting states advocated a modernisation of the Convention to make it much more flexible. Almost 100 Articles covering institutional matters, patent law and procedures were adapted to meet the new challenges facing the system in a globalized economy. Revisions included giving a legal basis for bringing together search and examination in the procedure for the granting of a European patent.

At an intergovernmental conference held in 2000 on reform of the European patent system, the contracting states agreed to dispense to a large extent with the translation of European patents into the official languages of the designated states. Under this agreement, states whose official language is one of the three official languages of the EPO will waive the translation requirement. States with a different official language will no longer require a translation if the European patent is granted in the official language of the EPO which have specified (or has already been translated into this language). The agreement will enter into force when it has been ratified by at least eight states, including the three states with the largest number of European patents coming into effect in 1999.

Another diplomatic conference held in 2000 on the WIPO Treaty for the harmonisation of formal requirements under patent law was brought to a successful conclusion in Geneva after five years of preparatory work. The new treaty contains important simplifications in patent office procedures and will make life much easier for applicants.

At the same time, the treaty is a major step towards the harmonisation of substantive patent law. It includes provisions covering the filing date and the content of patent applications, and also on the extension of time limits, further processing and re-establishment, particularly in respect of re-establishment when priority periods have not been adhered to. It will come into force after ratification by 10 states. The European Patent Organisation can also be a contracting party.

TABLE 1.1 : PRODUCTION INFORMATION EPO

PRODUCTION FIGURES 1999 AND 2000		
	1999	**2000**
Filings		
Total including Euro-PCT international phase	123,587	142,941
Total including Euro-PCT regional phase	89,322	100,692
Searches Carried Out		
European searches (Euro + Euro-PCT supplem.)	52,577	53,807
PCT searches (PCT-SAE + PCT-SA)	43,076	54,183
Searches on behalf of national offices	15,349	15,341
Other Searches	4,804	4,692
Total production search	**115,806**	**128,023**
Examination: final actions performed		
European examination	40,903	45,881
PCT Ch.II	28,996	35,519
Opposition (final action)	2,318	2,345
Total final actions examination / opposition	**72,217**	**83,745**
Appeal		
Technical appeals	1,060	1,141
PCT protests	10	17
Other appeals	49	50
Total decisions appeal	**1,119**	**1,208**

In Table 1.1, production figures for search (European, PCT and national searches), for examination (European and PCT Ch. II) and for opposition and appeal in the European procedure are given for the years 1999 and 2000.

In 2000, 128 023 searches have been completed (11% more than in 1999), the final actions in examination and opposition increased by 16% to 83 745, and 1 208 decisions in appeal have been completed (8% more than in 1999).

At the end of 2000, the Office's search files contained 27.7 million patent documents and 2.9 million technical or scientific articles. The collection acquired 920 000 new patent specifications and 300 000 English-language abstracts of Japanese and Russian patents. More than one million amendments were made to the databases.

The EPO's in-house classification system is an expanded form of the International Patent Classification (IPC) and consists of around 123 000 subclasses. Some 800 examiners are working on document reclassification. In 2000 they introduced 9 400 new subclasses and assigned additional classifications to 100 000 documents already in the collection.

The electronic patent file system PHOENIX is now fully operational. By the end of 2000, almost all search reports and three-quarters of examination reports relating to applications had been scanned in and made available in file format. PHOENIX is at the heart of the electronic communication system epoline®. This service got under way with the receipt of the first online electronic patent application on 8th December 2000. The system consists of several independently operating components and ensures that the vast majority of communications between the Office, applicants and the general public can take place via the Internet.

Patent Information

The 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 products and services are presented under the acronym EPIDOS (European Patent Information and Documentation Services - formerly INPADOC). EPIDOS products and services are available both directly to users and to commercial data suppliers.

The linking up of national patent libraries to form an information network (PATLIB) is one of the key elements to the effective patent based transfer of knowledge in Europe. These information centres are equipped with CD-ROM workstations, which facilitate user access to patent documents.
The main events of the year in terms of patent information were the annual EPIDOS conference, held in Vienna and attended by 430 experts, and the PATLIB symposium in Helsinki, which attracted 240 delegates from patent information centres in the EPC contracting states.

The patent offices of Cyprus, Denmark and Finland signed co-operation agreements with the EPO during the year with the aim of strengthening their patent information activities.

In 2000, the EPO was faced for the first time with the challenge of publishing two applications whose magnitude (50 000 and 10 000 pages respectively) exceeded all previous dimensions. Both related to DNA sequence listings. To make the task more manageable, the EPO limited the hard copy and the ESPACE® and esp@cenet® versions of both applications to the title page, description and claims. Full versions with sequence listings and reference tables were issued on a special CD-ROM.
Enhancements and new online services have further increased the attractiveness of esp@cenet®, the most comprehensive free patent information service on the Internet. The EPO prepared to extend its service to cover the eight candidates for accession to the European Patent Organisation. These states are to be given access to esp@cenet®, in 2001. Frequency of use and the number of users increased sharply during 2000. In the final quarter, around 6 000 users per day accessed the esp@cenet®, service, submitting 40 000 queries.

Technical Cooperation

In many countries and regions of the world, the EPO is involved in technical cooperation projects in partnership with national patent authorities, the EU Commission and the WIPO. In 2000, a total of 422 trainees attended 23 courses offered by the EPO's "International Academy".

As part of its co-operation programme with the Strasbourg-based Centre for International Industrial Property Studies (CEIPI), the EPO also arranged training in 2000 for 385 patent attorneys and patent judges from Asia, Latin America and central and eastern Europe.

In 2000, the EPO launched the first automation programme for patent offices in developing countries without any technical infrastructure. Known as POLite, it was tried out for the first time at the headquarters of the African Regional Industrial Property Organization (ARIPO) in Harare, Zimbabwe.

The EPO and the EU Commission completed the fourth Regional Industrial Property Programme (RIPP) covering 10 states in central and eastern Europe. As back up to the RIPP project, the EPO held a number of seminars during the year in those countries preparing for accession, covering licences, technology transfer and the patent grant procedure. The EPO also supported these countries in expanding their CD-ROM collections of national patent applications and patents.

The main focus of the EPO-supported ICON project was on seminars for trainees from the CIS states and Mongolia. The EPO also collaborated with WIPO and OHIM to hold four seminars on a variety of topics in Moscow, Tbilisi in Georgia and Yerevan in Armenia.

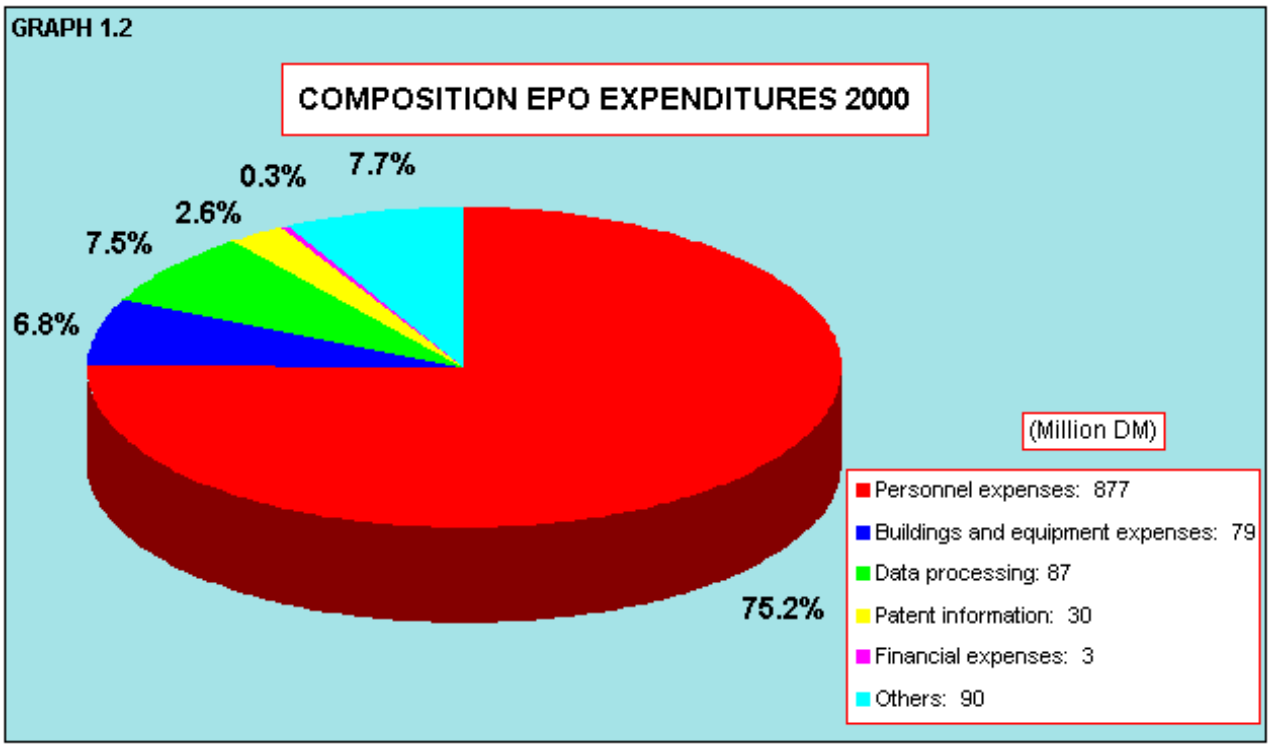
The EPO's bilateral co-operation programme with China concentrated in the year under review on training employees of the State Intellectual Property Office (SIPO), and the successful transfer of the EPOQUE system to SIPO. In November, the two offices also installed a data transmission link via PATNET. The EPO is also acting on behalf of the EU Commission on a project designed to modernise the national property rights system in China. The highlight of the programme during the year was a two-day international symposium in Beijing attended by more than 300 experts.

EPO's budget

The EPO is financially autonomous. Expenditure is met entirely out of income, mainly consisting of fees paid by applicants and patentees. Procedural fees such as the filing, search, examination and appeal fees and renewal fees for European patent applications are paid to the EPO directly. Renewal fees for European patents, on the other hand, are collected by the designated contracting states and determined by national law. From these renewal fees, 50% is kept by the National Offices and 50% is transferred to the EPO.

Total expenditure 2000 (excluding investments) was DEM 1 166 million. This breaks down into DEM 877 million (75.2%) for Personnel expenses, DEM 79 million (6.8%) for Buildings and equipment (including depreciation), DEM 87 million (7.5%) for Data processing (including depreciation), DEM 30 million (2.6%) for Patent information including co-operation with the contracting states, DEM 3 million (0.3%) for Financial expenses, and DEM 90 million (7.7%) for Others.

Total income to the EPO in 2000 amounted to DEM 1 450 million of which DEM 284 million constituted the operating surplus.



EPO Staff Composition

The EPO was obliged to tackle the increase in capacity bottlenecks by continuing its vigorous recruitment drive. In 2000, more than 300 patent examiners joined the EPO. By the end of the year, the staff reached a total of 4 713, including 2 653 examiners in search, examination and opposition and 107 members of Boards of Appeal.

Further information can be found be accessing the EPO's web page at http://www.european-patent-office.org.

Japan Patent Office

The Japan Patent Office (JPO) contributes to Japan's industrial development through policy planning for the industrial property rights (IPR) system, which covers patents, utility models, designs, and trademarks.

It is said that the 21st century will be an "era of intelligence", in which the IPR system is expected to play an increasingly important role as the foundation for intellectually creative activities, which are to serve as the driving force for the further economic and industrial development of Japan. The JPO adopted the following three industrial property administration policies as mainstays: 1) quick and adequate protection of industrial property under the IPR system, 2) a positive approach to the global patent system, and 3) establishment of an environment that will facilitate smooth protection/utilization of intellectual property, and has been making concerted efforts to achieve these aims.

Revision of Laws

With the aim of enhancing competition among patent attorneys by deregulation and enriching services to be provided by experts in the field of intellectual property, a bill to revise the Patent Attorney Law on a full scale was adopted at the 147th ordinary Diet session. The revised law was promulgated on April 26, 2000, and its gist is as follows.

A. Review of the scope of patent attorney responsibilities responding to customer needs.

1. Newly added responsibility: intermediation and representation in the conclusion of license agreements for industrial property rights.
2. Newly added responsibility: representation in making a request to custom authorities for seizure of counterfeit goods.
3. Newly added responsibility: representation in arbitration proceedings for cases involving IPR at organizations specializing in arbitration cases.
4. Newly added responsibility: representation in compromise procedures following arbitration proceedings.
5. Partial reduction of the previously exclusive responsibilities to work as a representative for an applicant who wishes to obtain an industrial property right.

B. Reform of the qualification examination system for patent attorneys.

In order to increase the number of patent attorneys, the qualification examination system for patent attorneys was reformed. Contents of examination were simplified, and those who hold other qualifications are to be exempted from taking certain parts of the examination.

C. Establishment of a system to provide comprehensive service.

Patent attorney offices are allowed to incorporate their offices and establish branch offices.

D. Rectification of patent attorney services through revision of their responsibilities, disciplinary systems, and penalty rules.

Revision of the Examination Guidelines (Patents)

In order to appropriately examine diverse forms of inventions and new technologies, the JPO revised its overall examination guidelines taking into consideration recent judicial precedents.
Also, the Examination Guidelines for Computer Software-related Inventions were revised. The purpose of this revision is to respond to 1) the increasing interest in inventions relating to new business methods which utilize general-purpose computers as well as 2) changes in the distribution methods of digital information contained in computer programs. The revised Examination Guidelines for Computer Software-related Inventions was made public in December 2000.

Electronic Applications

The JPO has been promoting the so-called Paperless Plan since 1984 for the purpose of improving efficiency in administrative processes, shortening the average period of examination, and expanding industrial property information services. In December 1990, the JPO started accepting electronic applications for patents and utility models with dedicated terminals (the first generation) and in April 1998, started operating a second-generation system which enables us to receive electronic applications filed through general-purpose personal computers. In January 1999, the JPO stopped accepting applications through flexible disks (FD applications).

In 2000, the percentage of online applications accounted for 96 percent of patent and utility model registrations. Although acceptance of online applications just started in January 2000, a high percentage of PCT applications in the national phase (97%), demands for ex-parte appeals (84%), design applications (82%) and trademark applications (80%) are made on line.
To expand the current Paperless System, moreover, the JPO has been studying a third-generation system that utilizes the Internet and e-commerce technology.

Patent Information

The JPO has been actively providing industrial property information over the Internet and on March 31, 1999, established the Industrial Property Digital Library (IPDL) on its homepage. At the beginning, through the IPDL, the JPO has provided, free of charge, information on roughly 40 million related documents using search functions. The IPDL service enables users to search publications concerning patents, utility models, designs, and trademarks issued since 1885, using document numbers and various classifications. The service also provides such related information as legal status of applications (i.e. if the application has yet to be examined, if the application is registered, or if an appeal is filed for the application) as well as information on laws and guidelines. All information is available free of charge.

In March 2000, the JPO also started providing new services targeted at those not familiar with patent information. These services include search functions for information relating to patents, utility models, and trademarks. In addition to the existing PAJ (Patent Abstracts of Japan) service, automatic Japanese to English translation of the patent gazette containing unexamined patent applications is provided.
By March 2001, the volume of information stored in the IPDL reached about 45 million documents. Searches through the IPDL number about 2 million per month.

International Cooperation

The JPO has been implementing a project to receive trainees from developing countries mainly in the Asia-Pacific region in order to assist in establishing industrial property rights systems. Since FY 1996, the JPO has been accepting more than 200 trainees annually to support the construction of an effective operational system including appropriate enforcement of intellectual property rights.

The JPO held enforcement seminars in Singapore and Korea targeted at staff members who work in the field of IPR enforcement.

The JPO has also sent experts in the fields of examination, computerization, and PCT to IP offices in the Asia-Pacific region and other regions through such schemes as the WIPO Funds in Trust/Japan and JICA.

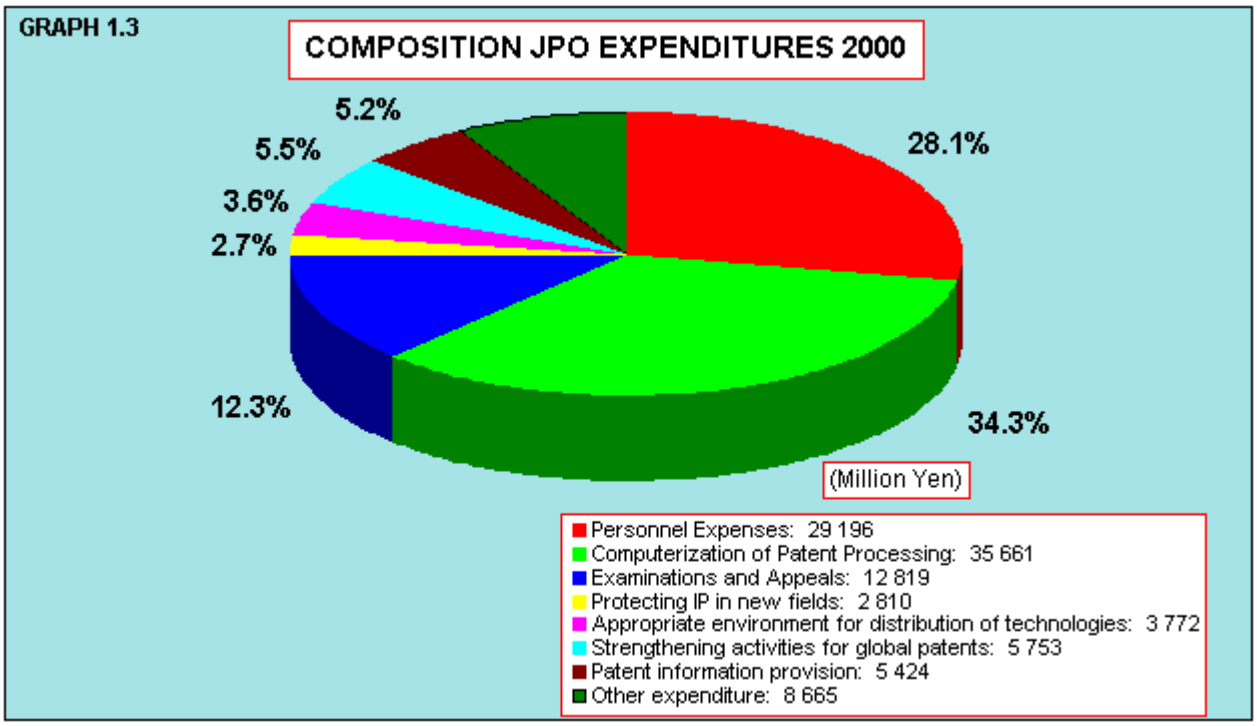
In addition, to help Japanese companies enforce their IPR against counterfeiting activities in the Asian region, the JPO has been making efforts to establish an improved enforcement system and to more quickly collect / provide detailed information on counterfeiting activities in respective countries.

TABLE 1.2 : PRODUCTION INFORMATION JPO

Patent Production Figures 1999 and 2000		
	1999	**2000**
Applications filed		
Domestic	360,180	387,364
Foreign	45,475	49,501
Total	405,655	436,865
Grants		
Domestic	133,960	112,269
Foreign	16,099	13,611
Total	150,059	125,880
Applications in appeals	14,650	16,498

JPO Budget

The JPO budget for fiscal 2000 was about 104.1 billion yen, with 3 772 million yen to establish an appropriate environment for distribution of technology through patents and other IPR systems, 2 810 million yen to protect results of intellectually creative activities in new fields under the IPR system, 5 753 million yen to strengthen activities toward the era of global patent system, 5 424 million yen to increase the user-friendliness of information provision, 35 661 million yen to promote computerization of patent administration, 12 819 million yen as administrative expenses for examinations/appeal examinations, and 29 196 million yen for personnel expenses.



JPO Staff Composition

The total of number of JPO staff was 2 524 at the end of fiscal year 2000. Compared to fiscal year 1999 (2 534) the number of staff is reducing. Although this reduction reflects the recent restructuring of governmental bodies, the number of patent examiners/appeal examiners has been increased with a view to achieving a shorter examination period. The total number of staff includes 1 088 patent/utility model examiners, 51 design examiners, and 142 trademark examiners for a total of 1 281 examiners. Also included in the 2 524 staff are 391 appeal examiners, who deal with appeals and appeal examinations in the Appeals Department, and 852 clerical staff.

Further JPO Information

The JPO provides statistics on patents, utility models, designs and trademarks on its website. To use this service, please access our homepage (http://www.jpo.go.jp/index.htm) and click "Statistics, Documents", then go to "Reports". You will find the statistical information under "Annual Report 2000".

UNITED STATES PATENT AND TRADEMARK OFFICE

The mission of the United States Patent and Trademark Office (USPTO) is to promote industrial and technological progress in the United States and strengthen the national economy by administering the laws relating to patent and trademarks; and to advise the Secretary of Commerce, the President of the United States, and the Administration on patent, trademark, and copyright protection, and the trade-related aspects of intellectual property.

The USPTO accomplishes its mission through the examination of patent and trademark applications, issuance of patents and registration of trademarks, dissemination of patent and trademark information to the public, and encouraging a domestic and international climate in which intellectual property can flourish.

As a Performance-Based Organization (PBO), the USPTO has refocused its management practices and is committed to performance goals that are customer-oriented, results-driven and dedicated to making a difference in areas that matter to the public. Recognizing the importance of customer satisfaction and enhanced service delivery, the USPTO has placed a greater focus on the provision of high quality products and services, partnerships, use of information technology and customer service. As one of 32 agencies that are committed to reshaping the public's opinion of government, redefining priorities, and focusing on the things that matter, the USPTO has developed significant, concrete, and measurable goals.

The USPTO's performance goals are as follows:

- Enhance the quality of our products and services
- Transition to Electronic Government
- Integrate our business practices into electronic government
- Optimize/minimize our processing time

The aforementioned USPTO performance goals build upon the agency's strategic and annual performance plans produced as a result of GPRA (the Government Performance and Results Act of 1993) as well as ongoing quality improvement efforts. The USPTO is a strong advocate of this process and has incorporated these goals in its corporate and annual performance plans, which can be viewed on the Internet at http://www.uspto.gov/.
USPTO's contribution and support of the Department of Commerce's (DOC) mission can be viewed in the DOC strategic plan at their Internet address at http://www.doc.gov/.

In addition to processing the growing annual application volumes (averaging 12 percent per year), significant accomplishments in the Patent Area this year include the implementation of the American Inventor's Protection Act (AIPA) of 1999. This Act provides for the publication of patent applications 18 months after filing unless the applicant requests otherwise upon filing, and certifies that the invention has not and will not be the subject of an application filed in a foreign country. It also sets new timeliness standards for the office. These specify that issuance of a first Office action on the merits of the claimed invention more than 14 months from the filing date, or the issuance of a patent more than 36 months from the filing date, will result in a commensurate adjustment of the patent term to the diligent applicant. The term of patent protection will also be adjusted when a response to an applicant's reply to a rejection or appeal is not mailed within four months of receipt by the Office, when action is not taken on an application within four months of a decision of the Board of Patent Appeals and Interferences or the Federal Courts, or when a patent is issued more than four months from the payment of the issue fee.

The USPTO continues to enhance its electronic database of foreign patent documents, which links examiners to critical foreign patent data. The expanded foreign patent database gives examiners the ability to word search and view bibliographic data and abstracts from the European Patent Office (EPO) and the Japan Patent Office (JPO) in a variety of different fields. This database contains over one million abstracts from European countries, including EPO documents and documents published by the World Intellectual Property Organization (WIPO), and nearly four million abstracts of Japanese patent documents. In addition, examiners now are able to view clipped images for most of the patent data contained in this database.

Also among the accomplishments of the USPTO in 2000 was the initiation of full production of the electronic filing system (EFS) for patent applications. The agency has set up an electronic business centre on its web site in support of EFS at http://www.uspto.gov/ebc/index.html, to provide customers with software to write and file applications using the Internet. EFS software assembles all application components, calculates fees, validates application content, and compresses, encrypts and transmits the filing to the USPTO.

Table 1.3 PRODUCTION INFORMATION U.S.P.T.O.

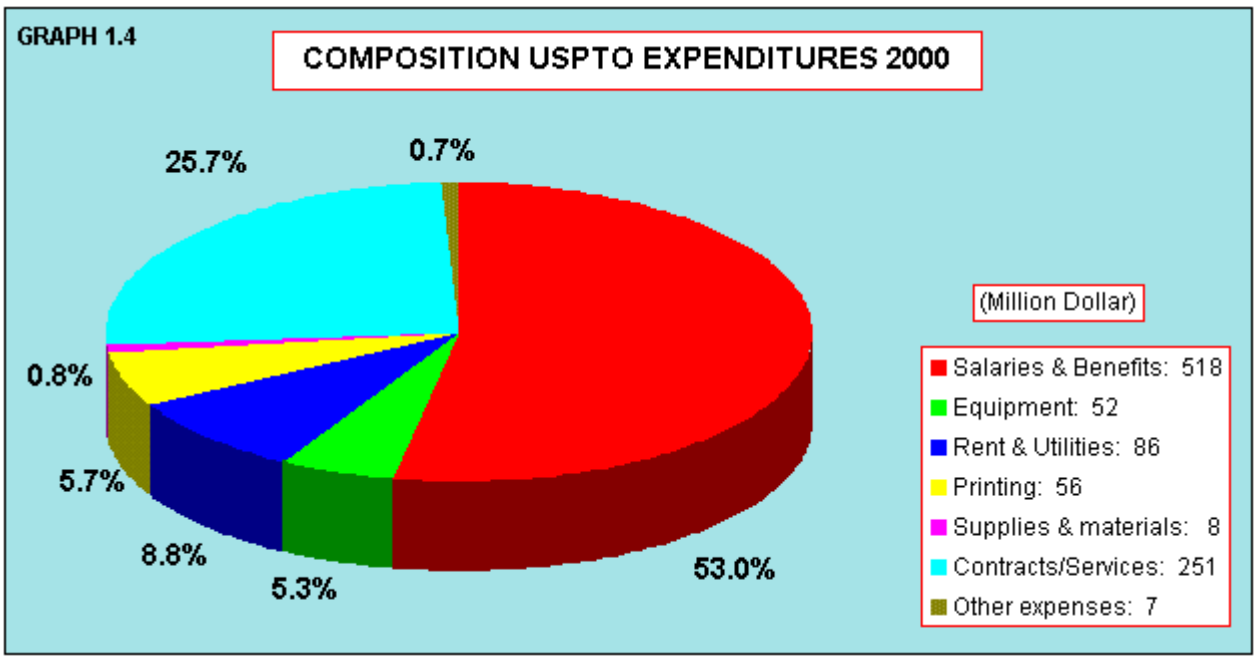
PATENT PRODUCTION FIGURES FOR 1999 AND 2000				
	1999		**2000**	
Application filed *1*	270,187		295,926	
First Actions	230,326		238,438	
Grants				
U.S. Residents	83,911	54.7%	85,072	54.0%
Japan	31,105	20.3%	31,296	19.9%
EPO	24,807	16.2%	26,324	16.7%
Others	13,670	8.9%	14,805	9.4%
Total Foreign	69,582	45.3%	72,425	46.0%
Total	153,493	100.0%	157,497	100.0%
PCT Chapter II	13,744		15,443	
Applications in appeals and interference proceedings				
	Appeals	**Interference**	**Appeals**	**Interference**
Contested	3,961	78	2,860	137
Disposed	4,689	187	5,134	189
Number of patent cases in litigation				
Total cases filed	69		60	
Total cases disposed	78		49	
Total EOY cases pending *2*	38		49	

1: For utility patents only.
2: End of Year (EOY) is the calendar year (December 31st).

Additional statistical information on the USPTO can be found at our homepage http://www.uspto.gov by selecting "statistics". The statistics link will take you to our Annual Reports and Calendar Year Patent Statistics where you can access our online brochure of product and services or related patent statistical reports.

USPTO's budget

The USPTO funding is derived from user fees collected from its customers. During 2000 USPTO expenditures was comprised of patent expenditures of $904 million dollars and the trademark expenditures of $74 million dollars. Expenditures for salaries and benefits constituted the largest cost at 53% of overall expenditures. A breakdown by major spending categories is shown in the following chart.



At the end of the Fiscal Year (September 30, 2000), the total staff at the USPTO was 6 394. The Patent staff total was 4 596. This total was comprised of 3 143 Utility, Plant and Reissue (UPR) examiners, 59 Design examiners, 1 251 managerial, administrative and technical support staff, 26 members of the Patent Quality Review staff, and 117 members of the Board of Patent Appeals and Interferences. *1*

1 Interference is generally defined as when two or more patent applications conflict because of claims to the same invention.