



*2003 edition*

# Trilateral Statistical Report





# **TRILATERAL STATISTICAL REPORT**

**2003 EDITION**

Trilateral Statistical Report 2003 Edition  
Jointly Produced by EPO, JPO, and USPTO

# PREFACE

Since the early 1980s, three key intellectual property offices in Asia, Europe, and North America have combined their efforts to better understand and harmonize procedures and activities with respect to patent protection. The three offices are the European Patent Office (EPO), the Japan Patent Office (JPO), and the United States Patent and Trademark Office (USPTO). These offices are commonly referred to as the Trilateral offices in the patent community. Collaboration among these offices has led to a number of achievements, including the production of the Trilateral Statistical Report (TSR).

The TSR is an annual publication of patent statistics that has been published since 1985. Besides promoting a better understanding of the importance of patent rights in the world, the purpose of this report is to facilitate an understanding of each office's operations and to increase general awareness about the patent grant procedures among the offices. This TSR is a compilation of statistics that supplements the annual reports of each one of the three offices and is also partially based on statistics from the World Intellectual Property Organization (WIPO) in Geneva. This report and an expanded annex are also available on the web sites of the Trilateral offices, which are listed on the back cover.

In calendar year 2003, patent application filings varied among the Trilateral offices. The EPO experienced the greatest annual percentage growth, with total patent application filings increasing by 9.7 percent from 2002 levels. At the USPTO, total patent application filings increased by 2.4 percent. Total patent application filings at the JPO declined slightly by 1.9 percent. As expected, most filings were of domestic origin at each office, with the proportions ranging from a low of about 50 percent at the EPO to a high of 88 percent at the JPO. In terms of fields of technologies, as defined by International Patent Classifications<sup>1</sup>, physics-related technologies represented the highest share at each office, and textiles and paper technologies represented the lowest. The offices granted a combined total of 351,531 patents in 2003, which is 5.0 percent above the 334,733 patents granted in 2002, and it is an all time high.

From a worldwide perspective, the most current information available is from the 2002 WIPO Industrial Property statistics series. It is interesting to note that demand for global patent rights continued to increase at a double-digit growth rate in calendar year 2002. Based on provisional WIPO data, total demand in 2002 increased by 17.8 percent over 2001 and reached 14,752,666, which was a new record high. A large part of the total demand consisted of multiple country designations made via the Patent Cooperation Treaty (PCT)<sup>2</sup>. PCT demand was 12,294,536 in 2002 compared to 10,011,805 in 2001. On average, 11.5 designations were made in each PCT application during calendar year 2002.

There are a variety of factors that have influenced patenting trends in the past. Economic activity is often cited as a key factor. However, interpreting worldwide patenting activity in terms of economic factors is not an exact science. Other important factors, such as political and technological considerations, also need to be considered. With this understanding in mind, a brief overview of recent economic activity is presented.

Once again, the global economy expanded in 2003, and over the last two years it has gained momentum. Business and consumer confidence continued to strengthen, and investment growth improved in almost all regions. According to the International Monetary Fund (IMF), world output in calendar year 2003 increased by 3.9 percent over 2002 levels. The growth rate in 2002 was also healthy at a 3.0 percent annual rate.

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<sup>1</sup> IPC information is available at [www.wipo.int/classifications/ipc/en/index.html](http://www.wipo.int/classifications/ipc/en/index.html)

<sup>2</sup> Information on PCT is available at [www.wipo.org](http://www.wipo.org).

This calendar year (2004), global economic activity is not only accelerating but broadening as well, with European countries expected to benefit more so than in the recent past. Output in the Euro area is expected to increase by 1.7 percent this year as compared to an anemic 0.4 percent last year. Growth in Asia will continue to be significant this year, especially in China and India where growth rates are expected to be 8.5 percent and 6.8 percent, respectively. In the United States, the economic outlook is also very positive, with a growth rate of 4.6 percent expected by the end of 2004. World output is expected to increase at a rate of 4.6 percent in 2004, and in calendar year 2005, the IMF is anticipating global output to continue growing at a 4.4 percent rate. Overall, the economic outlook remains positive despite some risks, such as surging oil prices that have recently reached record highs and could negatively impact the future.

There are many other factors that should be considered when examining patenting trends. In particular, measures of resources allocated to innovation-related activities and the perception of intellectual property in general are very important factors. Research and development expenditures are often cited as a key measure of innovation activity. On a global scale, R&D expenditures have continued to trend upwards, but at a slower pace. Spending on innovation helps to fuel patenting, as intellectual property continue to become more significant in a world with intensifying competition. Patents are increasingly being emphasized for a variety of business strategies, such as developing favorable partnerships and licensing agreements, capturing market share, and attracting new capital. With a greater emphasis on patenting, there is an expectation that demand will follow.

Globalization of markets and production continue to be key business trends. Countries are continuing to join the PCT and the European Patent Convention (EPC). This goes together with a tendency to harmonize patent laws towards common international standards. This has stimulated the flow of patent applications across borders. All of these factors together contribute to worldwide patent growth from year to year.

The Trilateral offices hope that you will find this report useful. The offices will continue to improve the report each year, and to help us better understand your requirements, a reader survey is attached at the end of this edition. Comments and suggestions on this joint publication would be greatly appreciated. Your input will help the Trilateral offices refine the report to better serve your expectations and objectives.

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November 2004

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# Chapter 1

## INTRODUCTION

### Definitions of terms

There are various 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 type, patents of invention.

Despite the existence of regional and international procedures, patent rights may differ among countries all over the world. One reason is that patent law is different in every country. With different patent laws and procedures, applications can have a different scope, e.g. with respect to the average number of claims included in one application. This is one of the basic reasons for the differences between the number of patent applications in Japan compared to those in Europe and the United States. The existence of differences in the scope of applicability of patent rights compromises to some extent the ability to compare patents from different countries.

In order to get protection for their innovations, applicants may use the following types of granting procedures, or combinations of them:

- **national procedures**,
- **supranational procedures**, comprising of:
  - **regional** procedures, (for example the European or the African Intellectual Property Organization), and,
  - the **international** Patent Cooperation Treaty (PCT) procedure.

In this chapter, the statistics presented in the report and the relations among them are briefly described. All statistics, apart from some of those in Chapter 6, relate to patents of invention only.

Statistics are presented in accordance with the following definitions:

- Four geographical blocs are defined: the **European Patent Convention (EPC) contracting states** (corresponding to the territory of all the states party to the EPC at the end of the reporting year), **Japan**, the **USA**, and the rest of the world referred to

as the bloc identified as “**Others**”.

- Demand for patent protection is considered principally counting each **supranational application** only once. However, alternative presentations are also given in some places in terms of **demand for patent rights** that include the number of designated countries in each supranational application.
- Filings of **PCT applications** are counted in the year of filing in the international phase, which is the first part of the PCT procedure.
- **Domestic applications** are defined as demands for patent rights made by residents of the country where the application is filed. For the purpose of reporting statistics for the EPC contracting states considered as a bloc, **foreign applications** are those applications made by non-residents of the EPC bloc as a whole. For example, applications made by French residents in one of the other EPC contracting states are counted as domestic demand in the EPC bloc.
- **First filings** are applications filed without claiming the priority of a previous filing, and all other applications are considered **subsequent filings**. The subsequent filings usually have to be made within one year of the first filings. In the absence of a complete set of available statistics on first filings, it is assumed in this report that domestic national filings are equivalent to first filings<sup>1</sup>, and that PCT filings are subsequent filings.
- **Grants** are reported as recorded by the WIPO in its Industrial Property Statistics series.
- A **patent family** is a group of patent filings that claim the priority of a single filing, including the original priority filing itself, and any subsequent filings made throughout the world. The set of distinct priority filings (that indexes the set of patent families) in principle constitutes a better proxy measure for the set of first filings than the set of aggregated domestic national filings added to first filings at the EPO. **Trilateral patent families** are a filtered subset of patent families for which there is evidence of patenting activity in all trilateral blocs. Other types of filters can be applied to select patent families of high importance, for example, the subset of Trilateral patent families known as “Triadic patent families” that are currently reported in OECD publications. These require achievement of an application to the EPO itself rather than any patent office in the EPC contracting states. They also require that there be a grant at the USPTO rather than only an application there.

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<sup>1</sup> Except in the section on patent families, for estimation of the numbers of first filings in the EPC bloc, an approximation is made by adding first filings at the EPO to aggregated domestic national applications in the EPC contracting states.

## **Chapter 2**

In this chapter, a summary of the recent developments in the Trilateral offices is presented.

## **Chapter 3**

The third chapter of the report provides an assessment of worldwide patent applications. Statistics in this chapter are derived primarily from the Industrial Property Statistics of the WIPO.

The number of inventions for which a patent application is filed is less than the total number of applications made. Generally for each invention, one application is filed first in the country of residence, followed by applications to as many foreign countries as required, each such foreign application claiming the priority of the earlier application. First filings can be seen as an indicator of innovation and inventive activity, while foreign filings are a measure of international trade and globalization.

This chapter also gives an indication of the interdependency and importance of the major geographical markets. The development of the total number of applications filed worldwide is given first. Next, there is a discussion of bloc-wise patent activity (first filings, origins of applications, targets of applications, patent grants). This is followed by a description of inter-bloc activity, firstly in terms of the flows of applications between the trilateral blocs, and then in terms of patent families.

## **Chapter 4**

This part of the report considers the substantive activities of the Trilateral offices. The aggregate demand for services in the patent procedures of the Trilateral offices is not exactly equivalent to the overall demand for patent rights. For example, the designated offices do not examine PCT applications definitively until they enter the national or regional phase.

Statistics are given for applications filed with Trilateral offices from each filing bloc, also showing domestic and foreign filings. They are counted at the date of filing for direct national applications at the JPO and the USPTO, and for direct regional applications at the EPO. PCT applications are counted at the moment they enter the national or regional phase. Part of the demand for patent rights in the EPC contracting states is processed through the national offices, and therefore does not result in workload for the EPO. The demand at the EPO is given in terms of applications rather than in terms of designations.

Statistics are provided on the breakdown of applications by fields of technology according to the International Patent Classification (IPC).

Although the patent applications filed do indeed represent demands for services, the work is

not always performed at a comparable point in time. Consequently, neither the number of applications filed nor the number of requests for examination is a perfect basis for comparison. Taking into account the fact that the percentage of applications that are granted is generally constant in each of the three procedures, some indicator of services actually demanded can nevertheless be provided using statistics on granted patents.

An analysis of patent grants is also provided, both in terms of the blocs of origin of the grants and in terms of the distributions of numbers of grants per applicant. In Chapter 4, the numbers of grant actions by the Trilateral offices themselves are described, even though grants by the EPO lead to multiple patents in the designated EPC contracting states.

To illustrate the similarities as well as the differences in the granting procedures of the three offices, characteristics of the trilateral patent granting procedures are shown in the last section of Chapter 4.

## **Chapter 5**

This chapter shows how the PCT impacts patenting activities. PCT work includes the actions required by the three offices for PCT applications in the international phase as international search authorities and international preliminary examination authorities.

Most of the data were obtained from WIPO Industrial Property Statistics, as reported by each country and region. However, some statistics (e.g., national stage figures, international search information, and international preliminary examination information) were provided by the Trilateral offices.

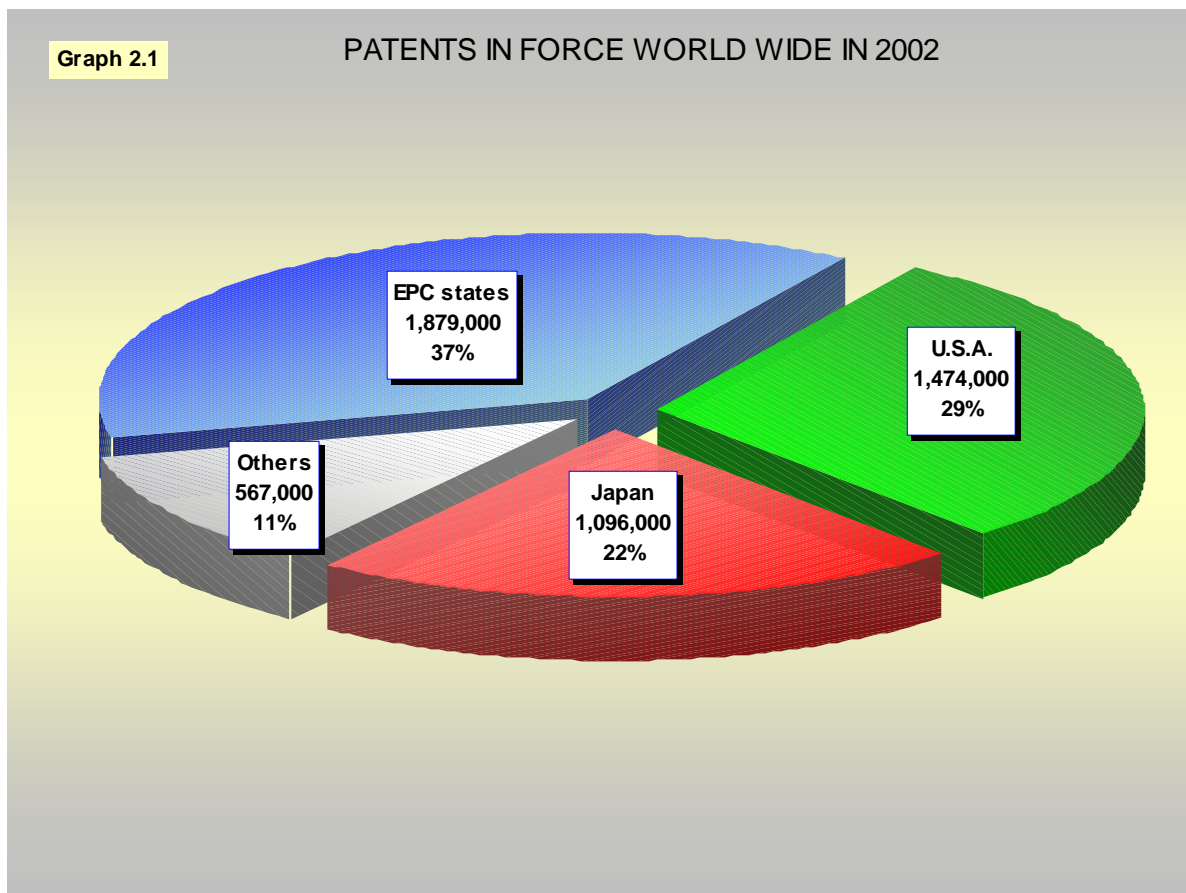
## **Chapter 6**

This last chapter is dedicated to the other activities the Trilateral offices are performing that are not common to all three offices, as well as work related to other types of industrial property rights.

## Chapter 2

# THE TRILATERAL OFFICES

Patent rights are used throughout the world. The most current information on worldwide patent rights is available from the 2002 WIPO Industrial Property Statistics series. At the end of the calendar year 2002, a total of about five million patents were in force. The EPC contracting states, the JPO, and the USPTO together cover about 89% 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 the result of successful economic and political cooperation, providing patent protection in up to 31 European countries on the basis of a single patent application and a unitary grant procedure. The EPO currently receives over 160,000 patent applications per year, twice as many as in 1995.

After Hungary (January 1<sup>st</sup>) and Romania (March 1<sup>st</sup>) joined the Organization, at the end of 2003, 27 states were members of the underlying European Patent Organization:

Austria	Belgium	Bulgaria	Cyprus	Czech Republic	Denmark
Ellas	Estonia	Finland	France	Germany	Hungary
Ireland	Italy	Liechtenstein	Luxembourg	Monaco	The Netherlands
Portugal	Romania	Slovakia	Slovenia	Spain	Sweden
Switzerland	Turkey	United Kingdom			

The following states have agreements with the EPO to allow extension of European patent applications to their territory:

**Albania, Latvia, Lithuania, and the former Yugoslav Republic of Macedonia.**

Together, the above states build a market of about 525 million people.

Poland joined the European Patent Organization on March 1, 2004. Latvia and Lithuania have been invited to join and will probably do so in the near future.

## Grant Procedure

The mission of the EPO is to support innovation, competitiveness, and economic growth for the benefit of the citizens of Europe. Its main task is to grant European patents according to the EPC. Moreover, the EPO acts as a receiving, searching, and examining authority under the Patent Cooperation Treaty. Another task of the EPO is to perform, on behalf of patent offices of certain member states, state of the art searches for the purpose of national procedures and to carry out searches at the request of third parties.

In 2003, the EPO continued to deploy the measures it had previously decided on to master its workload and to reduce the average time taken to grant a patent. The structural change to a Joint Cluster Office was strengthened. The BEST project that aims to have the same examiner performing search and examination for each patent was spread almost to its ultimate level, since 80% of the examiners are now working under its conditions. It is expected that the project will be fully implemented before the end of 2006.

These measures started to show some positive impact throughput. In 2003, the EPO granted almost 60,000 patents, and more than 20% of these patents were granted within the set timeframe of three years.

In July 2003, the EPO launched the Extended European search report pilot project. For the European first filings, the search report is supplemented with the first substantive examination communication. It is intended to expand this project to all the European applications in due course.

**Table 2.1: PRODUCTION INFORMATION EPO**

<b>PRODUCTION FIGURES</b>		
	<b>2002</b>	<b>2003</b>
<b>Filings</b>		
Total Euro-direct + Euro-PCT international phase	160,430	162,208
Total Euro-direct + Euro-PCT regional phase	106,325	116,613
<b>Searches carried out</b>		
European searches (Euro + Euro-PCT supplm.)	58,213	71,449
PCT international searches	68,421	69,098
Searches on behalf of national offices	14,980	16,369
Other searches	2,002	1,715
Total production search	143,616	158,631
<b>Examination: final actions performed</b>		
European examination	66,086	73,776
PCT Chapter II	49,438	35,591
Opposition (final action)	1,934	1,872
Total final actions examination / opposition	117,458	111,239
<b>Appeal settled</b>		
Technical appeals	1,336	1,363
PCT protests	19	27
Other appeals	48	35
Total decisions appeal	1,403	1,425

In Table 2.1, the latest production figures for search (European, PCT and national searches), for examination (European and PCT Ch. II) and opposition, and appeal in the European procedure are given for the years 2002 and 2003.

In 2003, the office production in search increased by more than 10% to 158,631 searches completed. While the examination work under the PCT was reduced, the number of final actions in European examination increased by 12% to about 74,000. In 2003, 1,425 decisions in appeal were completed (2% more than in 2002).

## **Documentation**

During the year 2003, the number of electronically searchable documents rose by 1.5 million to a total of 32.1 million patent documents. The Non-Patent-Literature (NPL) database holds

4.6 million documents, and 50 million articles were accessible via the EPOQUE online search system.

The EPO's in-house classification system (ECLA) is an expanded form of the International Patent Classification (IPC). With 129,000 subclasses, it allows for fast and systematic access to the search documentation available in each technical field. The ECLA system is also used in [esp@cenet](mailto:esp@cenet)<sup>®</sup>, the free Internet service to access patent documents.

The electronic filing tool made available by the EPO received a growing response from the users, who made more than 8% of their European applications using the online filing offered within epoline<sup>®</sup>. National versions of the online filing software have already been installed in Finland and France, and pilot versions were installed in Spain and the United Kingdom in 2003.

On average, 4,500 people at the EPO and the national offices in Europe use the computer based EPOQUE tool each day for document searches. The number of such computer based searches rose by 25% and 167 million documents were viewed in 2003. This system currently combines 77 databases, which will soon be simultaneously accessible.

## **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 centers are equipped with CD-ROM workstations, which facilitate user access to patent documents.

In 2003, the EPO surveyed its customers with a view to adjust its products and services to their expectations. A new version of MIMOSA software was made available on CD-ROM, and new publication standards should be applied starting in 2005.

The annual EPIDOS conference and the PATINOVA congress were held simultaneously in Luxembourg and were attended by 620 delegates. The PATLIB conference was held in Lüttich (Belgium) in May and attracted 260 participants. An EPIDOS users' meeting was organized for the second time jointly by the EPO and the JPO in Vienna. It concentrated on Japanese and Korean patent information.

After a redesign, the new EPO website with improved navigation attracts large numbers of users, with over 1.5 million hits per week.

In April 2003, the EPO hosted the first "European Policy for Intellectual Property" conference

of the EU research project on “improving the human research potential and the socio-economic knowledge base”.

## **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, the OHIM, and the WIPO. In 2003, the EPO's "International Academy" offered 22 courses taken by 1,120 staff from patent and trademark offices as well as patent attorneys, patent judges, government officials, and scientists. The EPO together with the Italian Patent and Trademark Office co-organized a seminar on “management of industrial property rights in a knowledge-based economy”, held in Turin. 350 professionals attended this seminar. A seminar on research and development in the European patent system was co-organized with the German patent and trademark office and the Fraunhofer-Institute. An international forum on change in the PCT procedure took place in November, jointly organized by EPO, the WIPO, and the Institute of Professional Representatives before the European Patent Office ( *epi* ).

In 2003, the EPO pursued cooperation programmes with China, Korea, and other ASEAN countries. In particular, training sessions were organised for the patent examiners of the SIPO.

The EPO actively participated in training courses and seminars co-organised in Latin America. The fourth ELDIPAT conference took place in Havana in March 2003. The EPO strengthened cooperation with Mexico and the five Andean States. A forum on industrial property rights was also jointly organized in South Africa by the EPO, the WIPO, and the UK patent office.

The EPO has pursued cooperation with other European countries concerning IT infrastructure, promoting IP issues, and modernizing patent systems.

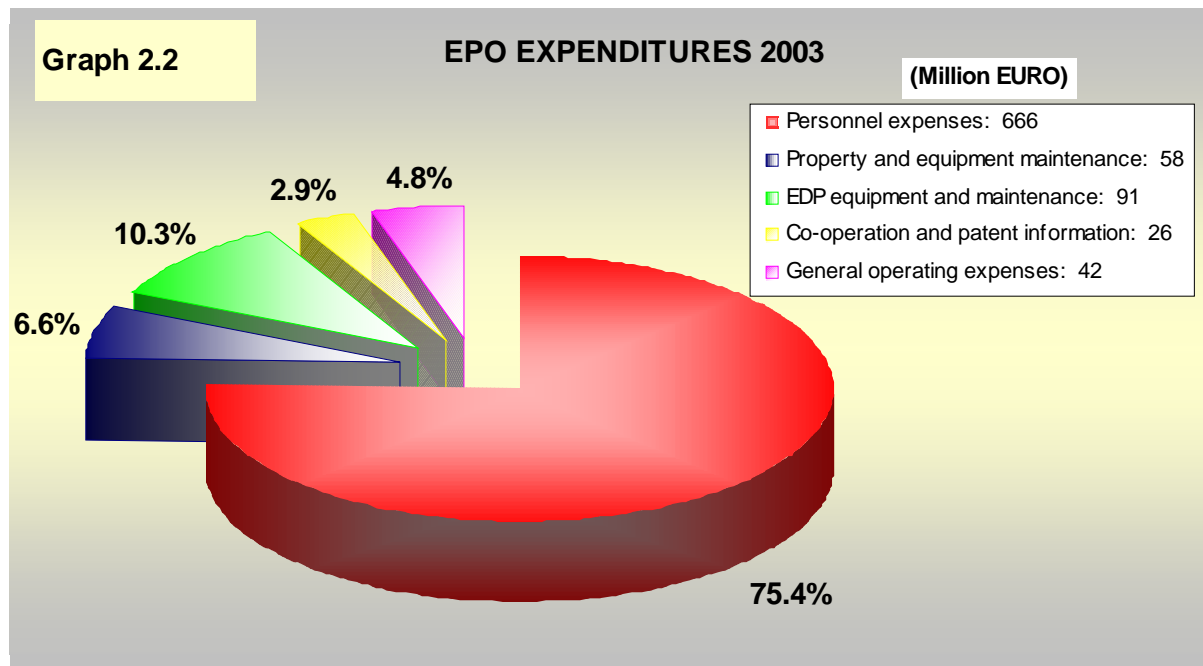
## **EPO's Budget**

The EPO is financially autonomous. Expenditure is met entirely from income, mainly consisting of fees paid by applicants and patentees. Procedural fees, such as the filing, search, examination, appeal fees, and renewal fees, for European patent applications are paid to the EPO directly. These fees are recorded as income for the accounting year, irrespective of the fact that they may partly relate to work to be performed only in the subsequent year. On the other hand, the renewal fees for European patents are collected by the designated contracting states and determined by national law. Of these renewal fees, 50% is kept by the National Offices and 50% is transferred to the EPO.

Total expenditure in the year 2003 (excluding investments) was EUR 883 million. This breaks down into EUR 666 million (75%) for personnel expenses, EUR 58 million (7%) for property and equipment (including depreciation), EUR 91 million (10%) for EDP equipment and

maintenance (including depreciation), EUR 26 million (3%) for patent information and cooperation with the contracting states, and EUR 42 million (4%) for general operating expenses.

Total income for the EPO in 2003 amounted to EUR 878 million, leading to a small operating deficit.



### EPO Staff Composition

During 2003, the EPO increased its capacity by continuing its recruitment drive. During the year, more than 200 patent examiners joined the EPO. By the end of the year, the staff reached a total of 5,809, including 3,365 examiners in search, examination, and opposition, and 119 members of Boards of Appeal.

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

**<http://www.european-patent-office.org>**

# **JAPAN PATENT OFFICE**

The Japan Patent Office (JPO) is committed to comprehensive development of industry through planning and carrying out examinations and appeals / trials under the system of industrial property rights, which includes patents, utility models, designs, and trademarks.

In order for Japan to maintain its competitive edge internationally, it is essential to improve the system for creating high quality technologies, to timely protect newly created technologies, and to establish a cycle of intellectual creation that provides an environment in which these technologies are optimally utilized. The JPO is making the utmost efforts to realize “timely and high-quality patent examination at the highest level in the world.”

## **Amendment of Laws to Expedite Patent Examination Processes**

In an effort to realize a “nation built on intellectual property”, a “Bill to Patent Law Amendment Reducing Patent Pendency” was submitted to the ordinary session of the Diet in 2004 in order to do the following:

- Allow outsourcing of the service of prior art search not only to public-interest corporations but also to the private sector in search process necessary for patent examination.
- Reduce the fee for request-for-examination in cases where the patent applicants who request examinations show the search reports issued by specified registered designated search organizations. This should provide applicants with incentives to perform their own prior art searches.
- Permit publication and issuance of official gazettes via the Internet so that industrial property information can be readily utilized.
- Extend the term of utility model rights from six to ten years. In addition, permit patent applications based on the utility model registration after registering the utility model right.
- Where an agreement, employment regulation or any other stipulation provides for the remuneration with regard to the employee’s invention, the payment of remuneration in accordance with the said provision(s) shall not be what is recognized unreasonable in light of situations including where a consultation between the employer and the employee had taken place in order to set standards for the determination of the said remuneration. A method is also provided to calculate the remuneration where, under the preceding paragraph, the payment of the remuneration in accordance with the provision(s) is recognized to be unreasonable.

## **Improvement / Reinforcement of the Examination System**

In an effort to accelerate the examination process, the JPO is planning to bolster the examination system, by not only steadily recruiting new regular examiners but also by employing an additional one hundred fixed-term examiners each year to a total of 500 examiners over the next 5 years. This process will immediately dispose of the projected

800,000 applications awaiting examination, with an aim to achieve the goal of eliminating pendency until first action.

### **Reinforcing Measures against Counterfeits and Pirated Copies**

In recent years, there have been frequent infringements of trademark rights, design rights, patent rights, and other rights resulting from the circulation of counterfeits mainly within the Asian nations. This has resulted in adverse affects on the activities of Japanese enterprises through loss of market potential and deterioration of brand images. Therefore, the JPO, in cooperation with the relevant ministries and agencies, shall request the reinforcement of control over counterfeits to the governments of the region by utilizing frameworks of the bilateral and multilateral intergovernmental consultation and joining forces with the International Intellectual Property Protection Forum. The JPO shall promote these aspects of providing information, consultation, etc. by utilizing the overseas offices of JETRO and other organizations in order to support the efforts of Japanese enterprises. The JPO shall also strengthen support by providing human resource development for those engaged in the intellectual property infringement countermeasures, mostly in the Asian nations' courts, customs houses, police, intellectual property-related administrative offices, etc.

### **Electronic Applications**

The JPO has promoted the Paperless Project since 1984 ahead of other countries with the aim to improve efficiency of administrative processing, shorten the examination period, and expand industrial property information services. It started to accept electronic filing of patent and utility model applications in December 1990, and, as of March 2004, about 29,000 applicants and representatives have utilized electronic procedures with the JPO by using the PC electronic filing software distributed free of charge.

The JPO also started to allow electronic procedures for the filing of design and trademark applications, appeal procedures, and national procedures for PCT applications in January 2000. As of 2003, a large proportion of the procedures have become digitized, with 97% of all patent and utility model application filings, 91% of design application filings, 83% of trademark application filings, 98% of appeal procedures, and 99% of national procedures for PCT applications conducted in electronic form.

In July 2003, the JPO adapted the format for the domestic application forms for patents and utility models to be the same as the format for the PCT international application, executed the international standardization in an electronic format (XML), and started electronic filing of PCT international applications electronically from April 2004. JPO is now developing an electronic filing system via the Internet, which is scheduled to begin in 2005. The electronic filing system will utilize the government public key infrastructure (GPKI) to identify applicants electronically and to prevent electronic falsification, and will enable electronic cash payment through the electronic revenue payment system developed by the Ministry of Finance.

## **Patent Information**

Industrial property information is simultaneously innovative technical information, information indicating the range of monopolistic rights, and information usable for grasping development of innovative technology and other companies' trends in R&D efforts.

The JPO started providing the Industrial Property Digital Library (IPDL) service on the JPO Website in March 1999 to allow people to have better access to patent information. English services that have been made available for patents and utility models as of March 2003 are Number search, FI/F-term search, and PAJ search. As for trademarks, wide-ranging English services are available, including information on trademark applications and registrations, searches for figures, searches for well-known and famous Japanese trademarks, and lists of goods and services. At present, the IPDL is accessed approximately 4.5 million times per month for searches and information references.

In addition to the free public inspection services through the IPDL, the JPO has also provided its own search-related data, such as legal status data in a standardized format like SGML, at marginal cost. (Additional costs, such as expenses for data copy, for data carrier, and for delivery, are included, while expenses for data creation and for maintenance are not included.) This dissemination policy has enabled companies to establish their own internal databases and has encouraged private patent information providers to distribute high value-added and diverse services to end-users. Industrial property digital library service has been transferred on October 1, 2004 to National Center for Industrial Property Information. ([http://www.ipdl.ncipi.go.jp/homepg\\_e.ipdl](http://www.ipdl.ncipi.go.jp/homepg_e.ipdl)).

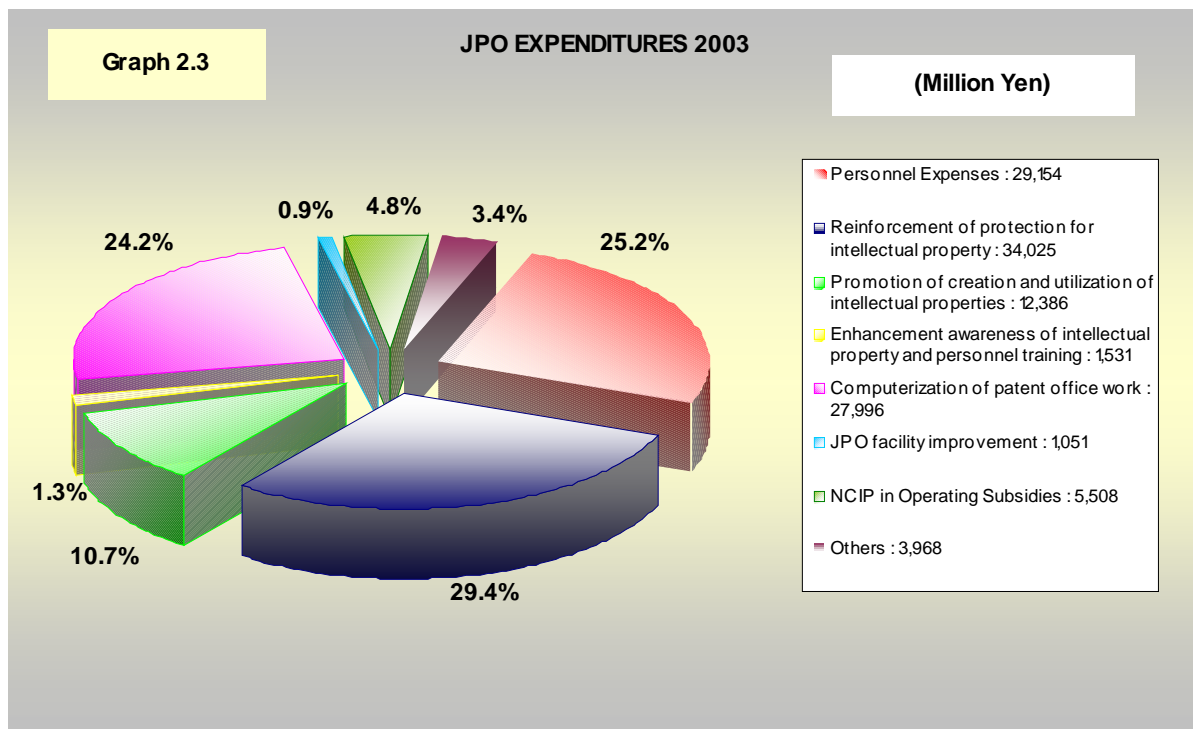
## **Cooperation with Developing Countries**

To help developing countries with the establishment and implementation of intellectual property rights systems, the JPO, in a joint scheme with WIPO, JICA, and other organizations, received a total of 1,856 trainees from both the public and private sectors of 43 countries and regions between 1996 and March 2004. The JPO will continue its human resource development programs with an emphasis on IP enforcement so that IP-related laws will be implemented more effectively. The JPO also utilizes WIPO Funds-in-Trust / Japan and JICA expert dispatch schemes to send its staff members and other qualified people to developing countries as experts in various IP fields. The dispatched experts primarily provide practical day-to-day support in such areas as examination and appeal / trial procedures, computerization, and PCT operations. They also provide seminars designed to help establish as well as educate local people on intellectual property rights systems.

## JPO's Main Budget

The JPO FY2003 budget totaled approximately 115,619 million yen. The breakdown of expenses is as follows:

- 34,025 million yen for reinforcement of protection for intellectual property,
- 12,386 million yen for promotion of creation and utilization of intellectual properties,
- 1,531 million yen for enhancement awareness of intellectual property and personnel training,
- 27,996 million yen for patent processing computerization,
- 1,051 million yen for JPO facility improvement,
- 5,508 million yen for the National Center for Industrial Property Information (NCIPI) in operating subsidies, and
- 29,154 million yen for personnel expenses.



## JPO Staff Composition

As of the end of FY2003, the JPO employed a total of 2,479 staff. This included an increased number of examiners and appeal examiners to further cut the time required for examination / appeal procedures.

Examiners: 1,325  
Patent / Utility model: 1,126  
Design: 51  
Trademark: 148  
Appeal examiners: 396  
General staff: 758

**Table 2.2: PRODUCTION INFORMATION JPO**

PRODUCTION FIGURES	2002	2003
Application filed		
<b>Domestic</b>	<b>369,458</b>	<b>362,711</b>
<b>Foreign</b>	<b>51,586</b>	<b>50,381</b>
<b>T o t a l</b>	<b>421,044</b>	<b>413,092</b>
Grants		
<b>Domestic</b>	<b>108,515</b>	<b>110,835</b>
<b>Foreign</b>	<b>11,503</b>	<b>11,676</b>
<b>T o t a l</b>	<b>120,018</b>	<b>122,511</b>
Applications in appeal	<b>21,847</b>	<b>22,217</b>
(Acceptance)	<b>( 4,552 )</b>	<b>( 4,950 )</b>
Applications in opposition	<b>3,150</b>	<b>3,896</b>
(Acceptance)	<b>( 987 )</b>	<b>( 837 )</b>

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

JPO Homepage: <http://www.jpo.go.jp>

## UNITED STATES PATENT AND TRADEMARK OFFICE

The mission of the USPTO is to ensure that the intellectual property system contributes to a strong global economy, encourages investment in innovation, and fosters entrepreneurial spirit. This mission is accomplished by the USPTO through its two businesses, Patents and Trademarks, which aim to:

- ❑ Promote the progress of science and the useful arts by securing, for limited times to inventors, the exclusive rights to their respective discoveries (Article 1, Section 8 of the United States Constitution).
- ❑ Provide businesses with enhanced protection of trademark rights and notices of the trademark rights claimed by others, as well as protect consumers against confusion and deception in the marketplace.

Since 1991, the USPTO has operated in much the same way as a private business, providing valued products and services to its customers in exchange for fees that are used 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 Commissioners of Patents and Trademarks act as the chief operating officers of the agency's two major business lines.

Over the past decade, the USPTO has faced unprecedented challenges, including soaring workloads, increasingly complex technology, and resource limitations. In response to customer demands for higher quality products and services and Congressional concerns about the agency's ability to continue to operate under a traditional business model, the USPTO developed and implemented the *21<sup>st</sup> Century Strategic Plan*, which is guided by the President's Management Agenda initiatives on strategic management of human capital, competitive sourcing, improved financial performance, expanded electronic government, and budget and performance integration.

The *21<sup>st</sup> Century Strategic Plan* is a far-reaching and aggressive one designed to transform the agency into an organization that is responsive to the global economy in which it operates. This plan is crafted around three long-term crosscutting themes: agility, capability, and productivity. Within these themes, the goals of the agency are to: 1) improve quality of patent products and services and optimize patent processing time, 2) improve quality of trademark products and services and optimize trademark processing time, and 3) create a more flexible organization through transitioning patent and trademark operations to an e-Government environment and advancing IP development worldwide.

In pursuit of e-Government, the USPTO and the EPO reached an agreement to foster collaborative development in the areas of e-filing and e-processing of patent applications. The USPTO made significant strides towards achieving the e-Government and quality goals of the *21<sup>st</sup> Century Strategic Plan* by implementing the Image File Wrapper (IFW) and quality initiatives.

The USPTO is accelerating deployment of critical automated information systems, particularly the electronic end-to-end processing of patent and trademark applications. The USPTO successfully completed deployment of the patent IFW system in August, 2004, whereby 88 percent of patent applications are electronically processed, exceeding the goal to electronically manage 70 percent of patent applications. All incoming and outgoing paper documents are captured electronically in the system and the last remaining pending paper applications will be scanned into the system by the end of 2004, with the electronic version of an application now considered the official file.

In addition to IFW, the Patent organization no longer mails paper U.S. references to applicants, instead making the information available to applicants via the Internet. Additionally, for the first time, anyone with Internet access anywhere in the world can now use the USPTO's website ([www.uspto.gov](http://www.uspto.gov)) to track the status of a public patent application as it moves from pre-grant publication to final disposition and review documents in the official application file, including all decisions made by patent examiners and their reasons for making them.

The system, known as PAIR (Patent Application and Information Retrieval), offers the public an advanced electronic portal for PDF viewing, downloading and printing an array of information and documents for patent applications not covered by confidentiality laws. Public PAIR also offers a quick-click feature for ordering certified copies of patent applications and application files.

## **International**

On the international front, the USPTO has faced many challenges. Regrettably, there is growing anti-IP sentiment in the world. This sentiment has been reflected by a number of member states at meetings conducted by the WIPO. The USPTO will continue to work with other countries to build a consensus and protect America's IP community.

Piracy and counterfeiting continued as major concerns during the past year and the USPTO has worked closely with the State Department, the Office of the United States Trade Representative, the Department of Commerce, and others on these vital issues. The USPTO has continued enforcement-training activities for government officials from a wide range of countries around the world. But perhaps the most significant development last year was the appointment of an attorney advisor in the USPTO Office of Enforcement to be an intellectual property attaché to the U.S. Embassy in China. This is the first time the USPTO has placed an official overseas for the purpose of improving intellectual property protection in a specific country. The USPTO believes this assignment will advance the Administration's work in the region, particularly in addressing the widespread counterfeiting and piracy that cost U.S. businesses billions of dollars in lost revenue and tens of thousands of U.S. jobs.

**Table 2.3: PRODUCTION INFORMATION USPTO**

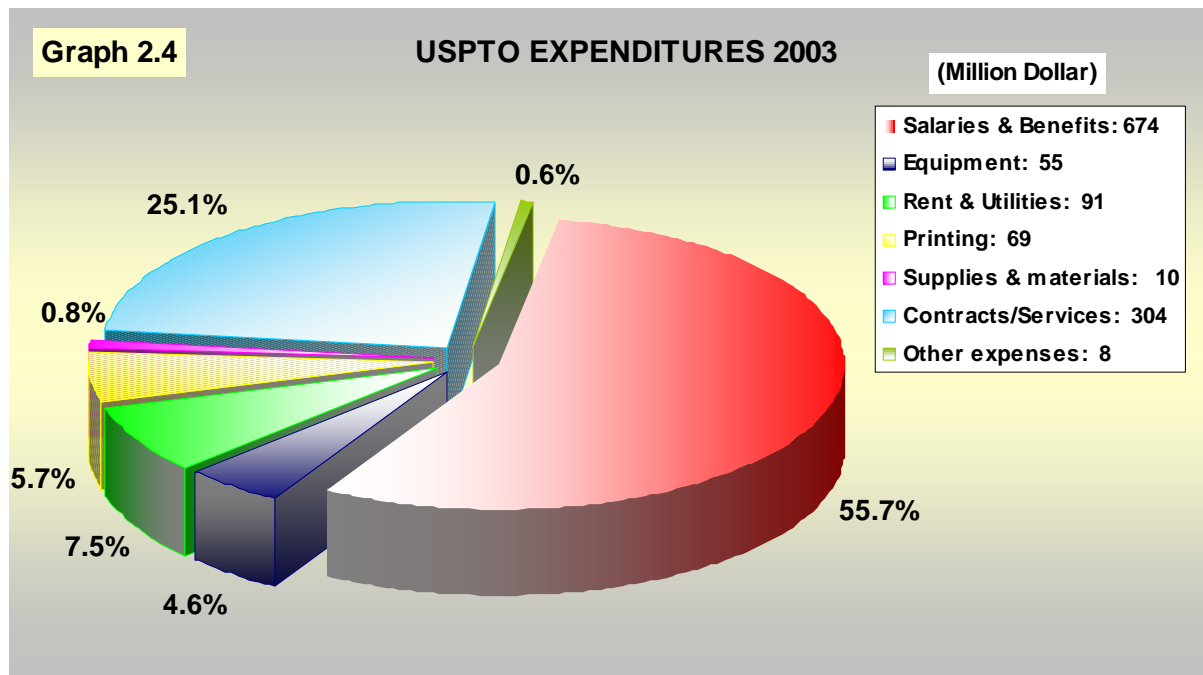
<b>PRODUCTION FIGURES</b>	<b>2002</b>		<b>2003</b>	
<b>Applications filed<sup>1</sup></b>	<b>334,445</b>		<b>342,441</b>	
<b>First Actions</b>	<b>271,624</b>		<b>288,033</b>	
<b>Grants</b>				
U.S. Residents	86,980	52.0%	87,901	52.0%
Foreign	80,354	48.0%	81,127	48.0%
Japan	34,859	20.0%	35,517	21.0%
EPC states	28,428	17.0%	28,174	16.7%
Others	17,067	10.2%	17,436	10.0%
Total	167,334	100.0%	169,028	100.0%
PCT Chapter II	17,505		21,932	
<b>Applications in appeal and interference proceedings</b>				
	Appeals	Interference	Appeals	Interference
Contested	3,253	108	2,683	101
Disposed	4,851	155	3,737	154
<b>Patent cases in litigation</b>				
Cases filed	49		60	
Cases disposed	55		54	
Pending cases (end of calendar year)	33		39	

1: For utility patents only.

## USPTO 's Budget

In calendar year 2003, USPTO expenditures reached \$1.2 billion. USPTO expenditures are divided into seven major categories: salaries and benefits, equipment, rent and utilities, printing, supplies and materials, contracts/services, and all other expenses.

The majority of expenditures in 2003 were attributed to the USPTO's labor force. Salaries and benefits accounted for 55.7 percent of overall expenditures, or about \$674 million. Supplies and materials were the second major expenditure, which represented about 25.1 percent of expenditures. Rent and utilities were the third largest at 7.5 percent. A breakdown of all the major spending categories is shown in Graph 2.4.



### USPTO Staff Composition

In calendar year 2003, the total staff at the USPTO was 6,723. The Patent staff total was 5,081. This total was comprised of 3,535 Utility, Plant and Reissue (UPR) examiners, 58 Design examiners, and 1,488 managerial, administrative and technical support staff. As reported in past Trilateral Statistical Reports, the Board of Patent Appeals and Interferences is no longer part of the Patent organization. It is now part of the Office of General Counsel (OGC), which has approximately 250 employees and consists of five organizations that are concerned with legal review of agency decisions, defense of agency decisions in court and administrative tribunals, internal agency legal advice, and regulation of persons practicing before the USPTO. The number of members on the Board of Patent Appeals and Interferences decreased in 2003 by one, and the total is now 109.

### More Information

Further information can be found at the USPTO 's Homepage:

<http://www.uspto.gov>

## Chapter 3

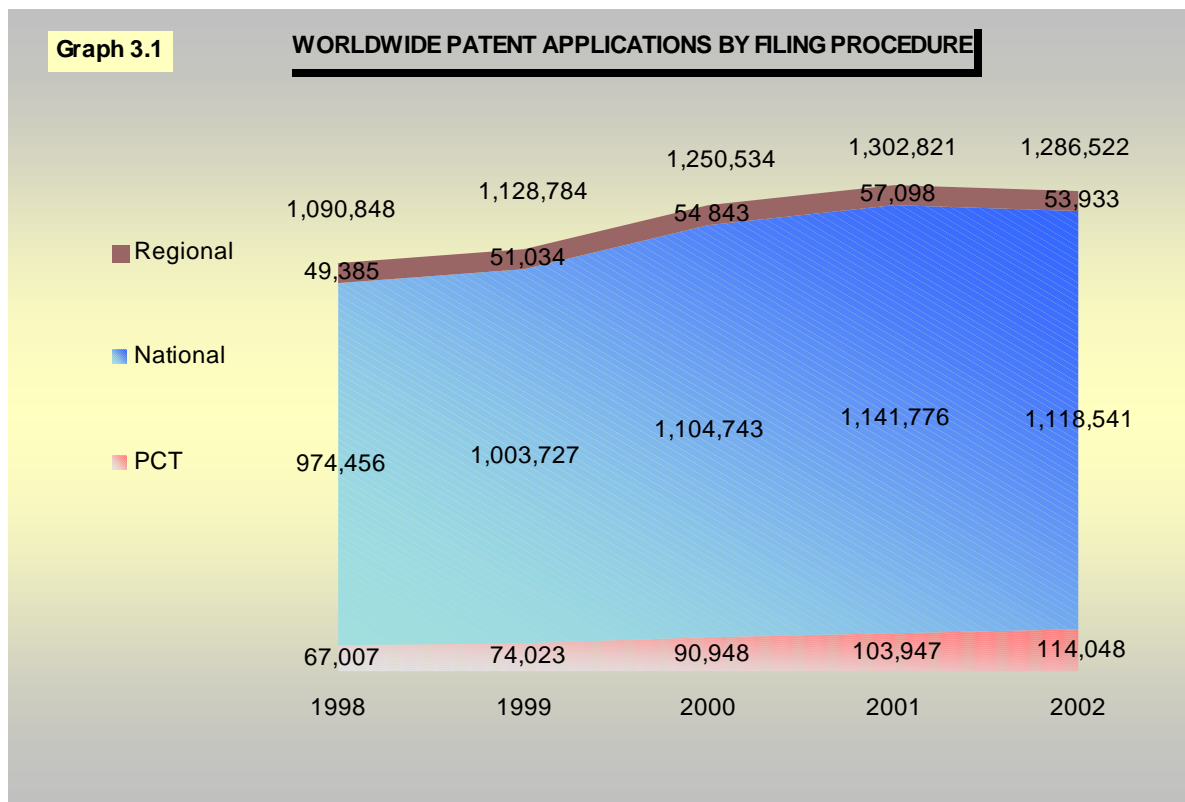
# WORLDWIDE PATENTING ACTIVITIES

Although the Trilateral offices represent a significant proportion of total patents worldwide, the global picture is not complete without including all other offices from around the world. This chapter examines worldwide patent activities in terms of patent applications and grants. The statistics cover a five-year period from 1998 to 2002. Data for the year 2002 are the most current available for worldwide patent filings. More current and detailed data sets from the Trilateral offices are presented in Chapter 4.

Applications reported in this chapter are counted by the calendar year of filing and grants by the calendar year of granting. For supranational applications, it is possible to file a single application that designates a number of member states, and the subsequent grants become a bundle of national patents in the various designated countries. Applications presented in the graphs and statistics of this chapter are only counted once, but where relevant, parallel graphs and statistics are also presented for patent rights.

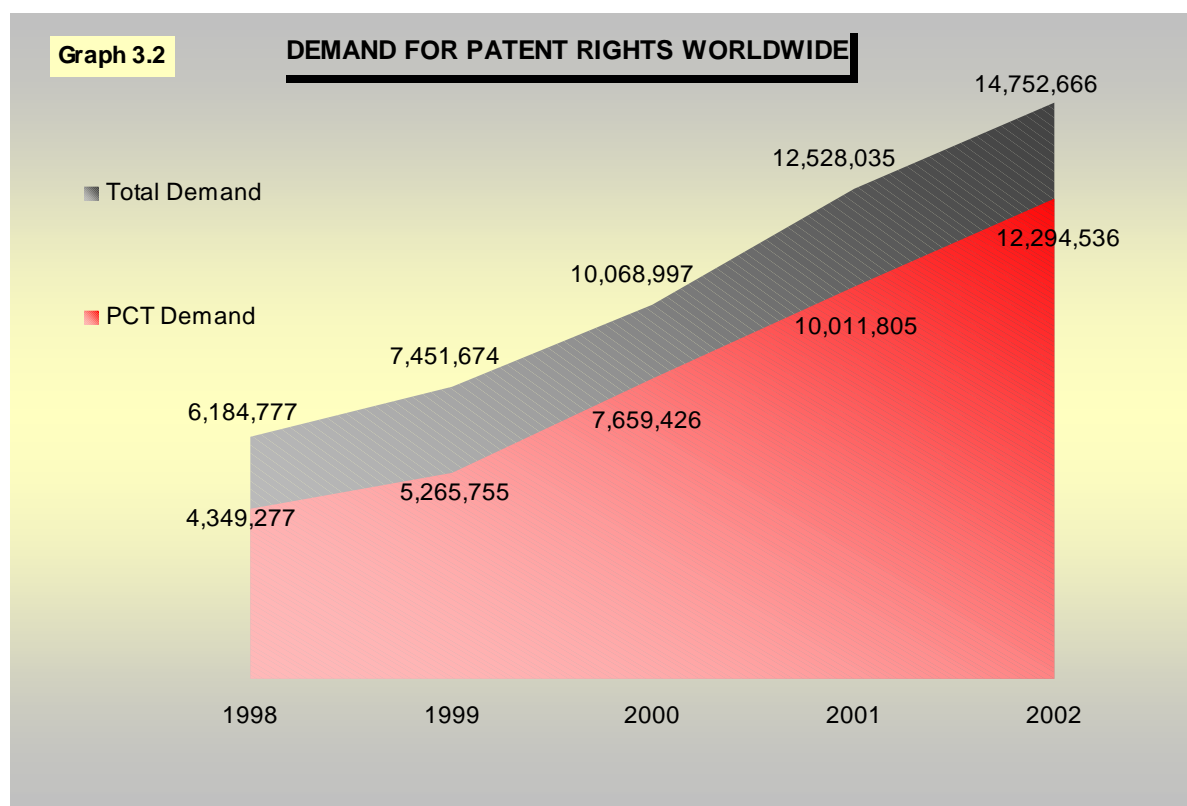
## PATENT APPLICATIONS FILED

The data in Graph 3.1 below show the number of applications filed all over the world.



There were a total of 1,286,522 filings worldwide in 2002. This represents an average compound rate of increase of 4.2% per year since 1998. The peak annual rate of 10.8% occurred in 2000. Since that time, the rate continued to weaken, and by 2002, the trend had actually reversed with filings dropping by 1.3% from the previous year. A resumption of growth in filings seems likely in 2003 and future years, but growth in the near future will likely be at a slower pace as compared to recent years. Though most of the applications were filed according to national procedures (87% in 2002), an increasing proportion was made via the PCT, offering applicants a broader range of options.

Graph 3.2 below shows the development of the worldwide demand for patent rights including cumulated supranational designations.



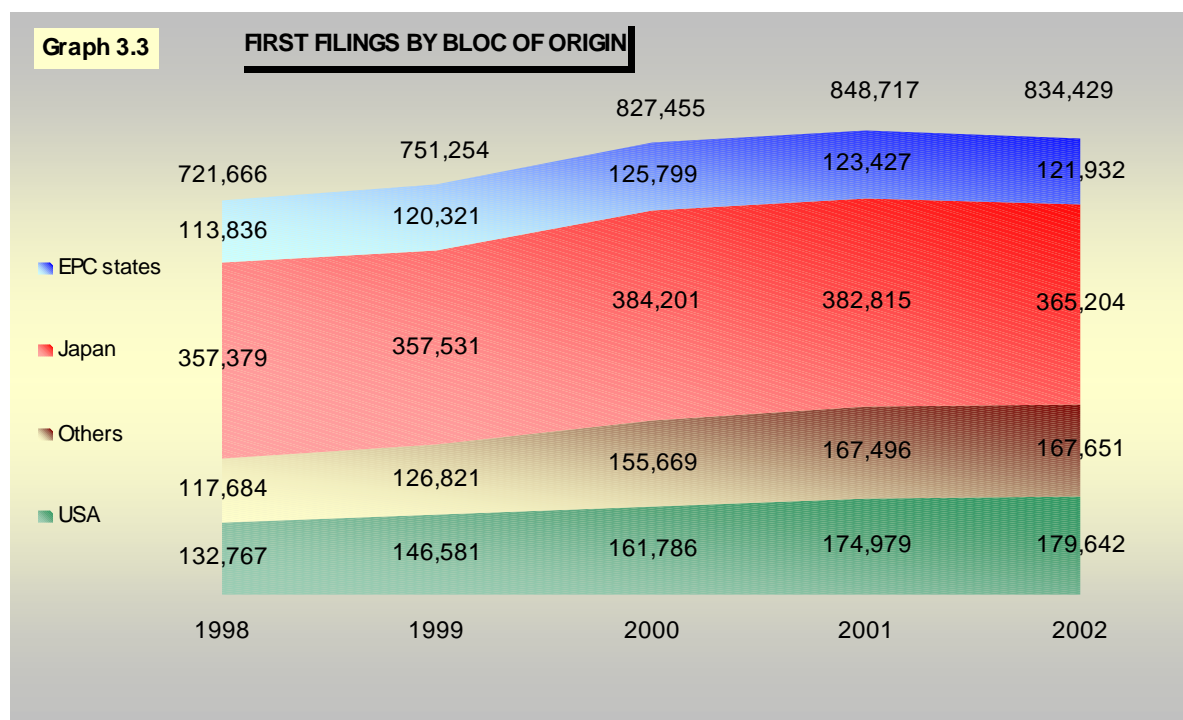
Demand for patent rights has been increasing at an average compound rate of 24.3% up through the year 2002. A new record high was reached in 2002 when the total was 14,752,666, with 83.3% of filings designating multiple countries via the PCT route.

Although most of the applications were filed according to national procedures, a large part of the demand arises from multiple designations under the PCT system. On average, in 2002, 11.5 designations were made for each application. In 1998, the comparable figure was only 5.7 designations for each application.

# PATENT ACTIVITY BY BLOCS

## FIRST FILINGS

The process of patent protection starts with a first filing, an initial patent application made to protect an invention or an innovation prior to any subsequent filing to extend the protection to other countries. The development of first filings in the major filing blocs is shown in Graph 3.3.

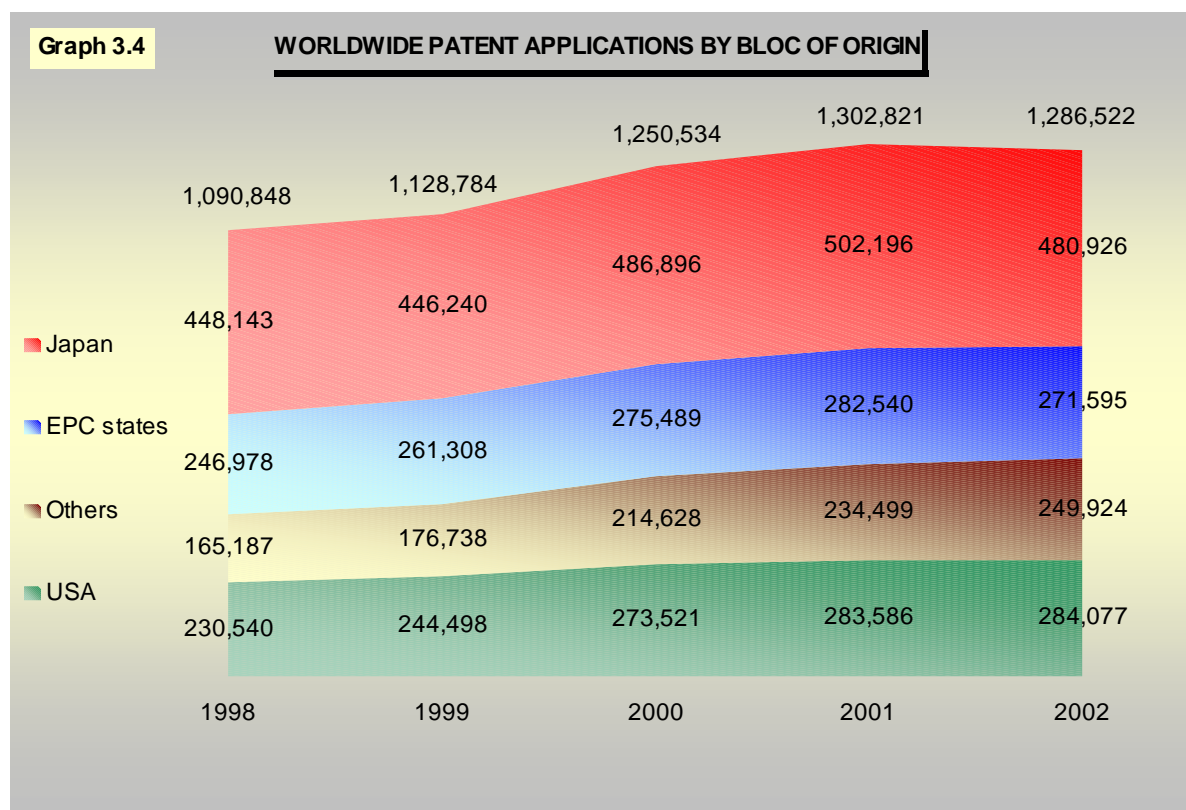


First filings have been increasing steadily. The peak annual rate of 10.1% during the 1998 to 2002 period occurred in 2000. A slowdown has occurred since that time, with the rate increasing by only 2.6% from 2000 to 2001 and actually dropping by 1.7% in 2002. Once again, Japan recorded the highest number of first filings in 2002, but the figure of 365,204 represents another decrease, with a peak occurring in 2000 when the total was 384,201. The EPC contracting states have experienced a slight decline in filings in 2002, and the USPTO has recorded a further increase in the numbers of filings. The first filings in the bloc "Others" managed to increase slightly from 167,496 in 2001 to 167,651 in 2002.

The total number of first filings in 2001 was 848,717. From these first filings, one year later, in 2002, 452,093 subsequent filings were registered. Thus, on average, one invention for which one first filing was made led to 0.53 subsequent applications. Considering the demand for patent rights generated by one first filing, for one invention a first filing in 2001 led to 16.4 subsequent applications for patent rights. Three years ago, the rate was at 9.3. This shows the ongoing internationalization of the patent system.

## ORIGIN OF THE APPLICATIONS

Graph 3.4 shows the worldwide numbers of applications, categorized by the blocs of origin of the applicants.

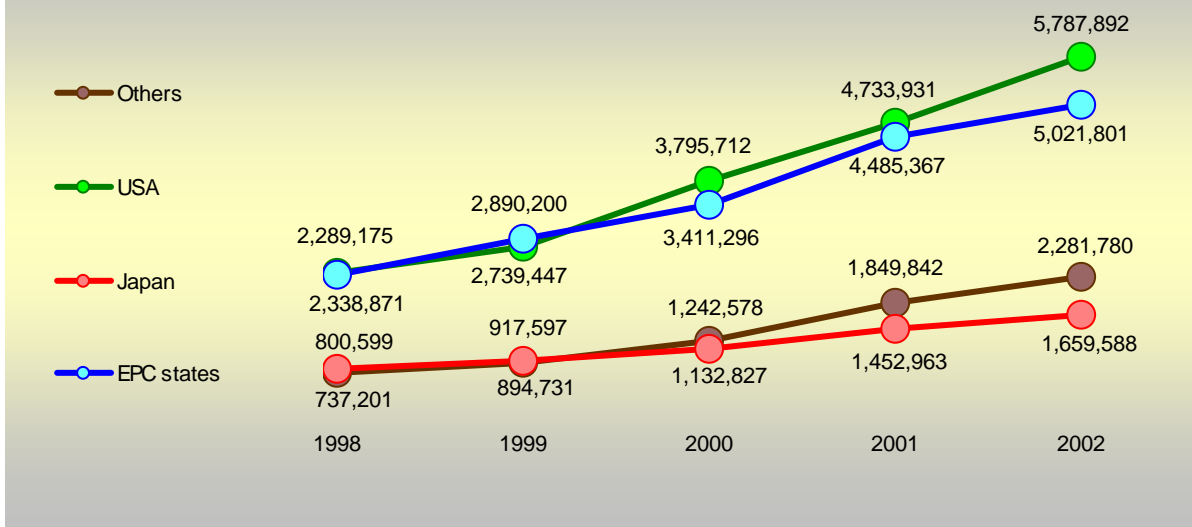


The number of filings worldwide decreased by 1.3% from 2001 to 2002. However, filings from the US and other blocks continued to increase slightly in 2002. Filings from Japan and the EPC contracting states reversed direction in 2002, decreasing by 4.2% and 3.9%, respectively. Filings from nations other than Japan, the US, and those in Europe (“Others”) saw an increase of 6.6% from 2001 to 2002. In 2002, 118 offices reported basic figures. As reflected in the fact that there were 178 WIPO member nations in 2002, the number of reporting offices changes from year to year. It is therefore advisable to draw conclusions with caution when comparing statistical data on a year-to-year basis.

Graph 3.5 shows the origin of the demand for patent rights including cumulated designations. Although the demand from residents in Japan and the EPC contracting states is increasing, the demand from residents in the US and “Others” is increasing at an especially high rate. The demand from US residents increased by 22.3% in the year 2002. Demand from “Others” increased by 23.4% in 2002.

Graph 3.5

WORLDWIDE DEMAND FOR PATENT RIGHTS BY BLOC OF ORIGIN



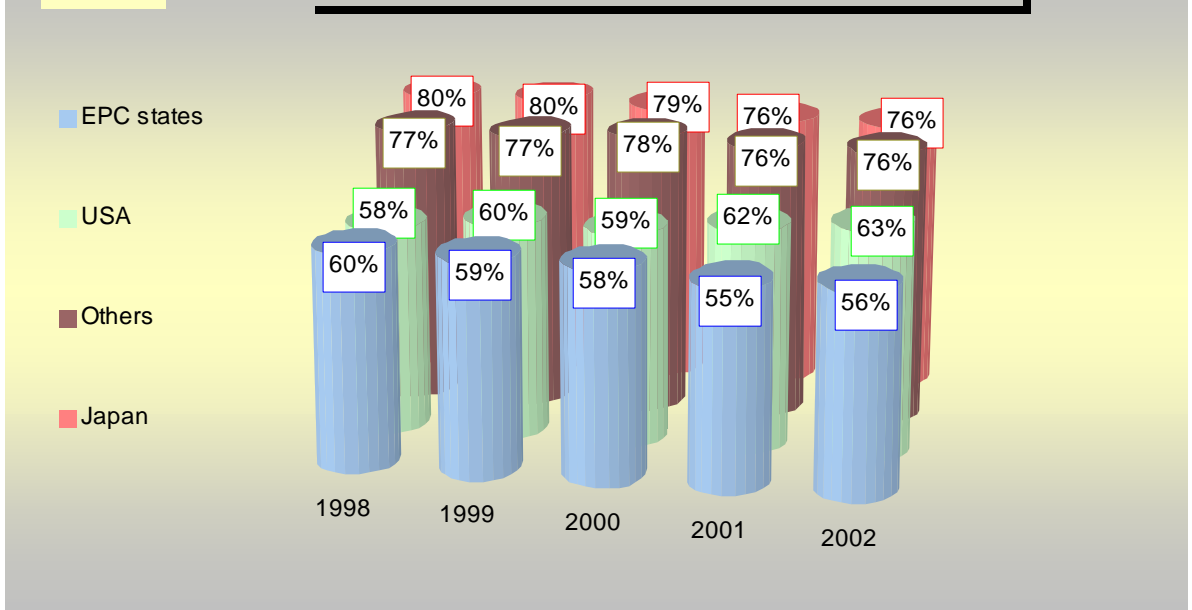
### TARGETS OF THE APPLICATIONS

Although the first filing is generally made in the country of residence and subsequent applications are made to protect the innovation abroad, a substantial part of the applications remain in the bloc of origin. Graph 3.6 shows, for applications made throughout the world by the residents of each bloc, the proportions of those applications that were made in the bloc of origin<sup>1</sup>.

The proportion of applications made in the bloc of origin is highest in Japan and “Others”, followed by the US and the EPC contracting states. A declining trend can be seen for Japan and for EPC contracting states up to 2001. The US shows no clear trend.

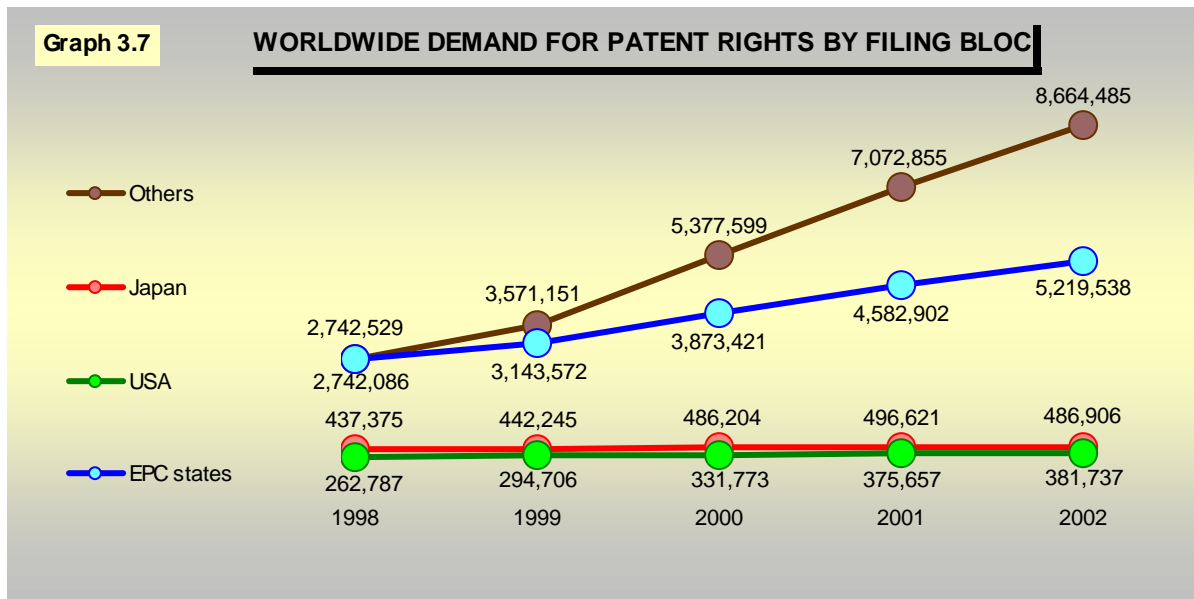
Graph 3.6

PROPORTION OF APPLICATIONS MADE IN THE BLOC OF ORIGIN



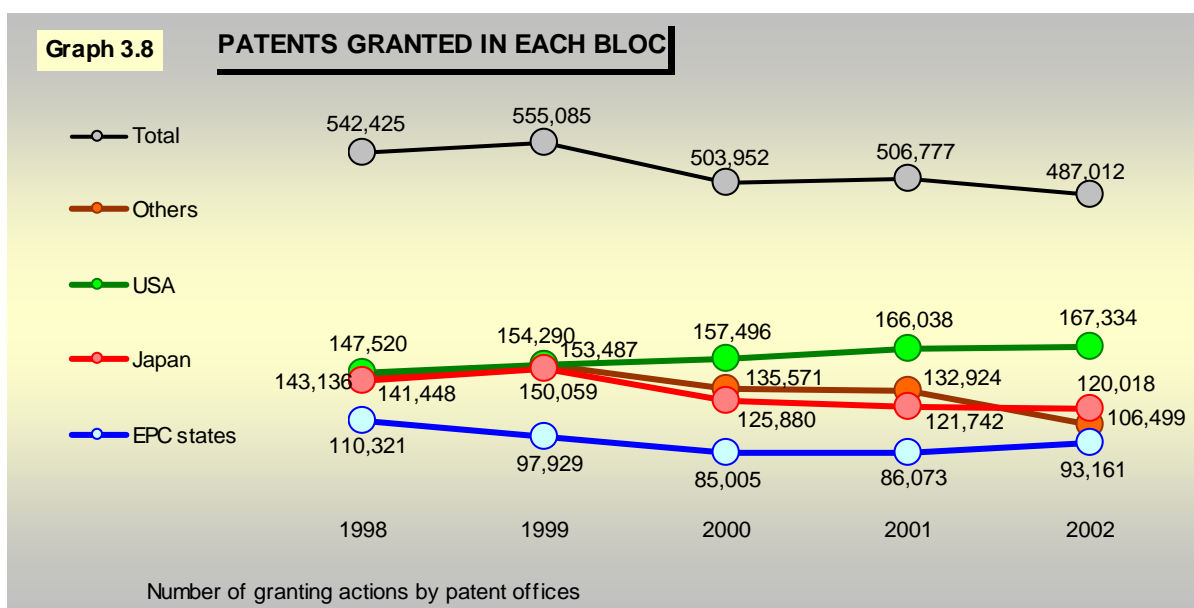
Graph 3.7 shows information on the demand for patent rights, including cumulated designations categorized by the target blocs in which patent rights are sought.

Demand in "Others" is the highest followed by the EPC contracting states. The demand increased in all blocs over the period 1998-2002. Within the Trilateral blocs, the relative change was the highest in the EPC contracting states (90.4% increase from 1998 to 2002), followed by the USPTO (45.3%) and Japan (11.3%). The development in bloc "Others" (215.9%) is due to several factors: countries setting up new intellectual property systems, new memberships to the PCT, and statistics becoming available for more countries.



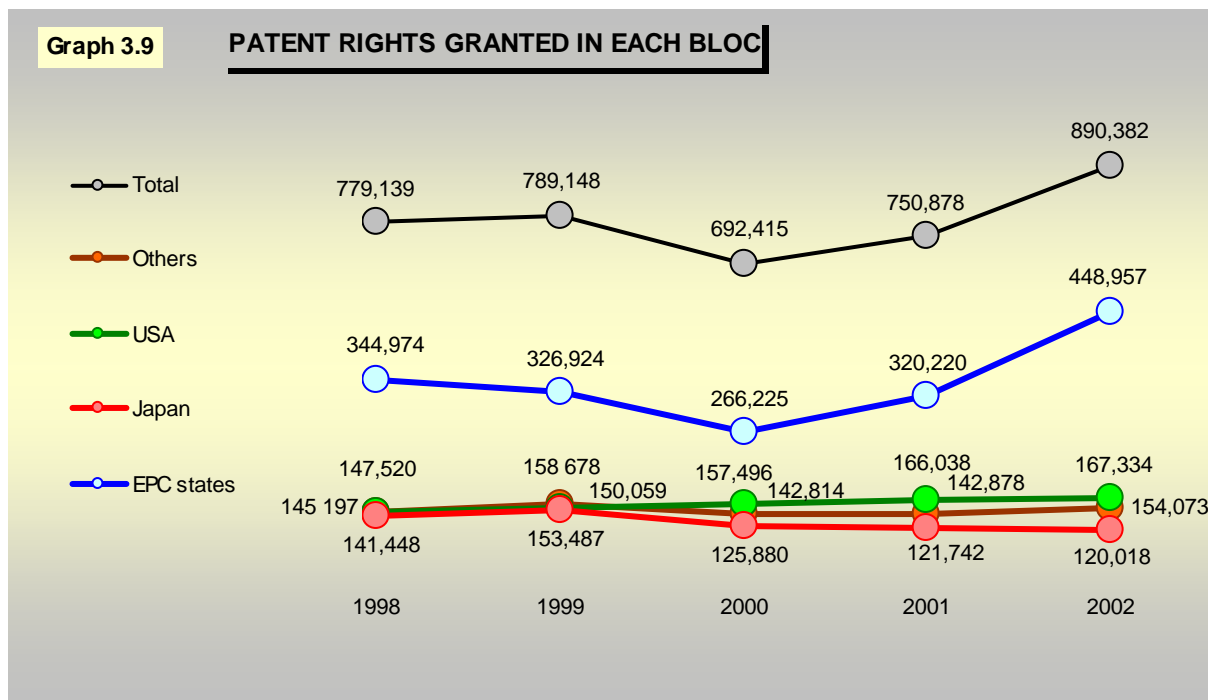
## GRANTS

Graph 3.8 shows the cumulative numbers of patents granted by the various offices in each bloc since 1998.



There have been noticeable developments and changes in trends in the number of patent rights registered worldwide. Japan's trend, which recorded an extremely high number of registrations in 1999, has gradually declined since that time. EPC member nations have shown a flat to slightly improving trend between 2000 and 2002. The numbers of registrations in the US have risen in the past but appear to have weakened in 2002, when they increased by less than one percent.

Regional granting procedures led to multiple patent rights in the various designated states within the region concerned. Graph 3.9 shows the development of grants as reflected in these rights and differs from Graph 3.8 only for those blocs where regional procedures exist in addition to national ones (EPC contracting states and "Others").



Total patent registrations have continued to increase and strengthen since 2000. In 2001, the growth rate was 8.9%, but in 2002, it accelerated to a double-digit growth rate of 19.8%. Of all the blocs, patent rights granted in the EPC states have increased the most (40.2%) in 2002. This indicates that more patents were obtained via supranational granting procedures.

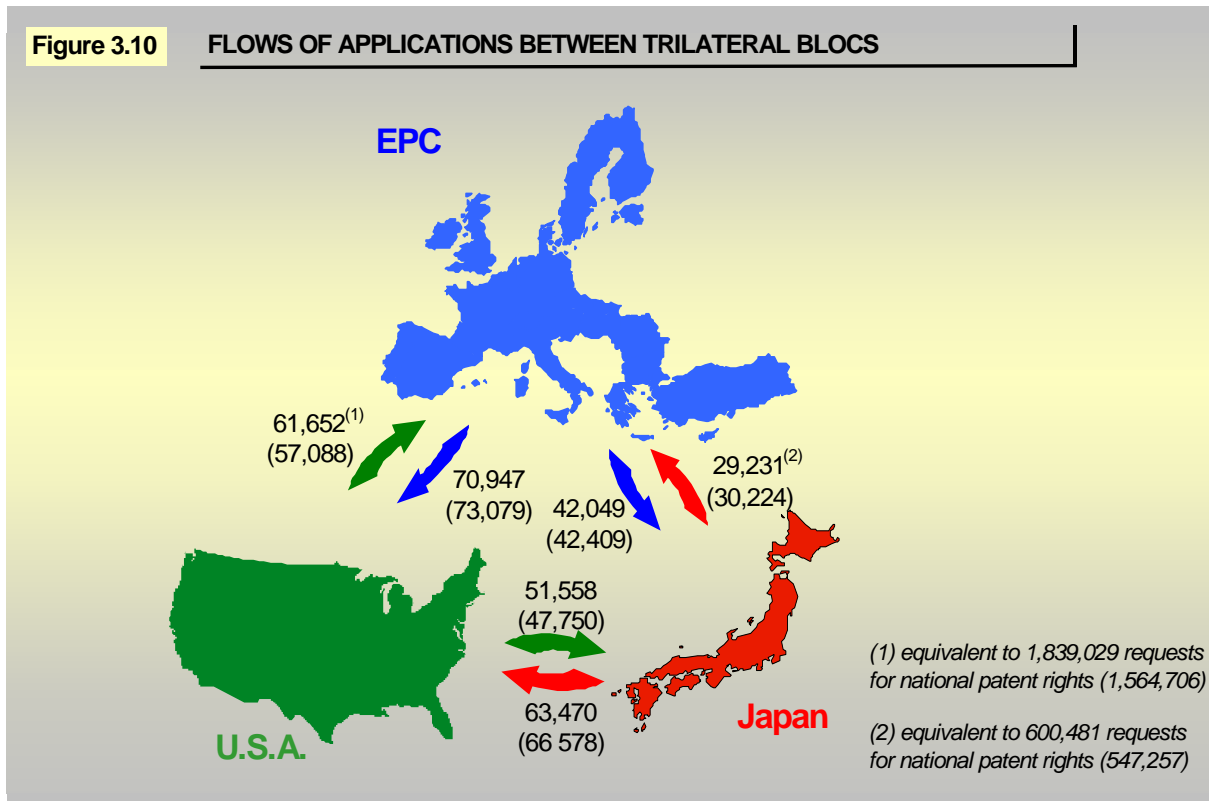
## INTERBLOC ACTIVITY

### FLOWS OF APPLICATIONS

The flows of patent applications and requests for patent rights between the three major filing blocs are important. Graph 3.10 shows details of the specific flows of applications between the trilateral blocs in 2002. The 2001 figures are given in parentheses.

Japanese applicants file more applications in the US than in the EPC area. US applicants

tend to apply more in the EPC area than in Japan. Residents of EPC contracting states seek much more protection in the US than they do in Japan. This phenomenon is the same as that of 2001.

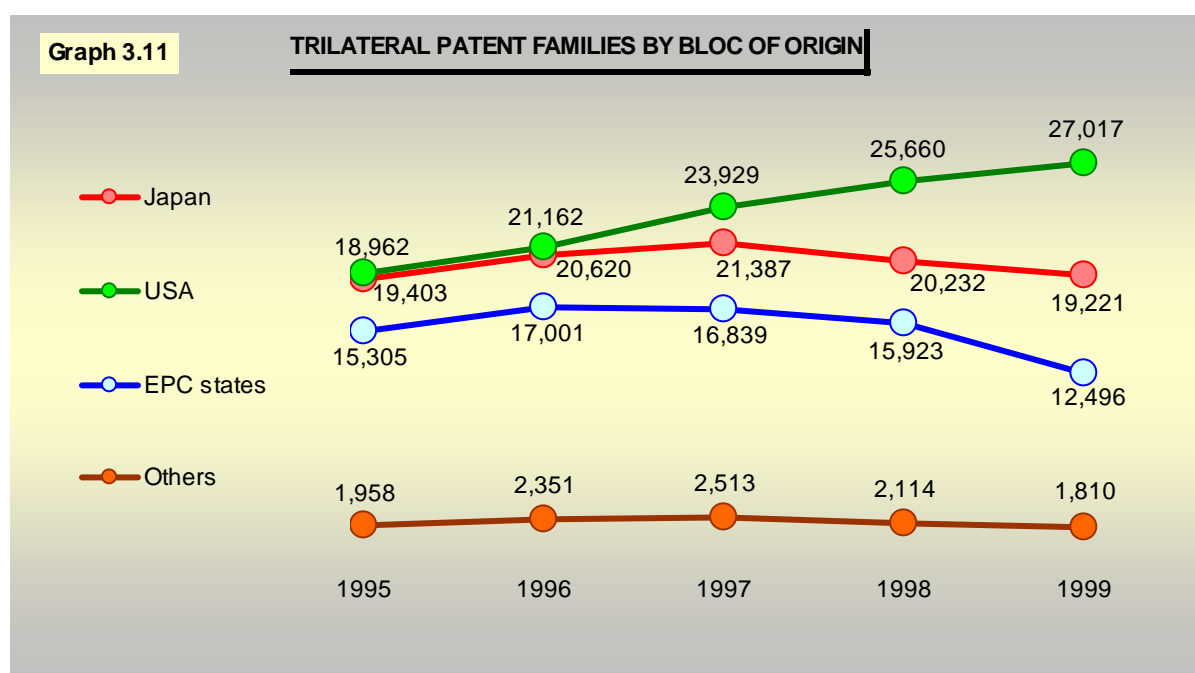


Notes (1) and (2) in the graph provide a comparison of the flows of applications to EPC contracting states, with the equivalent flows expressed in terms of rights including cumulative designations. US applicants filed 61,652 applications in the EPC contracting states, equivalent to 1,839,029 national patent applications (29.8 per application; 27.4 in 2001). Japanese applicants filed 29,231 applications in the EPC contracting states, equivalent to 600,481 national patent applications (20.5 per application; 18.1 in 2001). One of the reasons for the high number of designations per application in applications at the EPO is that an applicant for a European patent may delay his or her final choice of the contracting states to be designated until the time that he requests the substantive examination, at which point designation fees must be paid.

## PATENT FAMILIES

The information in this section was obtained from the DOCDB database of worldwide patent publications. The statistics are based on references to priorities given in published applications and differ slightly from the statistics earlier in this chapter, which are based on counts of patent applications provided by individual patent offices. Detailed tables that show the flows of patent families between blocs can be seen in the web-based annex to this report.

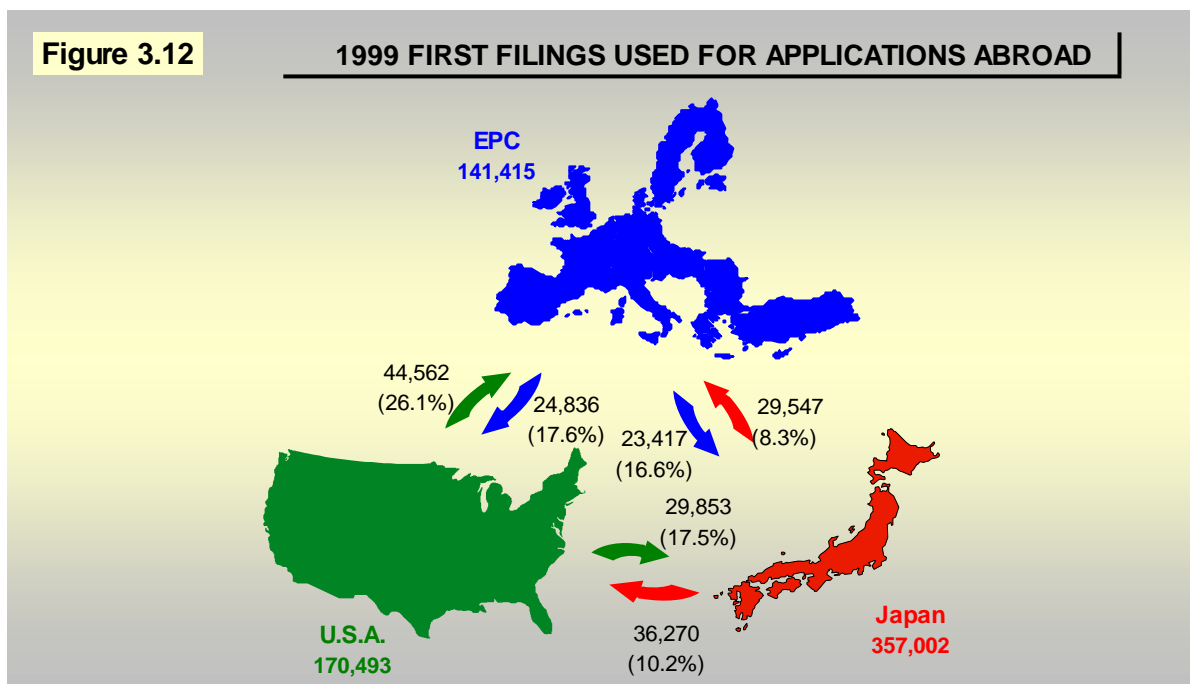
The development over time of trilateral patent families is shown in Graph 3.11. Due to the delay in publication (from the moment of filing), in particular in the patent system of the USA, where up to the year 2000 patents have been published only after grant, the figures can only be reported with any degree of accuracy after several years of delay. The figures for references to priorities and flows between trilateral blocs are accurate up to the year 1999, but the figures for trilateral patent families seem to be accurate only up to the year 1998 because for them there needs to be evidence of activity in all three blocs.



The trilateral patent families data trended upwards for the USA between 1995 and 1999, while the data for EPC contracting states rose until 1996 and then declined in 1997 through 1999. The data for the JPO show a peak in 1997 followed by a downward trend through 1999. The total number of trilateral patent families in 1998 was 63,929, of which 25% originated from EPC contracting states, 32% from Japan, 40% from the USA, and 3% from "Others". The corresponding figures for 1997 were a total of 64,668 trilateral families, of which 26% originated from EPC contracting states, 33% from Japan, 37% from the USA, and 4% from other states.

Out of all priority forming filings in the trilateral area in 1998, 9.6% formed trilateral patent families. The proportions differed considerably according to the bloc of origin of the priority forming filings. For EPC contracting states, 11.6% of priority forming filings formed trilateral families in 1998 as compared to 12.9% in 1997. For the United States, 16.7% were observed in 1998 as compared to 15.5% in the prior year. There were 5.7 in 1998 for Japan (was 6.1%), and for "Others" 1.4% in 1998 (was 1.9%).

The flows of patent families between trilateral blocs are shown in Graph 3.12. The number given for each bloc is the total number of distinct references to priority filings made in 1999. This can be taken as an indicator of the number of first filings in the bloc. The flow figures between blocs of origin and target blocs indicate the numbers of secondary filings in the target bloc that referenced priority filings from the bloc of origin in 1999.



Out of all first filings in the trilateral area in 1999, only 19.4% formed patent families including at least one other trilateral bloc. When considered by bloc of the priority applications, this proportion was much smaller for Japan than for the other blocs (25.3% for EPC contracting states, 13.1% for Japan, 27.8% for the USA). However, the absolute number of such filings for Japan (46,596) was comparable to filings from the other blocs (EPC states 35,757, USA 47,398) due to the large number of first filings in Japan. When the blocs receiving the subsequent applications were considered, a larger proportion of worldwide first filings were received by Japan than by the other blocs (14.0% by EPC contracting states, 17.1% by Japan, 12.3% by USA). From all the priority forming first filings throughout the world in 1999, 16.5% formed patent families including at least one trilateral bloc. See the statistical annex in the web version of this report for further information on these breakdowns.

## Chapter 4

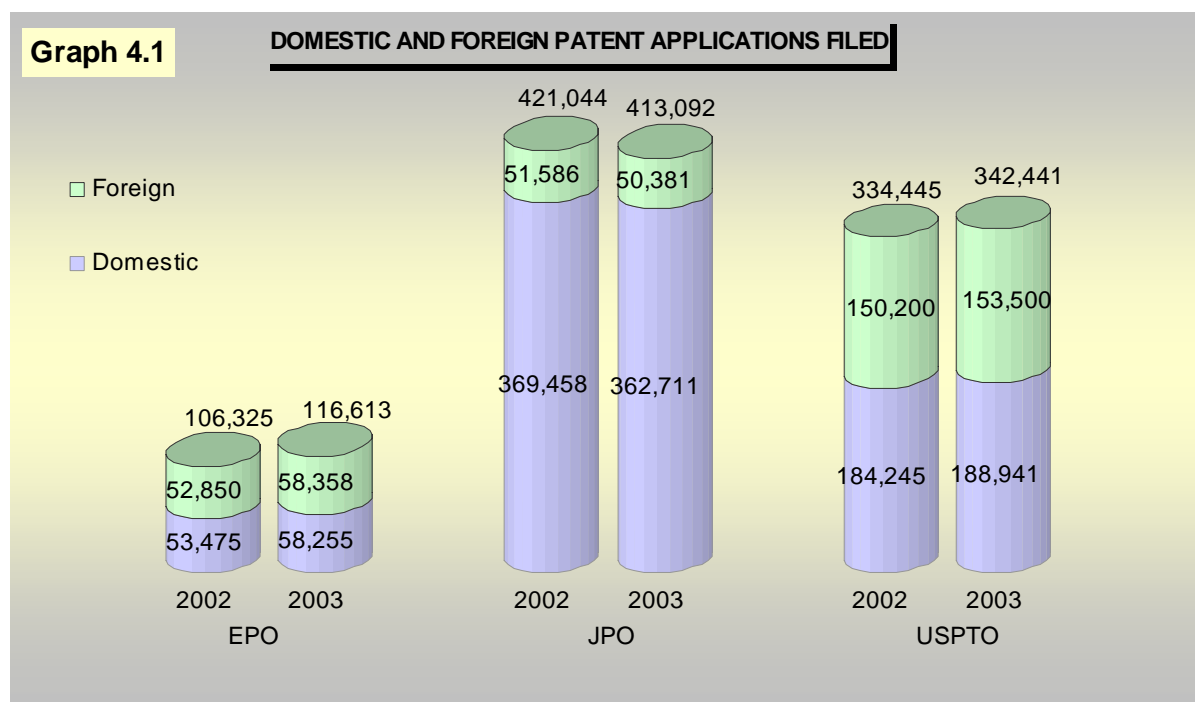
# PATENT ACTIVITY AT TRILATERAL OFFICES

Demand at Trilateral offices is demonstrated by statistics on patent applications. The total of direct national / regional applications filed and international applications entering the national / regional phase will hereinafter be called "patent applications filed", unless explicitly stated otherwise.

For the patent grant statistics presented in this chapter, direct, regional, and international applications granted are taken into account. Since in this context the statistics are meant to give insight into the work involved rather than the number of resulting individual patent rights, hereinafter "patents granted" will correspond to the number of grant actions.

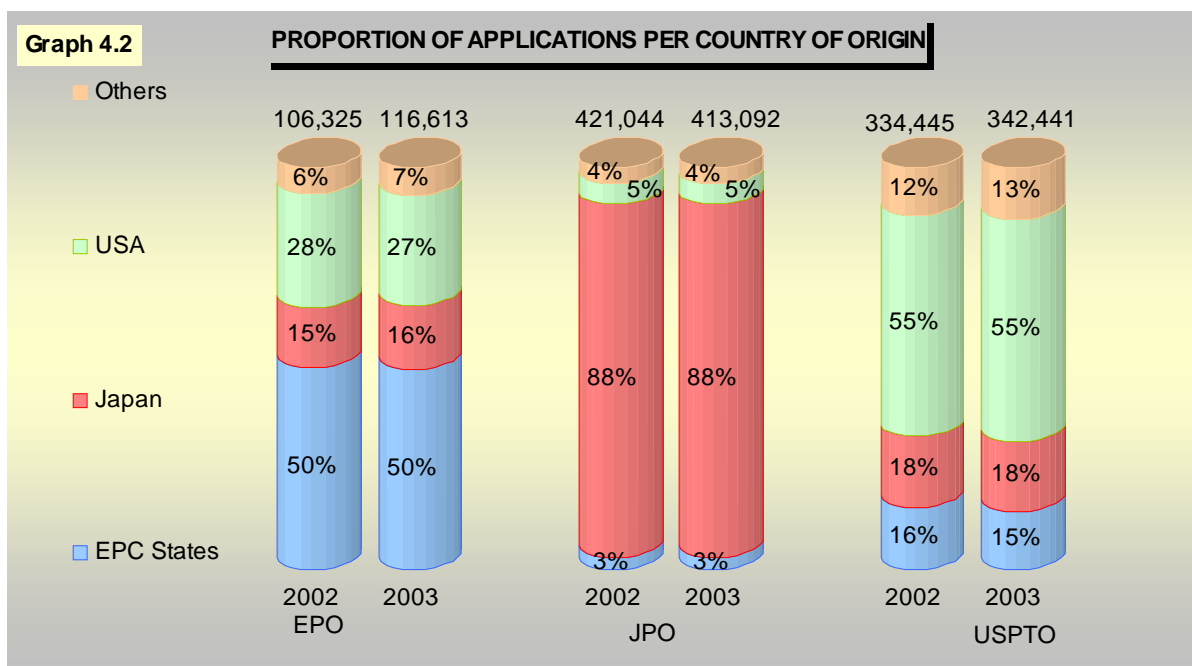
## APPLICATIONS WITH THE TRILATERAL OFFICES

The numbers of domestic (residents of the country) and foreign (non-residents) patent applications filed with each one of the Trilateral offices for the years 2002 and 2003 are shown in Graph 4.1.



There were a total of 413,092 patent applications filed with the JPO in 2003, which is a decrease of 7,952 filings or 1.9% below the previous year. The number of patent application filings at the EPO increased by 10,288 or 9.7%. USPTO patent application filings also increased over 2002 levels by 7,996 or 2.4%.

Graph 4.2 shows the respective shares of patent application filings by origin relative to total filings at each office for 2002 and 2003.



Compared to 2002, the shares of patent application filings by origin at each office were little changed in 2003. As in the past, patent application filings of domestic origin continued to represent the most significant share of filings at each office. In 2003, the shares of domestic filings at the JPO, EPO, and USPTO were 88%, 50%, and 55%, respectively. The numbers of domestic filings in the JPO and the USPTO are approximately equivalent to the numbers of first filings. Domestic EPO filings are defined as the total of EPO filings by residents of EPC contracting states. Only a low proportion of these are first filings at the EPO, which is explained by the fact that in EPC contracting states the first application is generally filed at a National office. A subsequent filing at the EPO follows if the invention is judged to be worthy of protection throughout Europe. Consequently, the number of domestic filings at the EPO is not equivalent to the number of first filings. The first filings with the EPO from residents of EPC contracting states were 10,469 in 2002 and 11,974 in 2003, respectively 19.6% and 20.6% of domestic European filings.

Due to the differences in behaviour of the applicants from different countries, comparison of the number of applications at the Trilateral offices should be made with caution. For example, the numbers of claims given in applications are significantly different among the three offices. On average, in 2003, an application filed at the EPO contained 17.7 claims (17.4 in 2002), one filed at the USPTO had 23.4 claims (23.1 in 2002), and one application at the JPO contained 7.6 claims (7.2 in 2002).

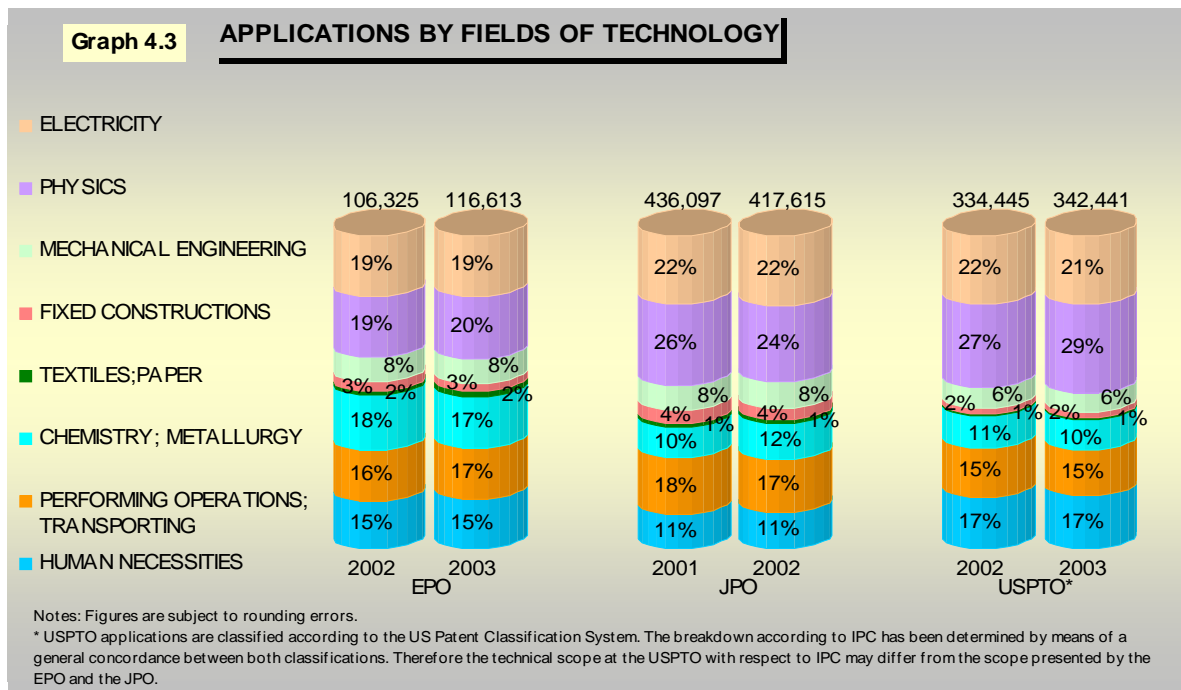
## APPLICATIONS BY FIELD OF TECHNOLOGY

Patents are classified by the Trilateral offices according to the International Patent Classification (IPC). This takes place at a different stage of the procedure in each office.

Graph 4.3 shows data for the EPO and the USPTO for the filing years 2002 and 2003, while for the JPO the breakdown is given for the filing years 2001 and 2002. The JPO graph for 2002 shows the most recent available figures because the IPC is assigned just before the publication of the Unexamined Patent Gazette (after the expiration of 18 months from the filing date). The JPO numbers in the graph were as of April 12, 2004.

Graph 4.3 indicates the share of applications in each technological field at each office. The following eight fields of technology are represented:

- 1) Human necessities
- 2) Performing operations, transporting
- 3) Chemistry, metallurgy
- 4) Textiles, paper
- 5) Fixed constructions
- 6) Mechanical engineering
- 7) Physics
- 8) Electricity



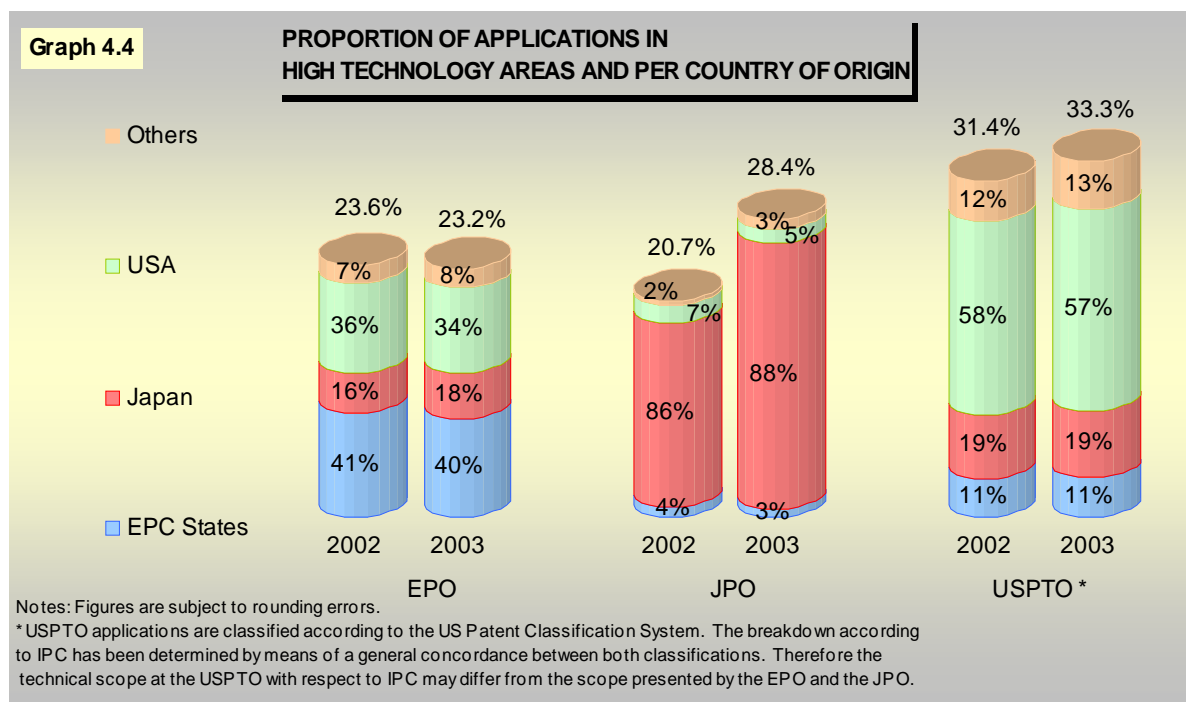
On a year-to-year basis, there is little change in the share these fields occupy at the Trilateral offices. Although the field of physics contributes to a smaller share of filings at the EPO than the other Trilateral offices, the field of chemistry and metallurgy contributes a larger portion than at the JPO and USPTO. Human necessities occupy a smaller share at the JPO than the other two offices.

Comparing 2003 to 2002, the share from the physics field of technology increased by 2% points at the USPTO and the electricity share fell by 1%. At the EPO, physics and performing operations and transportation increased each by 1%. From 2001 to 2002 at the JPO, there was a decrease of 2% in physics related technologies.

An increasing proportion of applications filed with the Trilateral offices are from high technology areas. In Graph 4.4, this proportion is given for each office in 2002 and 2003, together with their origin.

The patent classification does not itself define high technology fields. The Trilateral offices, however, previously agreed to consider as high technology the following fields:

- computer and automated business equipment,
- micro-organism and genetic engineering,
- aviation,
- communications technology,
- semi-conductors, and
- lasers.

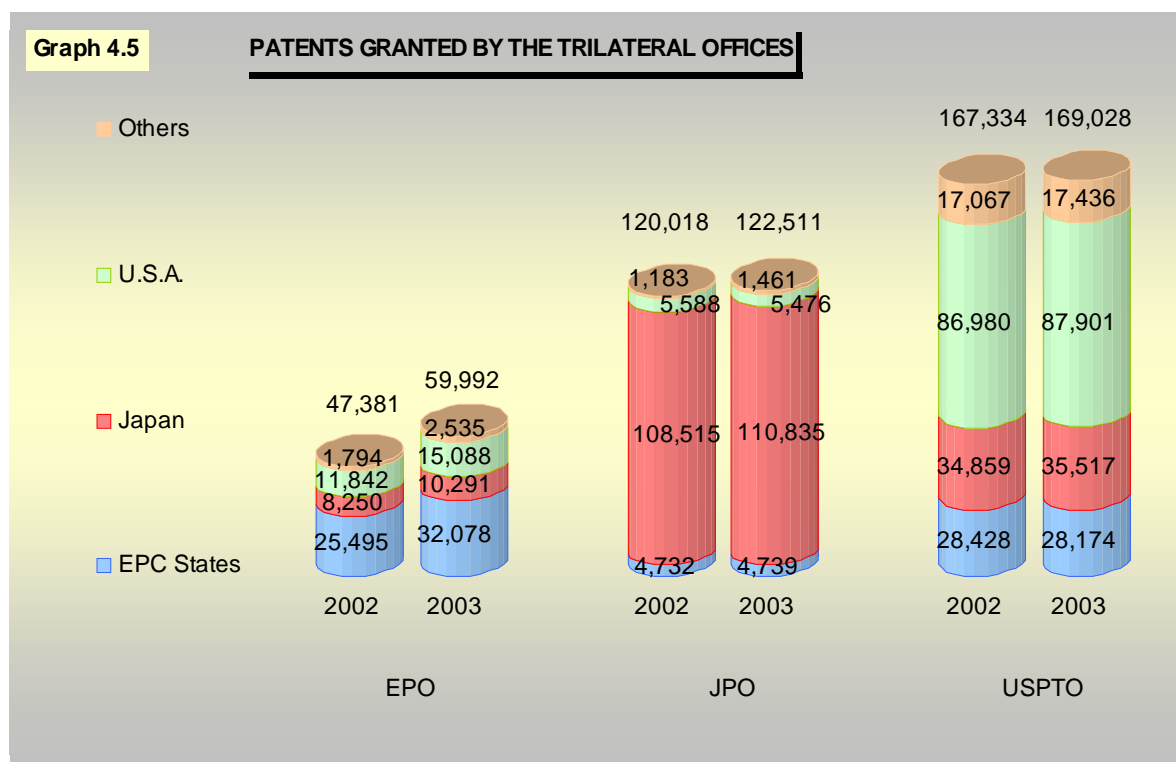


The USPTO has the highest share of patent applications in the high-tech field, with 33.3% of all applications occurring in this area. Of this number, 57% are from domestic applicants. At the JPO, where high-tech patent applications represented 28.4% of all applications in 2003, 88% of applications are from domestic applicants. At the EPO, the share of high-tech applications remained stable with 23.2% and about 40% are from EPC contracting states.

It is noticeable that the share of applications at the EPO from EPC contracting states in high technology is below their share on average in all filings at the EPO and at the USPTO (as shown in Graph 4.2). The share of the USA applicants in high technology is higher at the EPO and slightly higher at the USPTO than on average. The shares of Japanese applicants in high technology are sometimes slightly higher than their overall share of applications at the Trilateral offices.

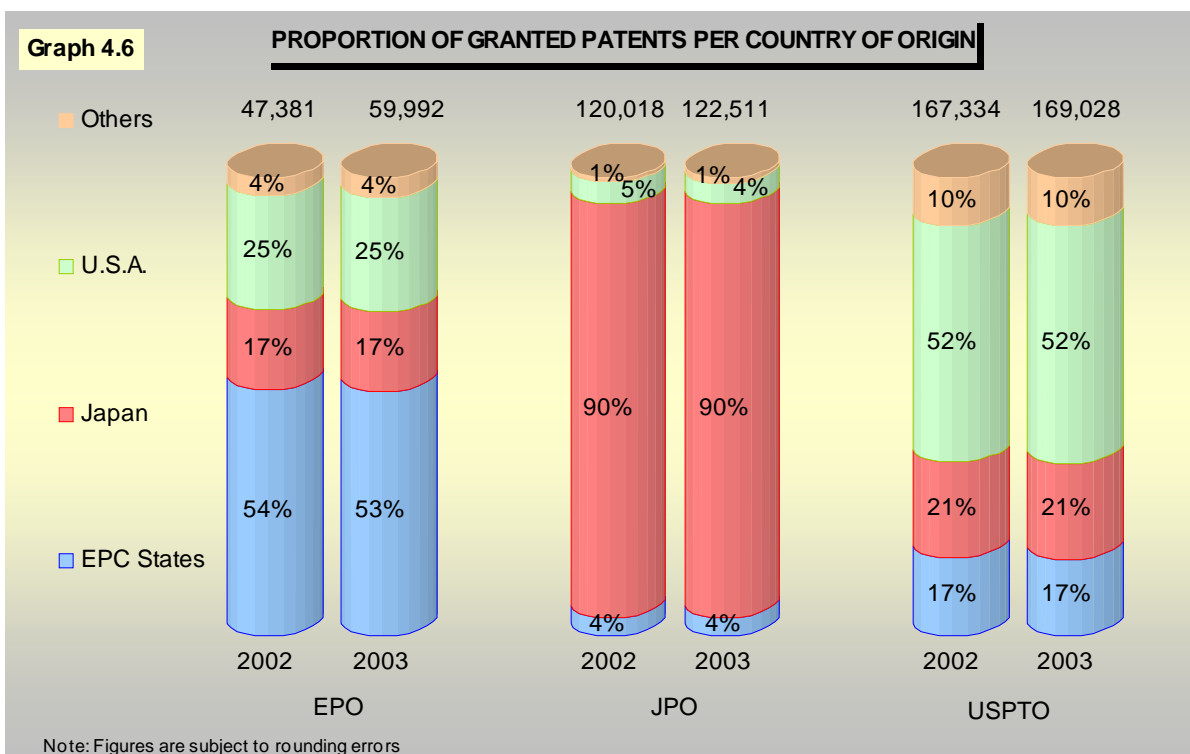
## PATENTS GRANTED BY TRILATERAL OFFICES

Graph 4.5 shows the number of patents granted by the Trilateral offices. The overall figure increased by 3.7% in 2002 and by 5.0% in 2003.



Patents granted by the JPO increased by 2.1% in 2003, reversing a downtrend, which started in 2000. The EPO experienced a further increase to 59,992 granted patents, or 26.6%, in 2003, after a 36.5% increase in 2002. The USPTO also experienced an increase in the number of patents granted, with 169,028 registrations in 2003, an increase of 1.0% over the previous year. This is the highest number of grants among the Trilateral offices.

Graph 4.6 presents the percentage share of total patents granted by origin. As indicated in this graph, the shares from the different filing blocs are more or less comparable to those observed for the filings in the JPO and the USPTO as presented in Graph 4.2.

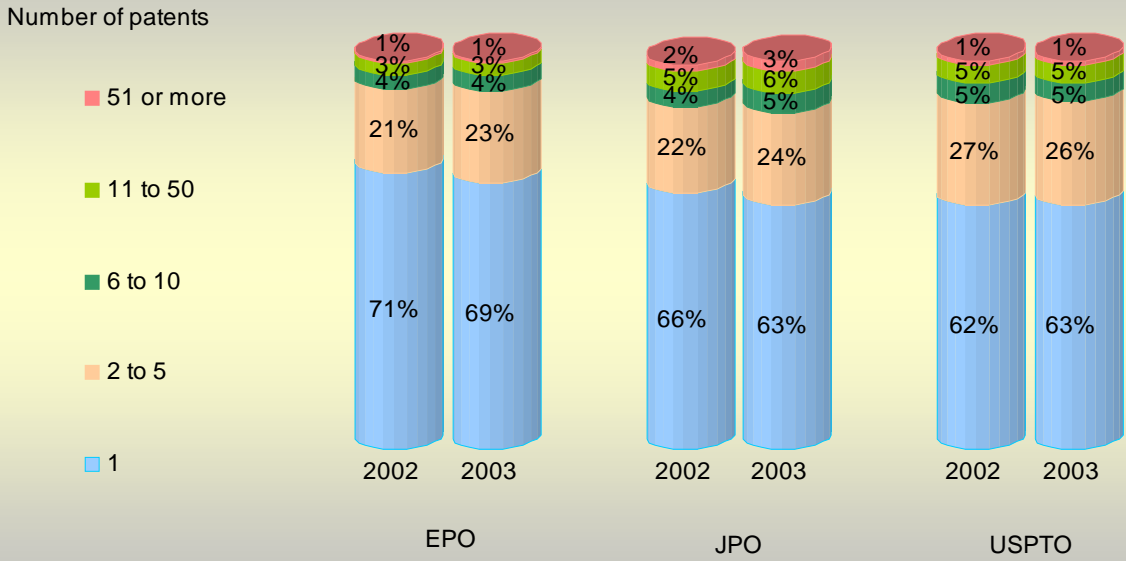


The differences between the Trilateral offices regarding the number of patents granted is mostly explained by the difference in the number of corresponding applications. In 2003, the maximum number of patents granted to a single applicant was 876 at the EPO, 4,240 at the JPO, and 3,415 at the USPTO.

The breakdown of patentees by number of patents granted is shown in Graph 4.7. The proportion of patentees receiving one patent grant was higher at the EPO (69%) than at the JPO (63%) or the USPTO (63%). The distribution of patentees with six or more patents remained essentially the same between 2002 and 2003 at the Trilateral offices. The greatest change occurred for patentees receiving one patent at the JPO. The share decreased from 66% in 2002 to 63% in 2003.

Graph 4.7

**DISTRIBUTION OF PATENTEEES BY NUMBER OF GRANTED PATENTS**



Note: Figures are subject to rounding errors

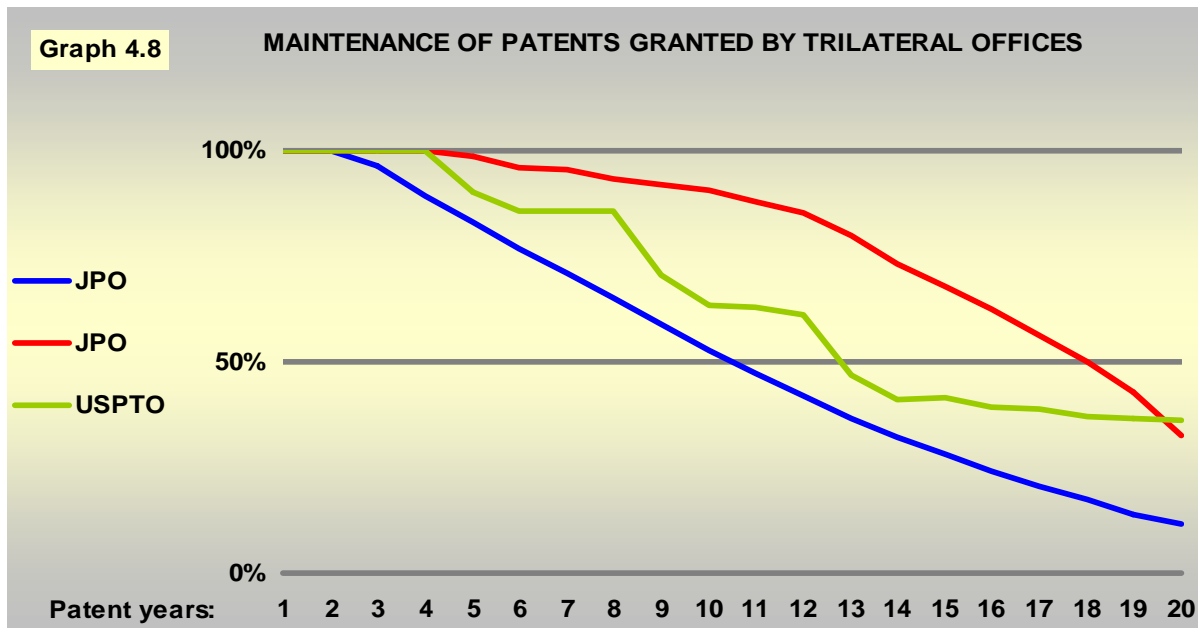
A patent granted by an office has a maximum term fixed by law. In all three offices, a patent has a twenty-year term from the date of filing. In order to maintain the protection right, the applicant has to pay renewal fees in the countries to which the protection pertains. Maintenance systems differ from country to country.

For a European patent, renewal fees have to be paid to the EPO from the third patent year onwards to maintain the application. After the application has been granted, annual renewal fees have to be paid to the national office of each designated contracting state where the patent is to be maintained.

For a Japanese patent, the first three years' fees are paid together, and for subsequent fees, the applicant can pay either yearly or in advance.

In the United States, patent maintenance requires payment of fees in three stages: 3.5 years, 7.5 years, and 11.5 years after grant.

In the three procedures, if a renewal fee is not paid in due time, the protection right expires. Graph 4.8 compares the rate of granted patent registrations existing and maintained each patent year. These figures are calculated from the year of application for the EPO and JPO and from the year of registration for the USPTO.



In the United States, over 50% of the patents granted are maintained for at least 12 years compared to 10 years for the European patents and 18 years for the Japanese patents.

## TRILATERAL PATENT PROCEDURES

### THE PROCEDURES

The grant procedures are not totally identical in the Trilateral offices. The major phases are outlined in Graph 4.9.

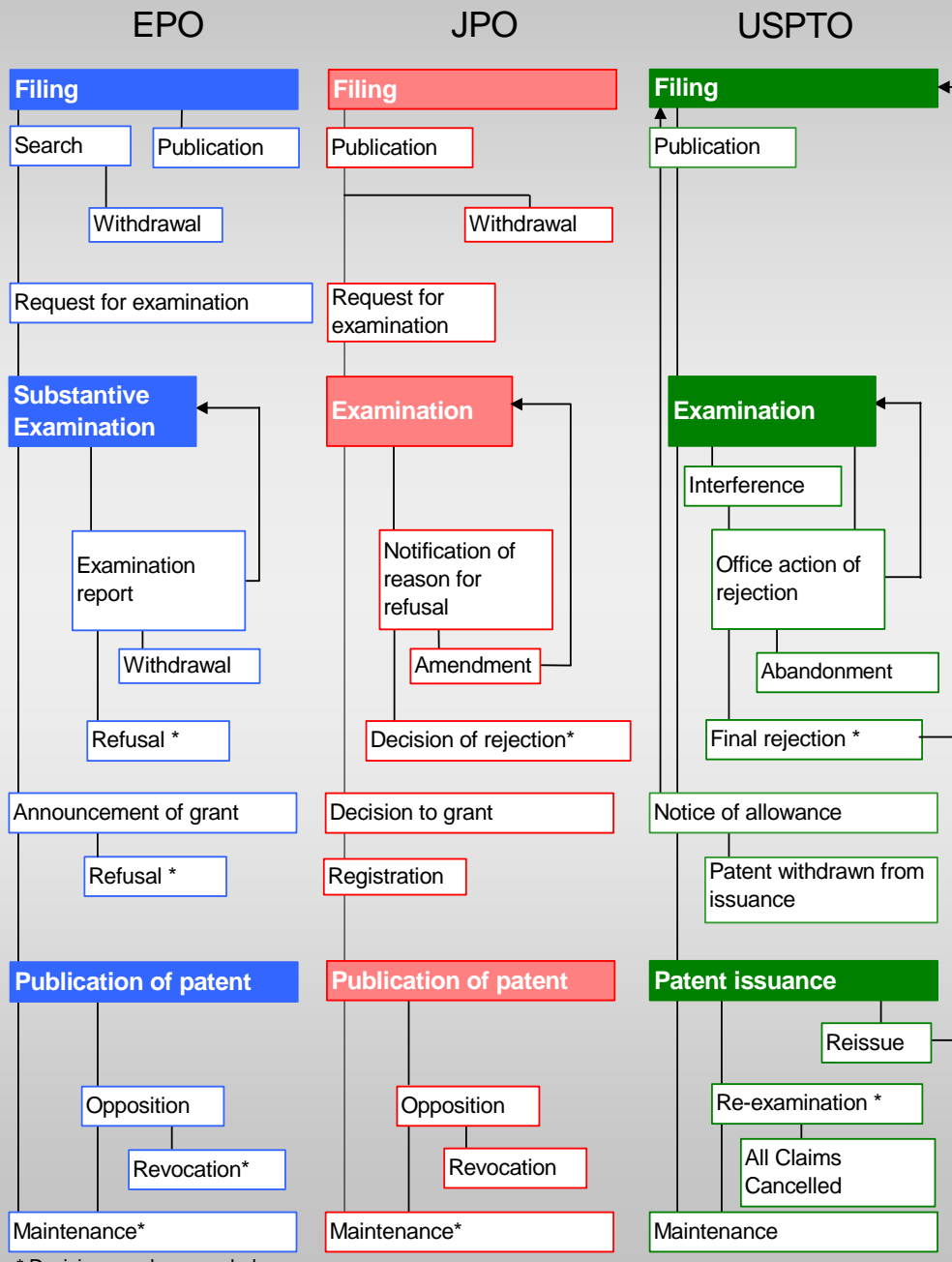
#### Examination: search and substantive examination

Each of the Trilateral offices will examine a filed patent application based upon novelty, inventive step, and industrial applicability. At the EPO, this examination is done in two phases. First, a search is done in order to establish the state of the art with respect to the invention. In a second phase, the inventive step and industrial applicability are examined in the substantive examination. In the national procedure before the JPO or the USPTO, the search and substantive examination are undertaken in one phase. The international searches and international preliminary examinations carried out by the three offices are not included in the flow chart, since for PCT applications, the granting procedure starts at the moment they enter the national or regional phase.

Filing of a European application with the EPO is taken to imply a request for search but not a request for substantive examination. For the latter, a separate request has to be filed no later than six months after publication of the search report. Filing of a national application with the JPO does not imply a request for examination; this may be filed up to three years after the date of filing (this delay was reduced from seven years in October 2001). Filing of a national application with the USPTO is taken to imply a request for examination.

**Graph 4.9**

# THE TRILATERAL PATENT PROCEDURES



\* Decision may be appealed

## **Publication**

In the Trilateral offices, the application is to be published at the latest 18 months from the date of filing or priority date. The application can be published before 18 months at an applicant's request. In the USPTO, an application that has not and will not be the subject of an application filed in foreign countries does not need to be published if an applicant so requests.

## **Grant, refusal / rejection, withdrawal**

When an examiner intends to grant a patent, this information is communicated to the applicant (EPO: Announcement of grant; JPO: Decision to grant; USPTO: Notice of allowance). If a patent cannot be granted in the form as filed before the office, the intention to reject the application is communicated to the applicant (EPO: Examination report; JPO: Notification of reason for refusal; USPTO: Office action of rejection). The applicant may then make amendments to the application, generally in the claims, after which examination is resumed. This procedural step is iterated as long as the applicant continues to make appropriate amendments. Then, either the patent is granted (see above) or the application is finally rejected (EPO: Intention to refuse; JPO: Decision of rejection; USPTO: Final rejection) or withdrawn by the applicant (EPO: Withdrawal; JPO: Withdrawal or abandonment; USPTO: Abandonment). In addition, if no request for examination for an application is filed to the EPO or the JPO within the prescribed period (EPO: six months after publication of the search; JPO: three years from the date of filing, seven years until September 2001), the application will be deemed to have been withdrawn. Furthermore, in all three procedures, an applicant may withdraw or abandon the application at any time before the application is granted or finally refused.

After the decision to grant the patent, the patent specifications are published if certain administrative conditions are fulfilled (EPO: Publication of patent; JPO: Publication of patent; USPTO: Patent issuance).

## **Opposition**

Any person may file an opposition at the JPO against a grant of patent within six months from the publication of the Gazette containing the patent. Opposition can lead either to a maintenance or revocation of the patent.

At the EPO, the period for filing opposition(s) begins after granting of the patent rights and lasts nine months. If successful, the opposition can lead to a revocation of the patent or to maintenance in amended form.

In the procedure before the USPTO, there are two actions that may lead to the cancellation of a granted patent: interference proceedings and re-examination. These actions are not comparable to opposition procedures in the EPO and the JPO. In the USPTO, the first action is a priority contest between applicants / patentees seeking to protect the same invention and the second action may be requested by third parties or by the patentee during the lifetime of a granted patent.

## **Appeal**

An appeal can be filed by any of the parties concerned against a decision taken by the Trilateral offices. In practice, applicants can appeal decisions to reject the application or revoke the patent, while opponents can appeal decisions to maintain the patent. The procedure is in principle similar for the three offices. The examining department first studies the arguments brought forward by the appellant and decides whether the decision should be revised. If not, the case is forwarded to a Board of Appeal, which may take a final decision or refer the case back to the examining department.

In the JPO, generally appeal examiners examine the supplementary reasons brought forward by the appellant and decide whether the decision can be overturned. However, in the case that amendments of the claims or the drawings have been made within 30 days from the filing date of an appeal against a decision to refuse the application, the examiner first re-examines the amendment brought forward by the appellant in order to decide whether the decision can be overturned. If not, the case will be forwarded to the appeal examiners for a final decision.

## **STATISTICS ON PROCEDURE**

The 2002 and 2003 values of the basic characteristics of trilateral procedures are shown in Table 4. The definitions and further explanations on the statistics are given in the ANNEX, DEFINITIONS FOR STATISTICS ON PROCEDURE.

Definitions are not always identical in the three offices. This should be considered when seeking to make comparisons between the offices based on the provided information.

## **Rates**

The examination rate in the USPTO is 100%, since filing implies a request for examination in the USPTO procedure, whereas in the EPO and the JPO a specific request for examination has to be made. In the Japanese procedure, the examination rate is lowest because applicants have substantively more time in which to evaluate whether to maintain or drop the application.

The grant rate in the EPO procedure, as defined in terms of decisions, increased to 59%. In the JPO, the grant rate decreased further to 49.9% in 2003. In the USPTO, the grant rate, as defined by the number of applications allowed to be granted, is related to the decisions made in the examination procedure, and it decreased to 64% in 2003.

The opposition rate in the EPO slightly declined in 2003 to 5.2%, and 64% of the opposed patents were maintained although in some cases in amended form.

In the EPO, 604 appeals were received in 2003. This was about 43% of decisions in examination to reject the application (1,403). In the USPTO, 2,683 appeals were received. This was 3% of final rejections (91,981).

In the EPO, 50% of appealable decisions in the opposition procedure (2,220 in 2003) were appealed against; the number of appeals was 1,121.

The total number of appeals in the JPO against decisions in examination, including decisions on applications against which oppositions had been filed, increased further to 22,217 in 2003 (21,847 in 2002).

**Table 4: STATISTICS ON PROCEDURES**

<b>Progress in the procedure</b>		<i>Year</i>	EPO	JPO	USPTO
<b>Rates in percentage</b>					
Examination		2002	89	54.0	100.0
		2003	87	53.8	100.0
Grant		2002	58	51.4	65.0
		2003	59	49.9	64.0
Opposition		2002	5.4	3.3	-
		2003	5.2	3.5	-
Maintenance after opposition		2002	67.4	n.a.	-
		2003	64.0	n.a.	-
Appeal	On examinations	2002	45	-	4.0
		2003	43	-	3.0
	On oppositions	2002	49	-	-
		2003	50	-	-
	On examinations and oppositions*	2002	-	21,847	-
		2003	-	22,217	-
<b>Pendency in the procedures</b>					
Search	Number of pending applications	2002	118,300	-	-
		2003	102,700	-	-
	Pendency time in search (months)	2002	26.0	-	-
		2003	18.5	-	-
Examination	Number of applications awaiting request for examination	2002	16,410	2,189,727	-
		2003	21,270	2,181,211	-
	Number of pending applications	2002	223,700	500,420	n.a.
		2003	232,100	521,435	n.a.
	Time to first office action (months)	2002	23.0	24.0	16.6
		2003	20.8	25.0	18.3
	Pendency time in examination (months)	2002	40.6	28.7	24.8
		2003	37.7	31.1	26.7
Opposition	Number of pending applications	2002	1,250	n.a.	-
		2003	1,630	n.a.	-
	Pendency time in opposition (months)	2002	6.6	n.a.	-
		2003	8.8	n.a.	-

n.a. indicates unavailable data - indicates not applicable \* numbers available for JPO only

## **Pendency**

In the successive stages of the procedure, there are pending applications awaiting action in the next step of the procedure. The number of pending applications gives an indication of the workload (per stage of procedure) from the patent grant procedure in the three offices. This is not a good indication for the backlog in handling applications within the offices since a substantive part of pending applications are awaiting action from the applicant, for instance a request for examination (which can take three years from the date of filing in the JPO), or a response to actions communicated to the applicant.

Pending applications in search at the EPO decreased by 13% to 102,700 in 2003, and pending search in months decreased from 26 to 18.5 months.

The number of pending applications awaiting a request for examination by the applicant increased at the EPO with around 21,270 cases.

In the JPO, the number of pending applications (2,181,211) is substantively higher than those in the EPO and the USPTO, due to the period during which requests for examination can be filed.

The number of pending applications in examination increased in the EPO to about 232,100 in 2003, and the pendency in months decreased to 37.7 months, since more decisions were taken in 2003. In the JPO, the number of pending applications increased by 4.2% to about 521,435, and pendency was about 31.1 months. In the USPTO, the average time for either abandoning or issuing an application is about 26.7 months.

The pendency to first office action decreased in 2003 to 20.8 months in the EPO. It increased slightly in the JPO to 25 months, and to 18.3 months in the USPTO.

Pendency in opposition increased at the EPO to 8.8 months in 2003.

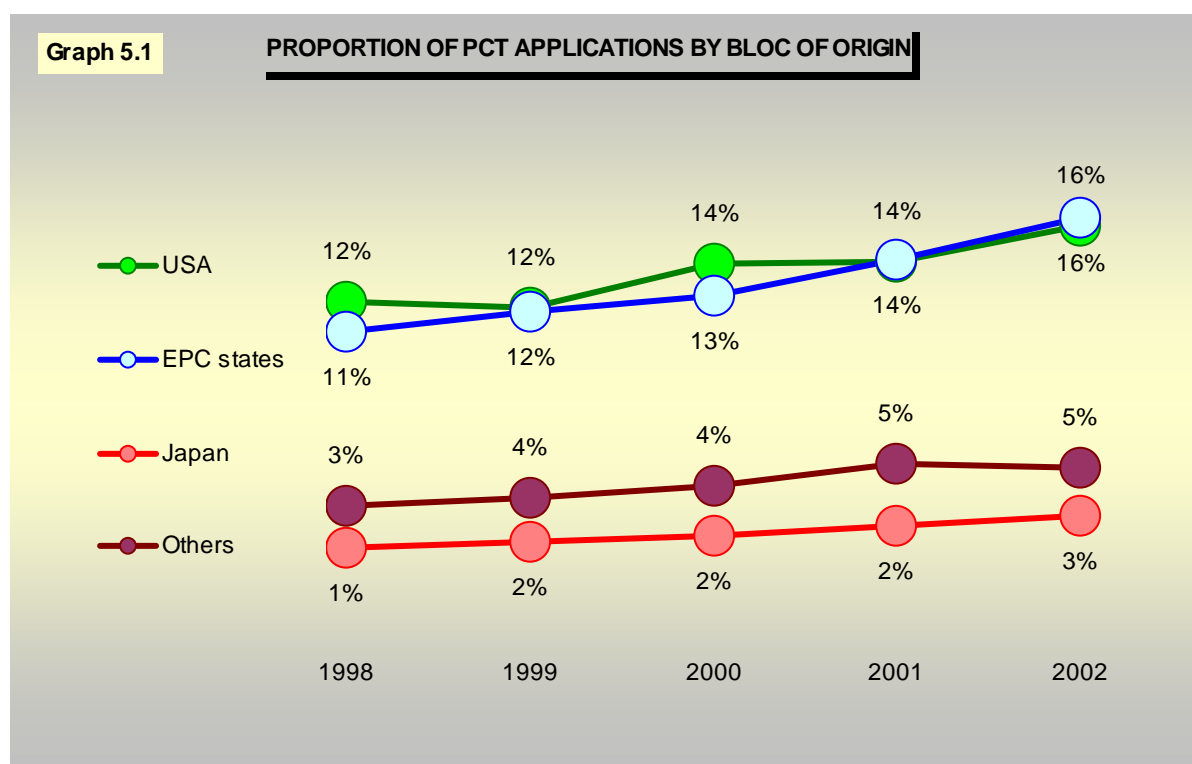
## Chapter 5

# USE OF THE PATENT COOPERATION TREATY

A substantial proportion of the demand for patent rights is requested via the Patent Cooperation Treaty. The statistics in this chapter display the shares of patent applications using the PCT route by origin. Past trends are revealed in the graphs that follow for calendar years 1998 through 2002.

## THE PCT AS A FILING ROUTE

For each bloc of origin, Graph 5.1 shows the proportions of all patent applications filed (as provided in Chapter 3) that are PCT international applications. Applications are counted in the year of filing.

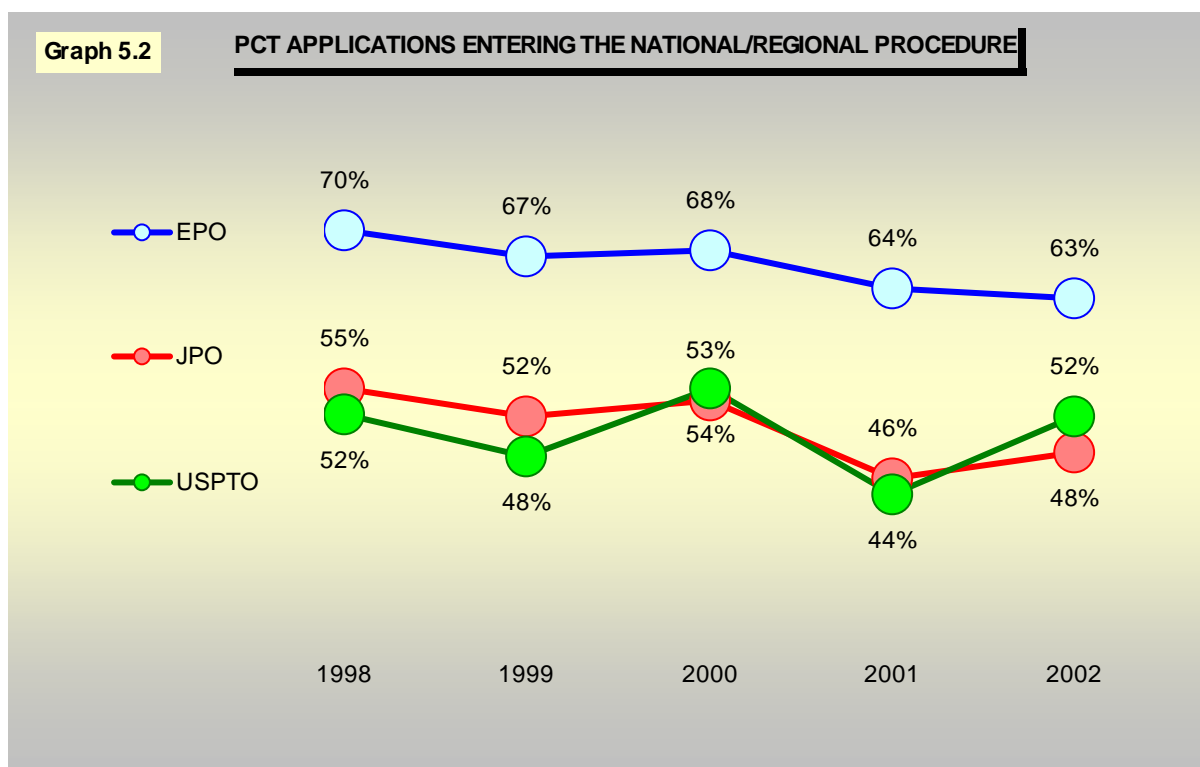


Overall, the use of PCT as a route for filing patent applications has continued to increase since 1998. From 2001 to 2002, the shares of PCT applications from the EPC states, the USA, and “Others” increased. Both the ECP states and US shares increased by about two percentage points and the share from filings originating from Japan was basically flat. The share from all “Others” increased by about one percentage point from 2001 levels.

## PCT APPLICATIONS ENTERING THE NATIONAL / REGIONAL PHASE

After the international phase of the PCT procedure, applicants decide whether they wish to proceed further with their applications by fulfilling the various national or regional requirements of one or more of the PCT contracting states they had designated. If the decision is made to proceed further, then the application enters the PCT national or regional phase. In the EPC contracting states, applicants have a choice of proceeding in either individual countries or at the EPO. The proportions of all PCT applications that have entered the national or regional phase at each Trilateral office are presented in Graph 5.2. Applications are counted in the year they are expected to enter the national or regional stage.

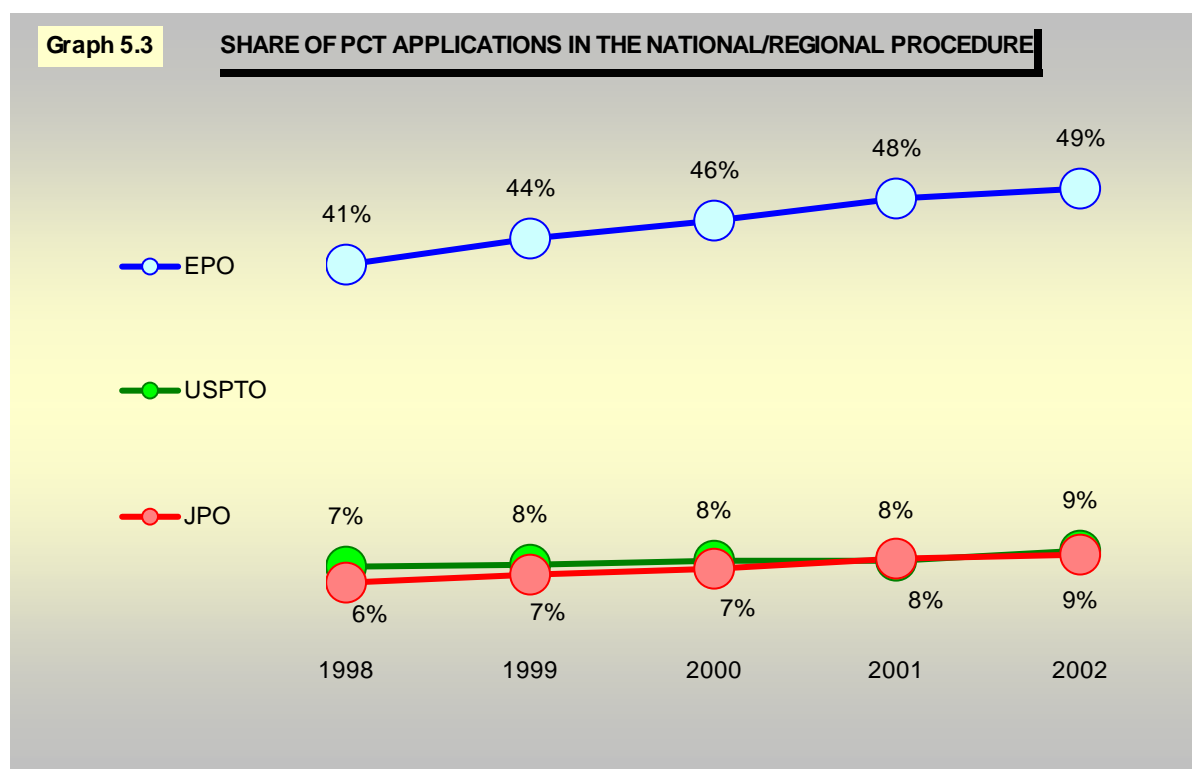
A higher proportion of PCT applications entered the regional phase at the EPO than entered the national phase either at the USPTO or the JPO. This is probably due to the supranational dimension of the EPO, which gives the opportunity at this late stage of the procedure to select target countries within the EPC contracting states.



The rate of patent applications entering the national / regional phase decreased at the EPO in 2002. However, the rate increased at both the JPO and the USPTO. Comparing 2001 to 2002, the rate at the EPO decreased from 64% to 63%. The rate at the JPO increased from 46% to 48%. The rate at the USPTO increased from 44% to 52%.

## PCT APPLICATIONS AT THE TRILATERAL OFFICES

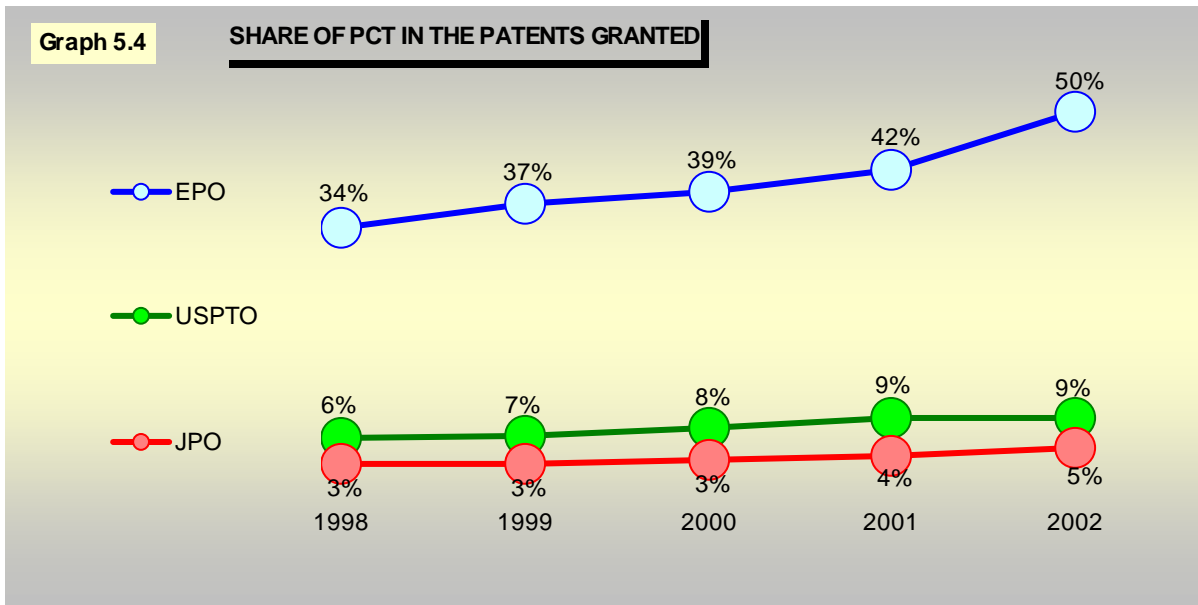
Graph 5.3 shows the proportions of PCT applications within the overall applications at each Trilateral office. As in Chapter 4, only PCT applications entering the national / regional phase are taken into account. The proportions of PCT applications are increasing at all offices. The EPO has a high proportion of PCT applications due to its status as a regional office, while the proportions for both the USPTO and JPO are low.



## PCT GRANTS BY TRILATERAL OFFICES

Graph 5.4 shows the percentage of patents granted by each Trilateral office that were based on PCT applications.

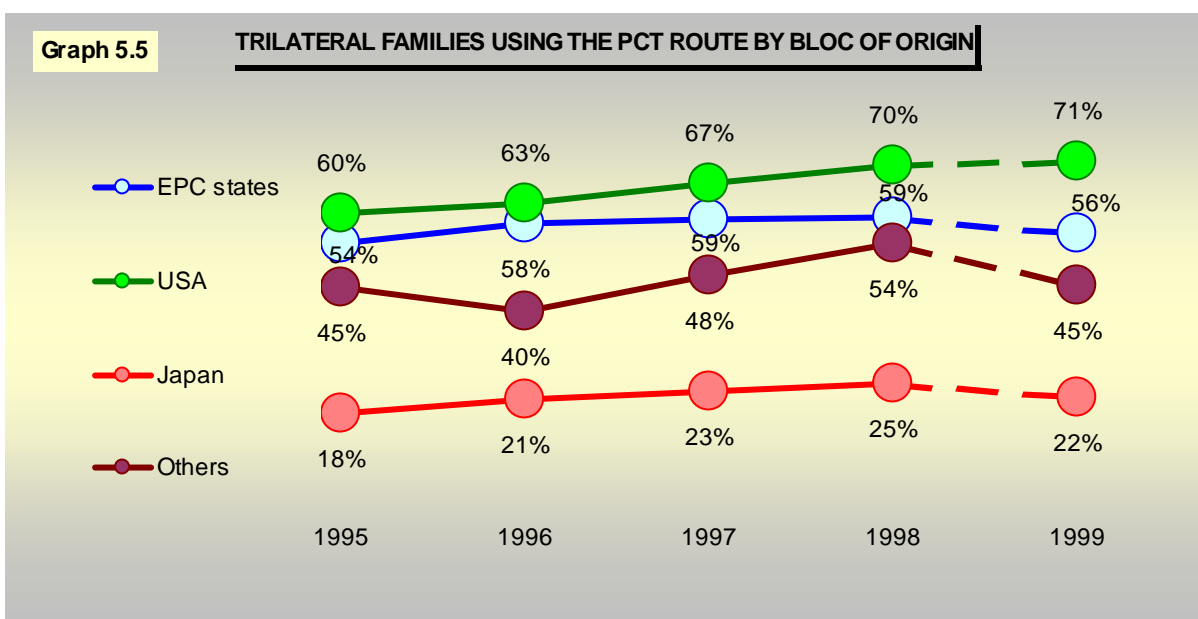
The EPO, which has witnessed an increase in applications using the PCT route, has also seen a rise in the share of PCT applications among all applications granted patent registration. On the other hand, in the same manner as the share of applications using the PCT route, at the USPTO and JPO there has been little increase in the share of PCT applications among all applications receiving patent registration.



## PATENT FAMILIES INVOLVING PCT APPLICATIONS

The PCT system provides a good route to make subsequent patent applications in a large number of countries. Therefore it can be expected that many patent families flowing between blocs will use the PCT route. In this section, use of the PCT system implies that at least one PCT application has been made within the family of filings for the same invention. Further details of PCT usage in patent families flows can be found in the web based annex to this report.

Graph 5.5 shows the share of Trilateral patent families (as given earlier in Graph 3.11) that use the PCT system. As discussed earlier, the data for 1999 are provisional.

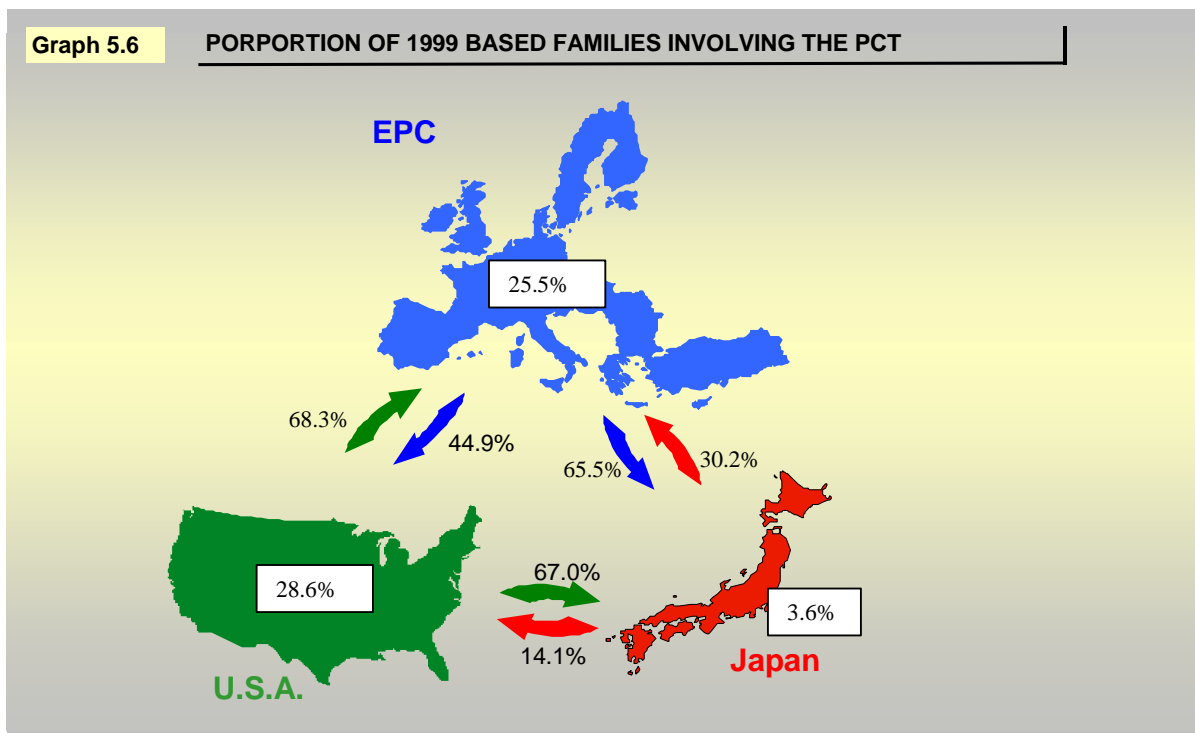


Usage of the PCT system is fairly widespread in Trilateral patent families originating in all blocs except Japan. The share has generally trended upwards for all the Trilateral blocs through 1998. In 1998, 52.5% of Trilateral patent families made some use of the PCT system. About 70% of Trilateral patent families originating from the USA and about 59% of Trilateral patent families originating from EPC contracting states involved PCT applications. This compares to about 25% from Japan and about 54% from other countries.

Graph 5.6 shows the share of PCT system usage in the flows of patent families between Trilateral blocs in 1998, and can be compared with Graph 3.12.

The percentage given in the center of each bloc is the share of distinct referenced priorities for the bloc that generated families using the PCT route. This is an indicator of the share of the total first filings in the bloc that led to the use of the PCT system.

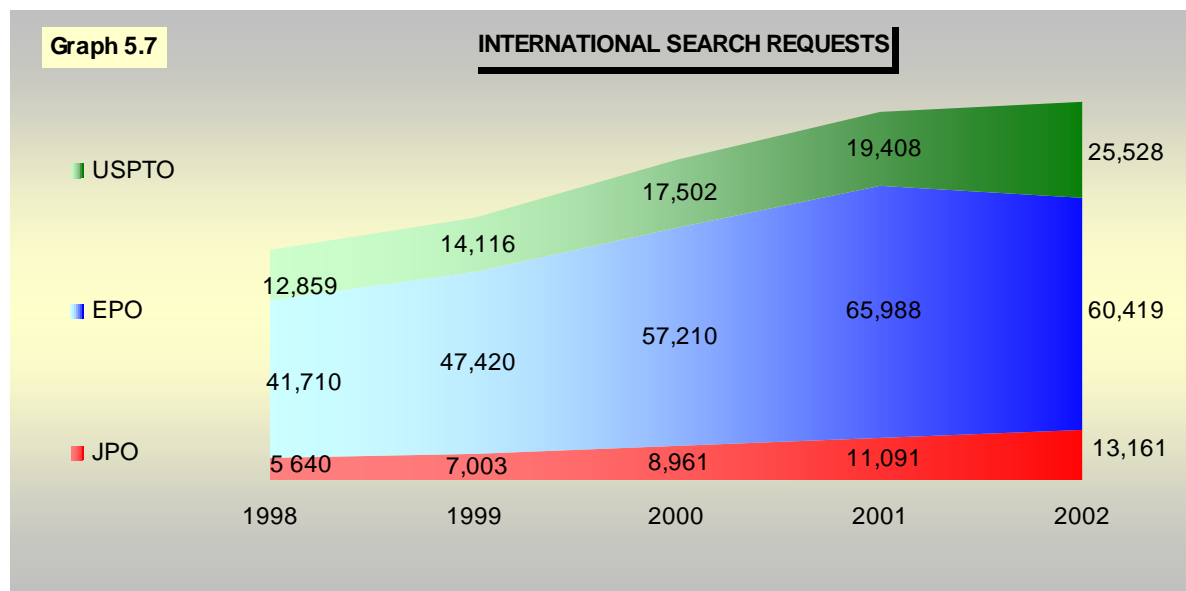
Out of all first filings in the Trilateral area in 1999, 12.2% formed patent families that made some use of the PCT system. From those first filings in the Trilateral area that resulted in filings in other Trilateral blocs, 45.8% made some use of the PCT system. However, when considered by the bloc of the priority applications, the proportions varied widely (54.5% from EPC contracting states, 21.1% from Japan, 65.8% from USA). When considered in terms of the blocs receiving the subsequent applications, the degree of variation in the share making use of the PCT system was slightly less (53.1% in EPC contracting states, 66.3% in Japan, 26.6% in USA).



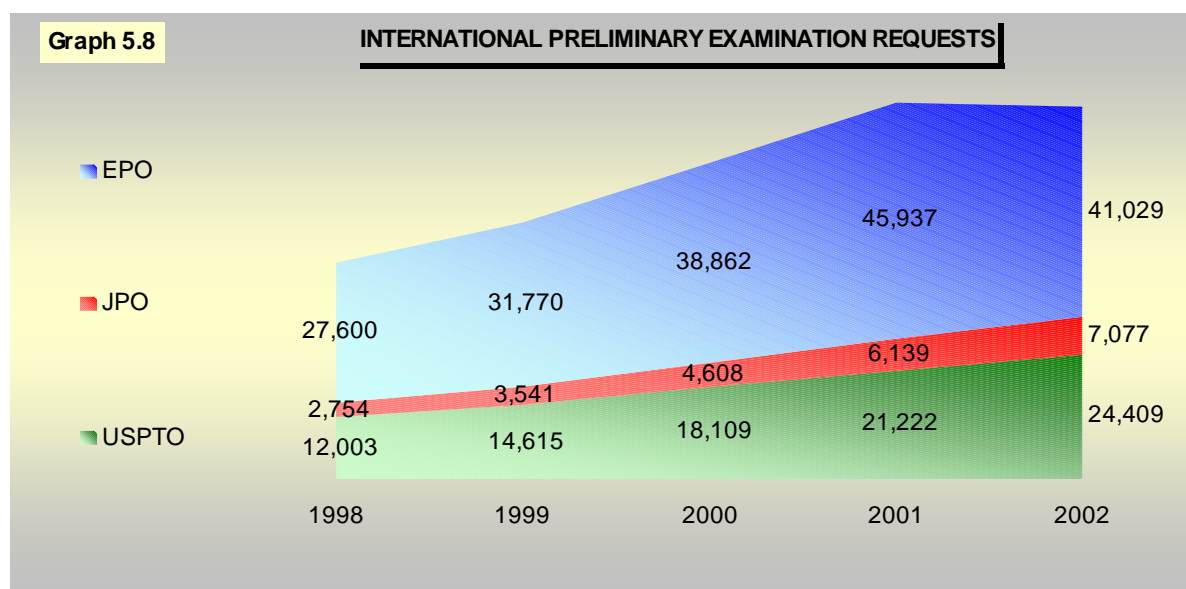
These statistics illustrate the fact that the PCT system is used on an increasing basis when making patent applications abroad. Applicants from USA and, to some extent, the EPC contracting states, favor the PCT system. In contrast, Japanese applicants tend to use the system to a somewhat lesser degree, both in percentage and absolute terms.

## THE TRILATERAL OFFICES AS PCT AUTHORITIES

The graphs that follow present the numbers of international searches and the numbers of preliminary examinations requested to the EPO, USPTO, and JPO in their capacity as an International Searching Authority (ISA) and International Preliminary Examination Authority (IPEA) under the PCT. With the exception of requests at the EPO, use of international searches rapidly increased in 2002. The number of requests at the EPO decreased in 2002.



The EPO received 60,419 international search requests, followed by the USPTO at 25,528 and the JPO at 13,161. Although the JPO received the lowest number of international search requests in 2002, from 1998 to 2002 it saw the largest percentage increase in this area, with a rise to about 133% of the 1998 value.



Of the three offices, only the EPO experienced a decline in international preliminary examinations. The EPO received 41,029 requests in 2002, followed by the USPTO with 24,409 and the JPO with 7,077.

## Chapter 6

# OTHER WORK

This chapter contains statistics on other work requested from Trilateral offices, such as requests for search or granting of rights, that are not common to all three offices. The data presented below are additional to the information already presented earlier in this report.

Other work includes applications for plant patents and re-issue patents in the USPTO and also applications for patents other than those for inventions: utility models in the JPO, and design patents and trademarks in the JPO and the USPTO. The searches on behalf of national offices and searches for third parties are special work requested from the EPO.

The numbers of requests received for all of these types of other work are shown in the table below for 2002 and 2003.

**Table 6: STATISTICS ON OTHER WORK**

<b>Activities</b>	<b>YEAR</b>	<b>EPO</b>	<b>JPO</b>	<b>USPTO</b>
Searches for National offices/Third Parties	2002	16,940	-	-
	2003	18,080	-	-
Design Patent Applications	2002	-	37,230	20,904
	2003	-	39,267	22,602
Utility Model Patents Applications	2002	-	8,603	-
	2003	-	8,169	-
Plant Applications	2002	-	-	1,144
	2003	-	-	985
Reissue Applications	2002	-	-	982
	2003	-	-	1,051
Trademark Applications	2002	-	117,406	264,053
	2003	-	123,325	273,715

## **Annex**

# **DEFINITIONS FOR STATISTICS ON PROCEDURES**

### **EXAMINATION RATE**

This rate shows the proportion of those applications for which the period to file a request for examination expired in the reporting year that resulted in a request for examination up to and including the reporting year. For the EPO, where the request for examination has to be filed no later than 6 months after publication of the search, the rate for 2003 relates to applications mainly filed in the years 2002 and 2003. Since the JPO has allowed a three-year period to file a request for examination since October 1, 2001, but a seven-year period before that, the rate for the JPO in 2003 relates to applications filed since 1996.

### **GRANT RATE**

This is the number of applications that were granted during the reporting period, divided by the number of disposals in the reporting period (applications granted plus those abandoned or refused).

The USPTO grant rate is based on applications allowed to be granted divided by disposals. The USPTO rate includes plant patents and re-issue patents in addition to utility patents. However, since utility patents comprise over 97% of patent applications, and over 97% of issued patents, the USPTO grant rate is almost identical to a grant rate based strictly on utility patents.

### **OPPOSITION RATE**

The opposition rate for the EPO is the number of granted patents for which the opposition period ended in the reporting year and against which one or more oppositions are filed, divided by the total number of patents for which the opposition period ended in the reporting year.

The opposition rate for the JPO is calculated by dividing the number of applications against which one or more oppositions were filed during the reporting year by the total number of decisions to grant patents during the reporting year.

This rate does not apply to the USPTO since there is no opposition procedure there.

### **MAINTENANCE RATE IN THE OPPOSITION PROCEDURE**

The rate for the EPO is the number of decisions (in the opposition procedure) to maintain, possibly in amended form, a patent during the reporting year, divided by the total number of decisions in the opposition procedure during the reporting year. Data are unavailable for the JPO and this rate also does not apply to the USPTO.

## **APPEAL RATE**

For the EPO, appeal rates are given for examination and opposition, being the number of decisions in the examination and, opposition procedure respectively, against which an appeal was lodged in the reporting year, divided by the number of all decisions for which the time limit for appeal ended in the reporting year.

For the JPO, the total number of appeals is shown instead of the appeal rate. The JPO does not make a distinction between inter-parts trials and appeals in which no defendants exist.

The USPTO appeal rate, which includes utility, plant, and reissue categories, captures the number of appeals filed after an examiner's decision to issue a final rejection against a patent application. The rate is the number of examiner answers written during the year in response to appeal briefs divided by the number of final rejections issued that year.

For all Trilateral Offices, any subsequent litigation proceedings in national courts are not included.

## **PENDENCY IN THE SEARCH PROCEDURE**

This only applies to the EPO. Pending applications in search is the number of applications received up to and including the reporting year for which a search report has not been made by the end of the reporting year. Pending searches in months is defined as the number of pending applications in search by the end of the reporting year divided by the average monthly number of disposed searches in the reporting year.

In the case of Euro-direct applications, there is a target to produce the search report by the time of the publication of the applications.

## **PENDENCY APPLICATIONS AWAITING REQUEST FOR EXAMINATION**

This only applies to the EPO and the JPO. This statistic indicates the number of filed applications awaiting a request for examination by the applicant for the EPO after publication of the search report and for the JPO at any time during three years after filing.

For the EPO, pending applications awaiting request for examination is the number of applications for which the search report has been published by the end of the reporting year and for which the prescribed period for the request has not expired (six months after publication of the search).

For the JPO, pending applications awaiting request for examination indicates the number of applications for which no request for examination has been filed by the end of the reporting year, and for which the prescribed period for the request has not expired (three years from the date of its filing).

For all Trilateral Offices, any subsequent litigation proceedings in national courts are not included.

## **PENDING EXAMINATIONS**

This only applies to the EPO and the USPTO. Pending applications in examination is the number of applications filed (in the USPTO), or the number of requests for examination filed (in the EPO), which have not been disposed of (granted or abandoned) by the end of the reporting year.

For the EPO, pendency examination in months is the number of pending applications in examination as of the end of the reporting year, divided by the average monthly number of disposals (decisions to grant or refuse, withdrawals, abandonments) during the reporting year.

For the USPTO, pendency examination in months for utility, plant, and reissue applications is calculated by measuring the time from filing to abandonment or issue for all applications that are abandoned or issued during a three month period. The average of these times is the pendency in months.

## **PENDENCY FIRST OFFICE ACTIONS**

For the EPO and the JPO, pendency first office action is the average time period, in months, from the request for examination to first office action in examination.

In the USPTO, this is the average amount of time, in months, from filing to first office action on merits (FAOM). A FAOM is generally defined as the first time an examiner either formally rejects or allows the claims in a patent application.

## **PENDENCY OPPOSITIONS**

This only applies to the EPO.

Pending applications in opposition is the number of patents against which one or more oppositions have been filed and for which no final decision has been taken by the end of the reporting year.

Pendency opposition in months is the number of pending applications in opposition at the end of the reporting year, divided by the average number of disposals in opposition per month in the reporting year.

# READER SURVEY

The European Patent Office (EPO), the Japan Patent Office (JPO), and the United States Patent and Trademark Office (USPTO) would appreciate receiving your answers to the questions in this survey. Your comments will further enhance the content of future editions of the Trilateral Statistical Report (TSR).

Please check all boxes as appropriate.

1. I receive this report from

- the EPO*
- the JPO*
- the USPTO*
- Via Internet*
- 

Other: \_\_\_\_\_

2. It provides useful information for

- Statistics*
- Offices' details*
- Patent procedures*
- 

Other: \_\_\_\_\_

3. I would like to see in this report  
more detailed information on:

- Patent applications*
- Granted patents*
- Patent families*
- Users of patent systems*
- Granting procedures*
- PCT procedure*
- Offices' details*
- 

Other: \_\_\_\_\_

4. My organization is active in

- Industry*
- Services*
- Government*
- Intergovernmental organizations*
- Research*
- Education*
- 

Other: \_\_\_\_\_

5. I am a resident

of: \_\_\_\_\_

6. Have you or your organization applied for a patent?  No  
 Yes

If Yes, where?

- at the EPO
- at the JPO
- at the USPTO
- elsewhere

7. I have the following comments regarding the content and the presentation of the report:

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Once completed, please return this survey form to:  
Attention: Trilateral Statistical Working Group  
Office of Corporate Planning  
United States Patent & Trademark Office  
P.O. Box 1450, Alexandria, VA 22313-1450  
Facsimile (571) 273-6292 / email: TSWG@uspto.gov



**EPO**

D-80298 Munich. GERMANY  
*[www.european-patent-office.org](http://www.european-patent-office.org)*

**JPO**

3-4-3 Kasumigaseki, Chiyoda-ku, Tokyo 100-8915. JAPAN  
*[www.jpo.go.jp](http://www.jpo.go.jp)*

**USPTO**

P.O. Box 1450 Alexandria VA 22313. USA  
*[www.uspto.gov](http://www.uspto.gov)*

This report contains statistical information from the three major patent offices in the world. It gives a full description of world-wide patenting activities, as well as detailing and comparing the business processes taking place at each office.

*Jointly produced by the USPTO, the EPO and the JPO  
Edited by the USPTO, October 2004*