

**TRILATERAL**

**STATISTICAL**

**R E P O R T**

**2002 edition**

**三 極 統 計 報 告**  
**2002年版**

## P R E F A C E

For over two decades, the three major patent offices in the world have combined their efforts towards a better mutual understanding and greater harmonization of procedures and activities with respect to patent protection. Trilateral cooperation among the European Patent Office (EPO), the Japan Patent Office (JPO), and the United States Patent and Trademark Office (USPTO) has resulted in a number of achievements, including the Trilateral Statistical Report, which has been published every year since the early 1980s.

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 the operations of each office and to increase general awareness about the patent grant procedures of the three offices. This joint annual Trilateral Statistical Report is a compilation of statistics that supplements the annual reports of each of the three offices and is also partially based on statistics from the World Intellectual Property Organization (WIPO) in Geneva. This report is also available on the web sites of the Trilateral Offices.

To better understand the patent statistics and trends contained in this report, a general overview of the world economy is presented. However, it is difficult to interpret worldwide patenting activity in terms of economic developments because the exact relationship is not known and there are other key factors, such as political and technological considerations that need to be considered.

The world economy continued to strengthen in calendar year 2002. According to the International Monetary Fund (IMF), world economic output increased by about 3.0% in 2002. This is an improvement over the 2.4% rate recently revised and reported for 2001. Overall in Asia, economic output was positive. Newly industrialized Asian countries showed a strong recovery, with GDP increasing by 4.8% as compared to 0.8% in 2001. Japan's economy also showed a small increase of 0.2%. In the Euro area, economic activity was still positive, but weaker than last year. Economic output increased by 0.9%, which was weaker than 1.5 rate reported for 2001. However, there were a few bright stars, with Ireland and Greece showing growth rates of 6.9 and 4.0 respectively. In the United States, the recovery continued, with economic output increasing by 2.4%. Growth in the United States is still relatively weak, but it has strengthened from a 0.3% rate in 2001.

The IMF expects economic activity in 2003 to improve, especially in Japan and the United States. World economic output could increase by 3.2% in 2003. There are already positive indications in Japan where there is a rebound in corporate restructuring and profits that is helping improve business confidence. The IMF expects Japan's economy to strengthen and increase by 2.0%, which is a significant improvement over the last few years. There is some uncertainty whether a full recovery will materialize in the Euro area, with concern raised by the Organization for Economic Cooperation and Development (OECD) that business inventory levels are too high and demand is slowing. The IMF is forecasting a 0.5% growth rate for the Euro area in 2003. Economic recovery in the United States should continue to gain momentum. Indications are that demand and production should rebound along with strong manufacturing activity, with the IMF expecting a 2.6% growth rate in 2003. Growth rates in

output expected by the IMF in 2004 are 4.1% (World), 1.9% (Euro area), 1.4% (Japan) and 3.9% (United States). Levels of exchange rates between the major currencies may also be an important determinant of future developments.

Other factors should be considered when reviewing patenting trends. One key factor is Research and Development and the importance of intellectual property in general. Some lessening in the growth rate of patent applications is apparent in this report for 2002, probably at least partly due to financial problems experienced by most publicly quoted companies after experiencing downward trends in stock market valuations. But world wide expenditures on R&D have continued to trend upwards as the global economy has grown. Increased spending on innovation helps to fuel patenting, as intellectual property has continued 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 to attract 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 Patent Cooperation Treaty (PCT) and the European Patent Convention (EPC) and this goes together with a tendency to harmonize their patent laws towards common international standards. This has stimulated the flow of patent applications across borders. All these factors together contribute to world wide patent growth from year to year.

We hope that you will find that this report contains useful information. We hope to improve it from year to year, and to help us to 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 adjust the report to serve the expectations and objectives of the readers.

Trilateral Statistical Report 2002 Edition  
Jointly produced by EPO, JPO, USPTO  
Edited by JPO

October 2003

# TABLE OF CONTENTS

# Page

Chapter 1. INTRODUCTION	1
Chapter 2. THE TRILATERAL OFFICES	5
Chapter 3. WORLD WIDE PATENT ACTIVITIES	17
Patent Applications Filed	17
Patent Activity By Blocs	19
First Filings	19
Origin of the Applications	19
Targets of the Applications	21
Grants	22
Interbloc Activity	24
Flows of Applications	24
Patent Families	25
Chapter 4. PATENT ACTIVITIY AT TRILATERAL OFFICES	27
Applications with the Trilateral Offices	27
Applications by Fields of Technology	29
Patents Granted by Trilateral Offices	31
Trilateral Patent Procedures	33
The procedures	33
Statistics on procedures	36
Chapter 5. USE OF THE PATENT COOPERATION TREATY	39
The PCT as a Filing Route	39
PCT Applications Entering the National / Regional Stage	39
PCT Applications at the Trilateral Offices	40
PCT Grants by Trilateral Offices	41
Patent Families Involving PCT Applications	41
The Trilateral Offices as PCT Authorities	43
Chapter 6. OTHER WORK	45
Annex. DEFINITIONS FOR STATISTICS ON PROCEDURES	46
READER SURVEY	

## TABLES

- Table 2.1 : Production Information EPO	7
- Table 2.2 : Production Information JPO	13
- Table 2.3 : Production Information USPTO	15
- Table 4 : Statistics on Procedures	37
- Table 6 : Statistics on Other Work	45

# GRAPHS

# Page

- Graph 2.1 : Patents in Force World wide in 2001	5
- Graph 2.2 : EPO Expenditures in 2002	9
- Graph 2.3 : JPO Expenditures in 2002	13
- Graph 2.4 : USPTO Expenditures in 2002	16
- Graph 3.1 : World wide Patent Applications by Filing Procedure	17
- Graph 3.2 : Demand for Patent Rights World wide	18
- Graph 3.3 : First Filings by Bloc of Origin	19
- Graph 3.4 : World wide Patent Applications by Bloc of Origin	20
- Graph 3.5 : World wide Demand for Patent Rights by Bloc of Origin	20
- Graph 3.6 : Proportion of Applications Made in the Bloc of Origin	21
- Graph 3.7 : World wide Demand for Patent Rights by Filing Bloc	22
- Graph 3.8 : Patents Granted in Each Bloc	22
- Graph 3.9 : Patents Rights Granted in Each Bloc	23
- Graph 3.10: Flows of Applications Between Trilateral Blocs	24
- Graph 3.11: Trilateral Patent Families by Bloc of Origin	25
- Graph 3.12: 1998 First Filings Used for Applications Abroad	26
- Graph 4.1 : Domestic and Foreign Patent Applications Filed	27
- Graph 4.2 : Proportion of Applications per Country of Origin	28
- Graph 4.3 : Applications by Fields of Technology	29
- Graph 4.4 : Proportion of Applications in High Technology Areas and per Country of Origin	30
- Graph 4.5 : Patents Granted by the Trilateral Offices	31
- Graph 4.6 : Proportion of Granted Patents per Country of Origin	31
- Graph 4.7 : Distribution of Patentees by the Number of Granted Patents	32
- Graph 4.8 : Maintenance of Patents Granted by Trilateral Offices	33
- Graph 4.9 : The Trilateral Patent Procedures	34
- Graph 5.1 : Proportion of PCT Applications by Bloc of Origin	39
- Graph 5.2 : PCT Applications Entering the National/Regional Procedure	40
- Graph 5.3 : Share of PCT in Patent Application	40
- Graph 5.4 : Share of PCT in the Patents Granted	41
- Graph 5.5 : Trilateral Families Using the PCT Route by Bloc of Origin	42
- Graph 5.6 : Proportions of 1998 Based Families Involving the PCT	42
- Graph 5.7 : International Search Requests	43
- Graph 5.8 : International Preliminary Examination Requests	44

# Chapter 1

## INTRODUCTION

### Definitions of terms

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

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

This report concentrates on the first kind, patents of invention.

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 numbers of patent applications in Japan compared to 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:
  - **regional** procedures, (for example the European or the African Intellectual Property Organisation), and,
  - the **international** Patent Cooperation Treaty procedure (PCT).

In this chapter, the statistics presented in the report and the relations between 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:

- 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** after cumulating 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 all 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 given with regard to the 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 another previous filing, and all other applications are **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 WIPO in its Industrial Property Statistics.
- A **patent family** is a group of patent filings that claim the priority of a single filing, including the original priority forming filing itself and any subsequent filings made throughout the world. The set of distinct priority forming filings (that indexes the set of patent families) in principle constitutes a better proxy measure for the set of first filings than an aggregation of reported first filings and domestic national filings in cases where first filings are not known. **Trilateral patent families** are patent families for which there is evidence of patenting activity in all trilateral blocs.

## 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 world wide patent applications. Statistics in this chapter are derived primarily from the Industrial Property Statistics of 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 globalisation.

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. Then 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.

---

<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 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 rather 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 procedure 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 Patent Co-operation Treaty (PCT) impacts on 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 were provided by the Trilateral Offices, such as national-stage figures or international searches and international preliminary examination information.



## **Chapter 6**

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

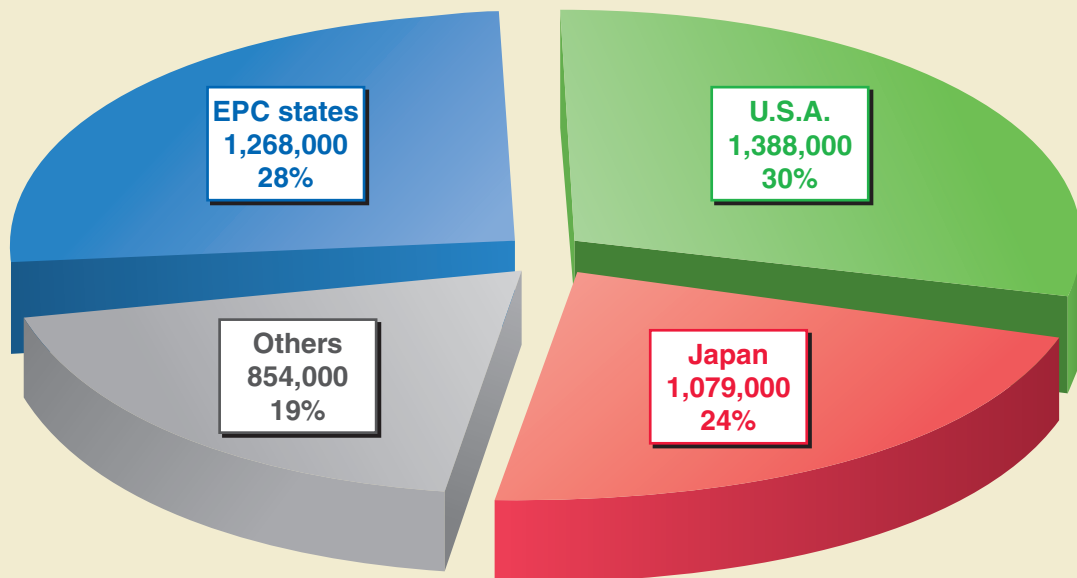
## Chapter 2

# THE TRILATERAL OFFICES

Patent rights are well-used throughout the world. At the end of the year 2001, a total of about 4.6 million patents were in force. The contracting states of the European Patent Convention (EPC contracting states), the JPO and the USPTO, together cover about 82% of the total patents world wide. In the EPC contracting states, patents are granted either by the national offices or by the EPO.

**Graph 2.1**

**PATENTS IN FORCE WORLD WIDE IN 2001**



# EUROPEAN PATENT OFFICE

The European Patent Office (EPO) – the main patent granting authority for Europe – is a product of successful economic and political co-operation, providing patent protection in up to 30 European countries on the basis of a single patent application and a unitary grant procedure. The mission of the EPO is to support innovation, competitiveness and economic growth for the benefit of the citizens of Europe.

At the end of the year 2002, the following 25 states were members of the underlying European Patent Organisation:

<b>Austria</b>	<b>Denmark</b>	<b>Greece</b>	<b>Monaco</b>	<b>Sweden</b>
<b>Belgium</b>	<b>Estonia</b>	<b>Ireland</b>	<b>Portugal</b>	<b>Switzerland</b>
<b>Bulgaria</b>	<b>Finland</b>	<b>Italy</b>	<b>Slovakia</b>	<b>The Netherlands</b>
<b>Cyprus</b>	<b>France</b>	<b>Liechtenstein</b>	<b>Slovenia</b>	<b>The United Kingdom</b>
<b>Czech Republic</b>	<b>Germany</b>	<b>Luxembourg</b>	<b>Spain</b>	<b>Turkey</b>

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

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

Together the above states build a market of about 515 million people.

Hungary joined the European Patent Organisation on January 1, 2003, and Romania joined on March 1, 2003. Three other countries were invited to join and will probably do so later: Latvia, Lithuania, and Poland.

## Grant Procedure

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

The EPO has reviewed its priorities on the basis of a workload analysis. To achieve its objective of cutting the average time taken to grant a European patent to three years, it aims to pursue a range of strategies designed to help it master its workload.

In June 2002, the EPO introduced a new structure for its examining departments. The directorate's in Munich, The Hague and Berlin are grouped in *Joint Clusters* related to technical fields. This should boost efficiency significantly through synergy gains.

The EPO continued in 2002 to deploy the harmonised procedure between search and examination (BEST). At the end of the year, about two third of the examiners were working under the new conditions. The project is expected to be fully implemented by the end of 2006.

**Table 2.1: PRODUCTION INFORMATION EPO**

<b>PRODUCTION FIGURES</b>	<b>2001</b>	<b>2002</b>
<b>Filings</b>		
Total Euro-direct + Euro-PCT international phase	161,295	165,066
Total Euro-direct + Euro-PCT regional phase	110,133	106,243
<b>Searches carried out</b>		
European searches (Euro + Euro-PCT supplementary)	51,220	58,213
PCT international searches	56,307	68,421
Searches on behalf of national offices	15,386	14,980
Other searches	4,523	2,916
Total production search	127,436	144,530
<b>Examination: final actions performed</b>		
European examination	55,284	66,086
PCT Chapter II	41,020	49,438
Opposition (final action)	2,091	1,934
Total final actions examination / opposition	98,395	117,458
<b>Appeal settled</b>		
Technical appeals	1,170	1,336
PCT protests	24	19
Other appeals	58	48
Total decisions appeal	1,251	1,403

In Table 2.1, the latest production figures for search (European, PCT and national searches), for examination (European and PCT Ch. II) and for opposition and appeal in the European procedure are given for the years 2001 and 2002.

In 2002, the efforts undertaken by the Office to improve its productivity and production lead to substantial results. More than 144,500 searches have been completed, an increase of 13%, the final actions in examination and opposition increased by 19% to nearly 117,500, and 1,403 decisions in appeal have been completed (12% more than in 2001).

### **Documentation**

During the year 2002, the number of documents searchable electronically rose by 1.5 million to a total of 30.6 million patent documents. The EPO also maintains also a digital library, and at the end of 2002, this collection contained about 71 million documents. Non-patent literature (NPL) was an area of high activity in 2002. The NPL database holds four million documents and 48.5 million articles were accessible via the EPOQUE online search system.

The EMBASE database, dedicated to biomedical and pharmacological documents, has been added to the EPO's search collection. It contains over 15 million records drawn from the international literature. Together with MEDLINE and BIOSIS, two major databases already incorporated, this provides the EPO with an optimum additional NPL database in these prominent fields.

The EPO's in-house classification system (ECLA) is an expanded form of the International Patent Classification (IPC). With 127,000 additional 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>.

On average, 4,100 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 10% and 133 million documents were viewed. 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 centres are equipped with CD-ROM workstations, which facilitate user access to patent documents.

The Office has further enhanced its online information and service systems. Applicants and interested parties will benefit from the facility to make online payment of procedural fees and free file inspections. It is the intention of the Office to offer maximum transparency regarding the latest status of every single published application.

The main events of 2002 were the annual EPIDOS conference, held in Copenhagen and attended by 500 delegates, and the PATLIB conference in Sicily which attracted 200 participants from more than 30 countries. The first EPIDOS users' meeting on Japanese patent information was organised jointly by the EPO and the JPO in Vienna.

The EPO website continues to attract large numbers of users, with over 1.5 million hits per week. A new, more intuitive website with improved navigation is under development.

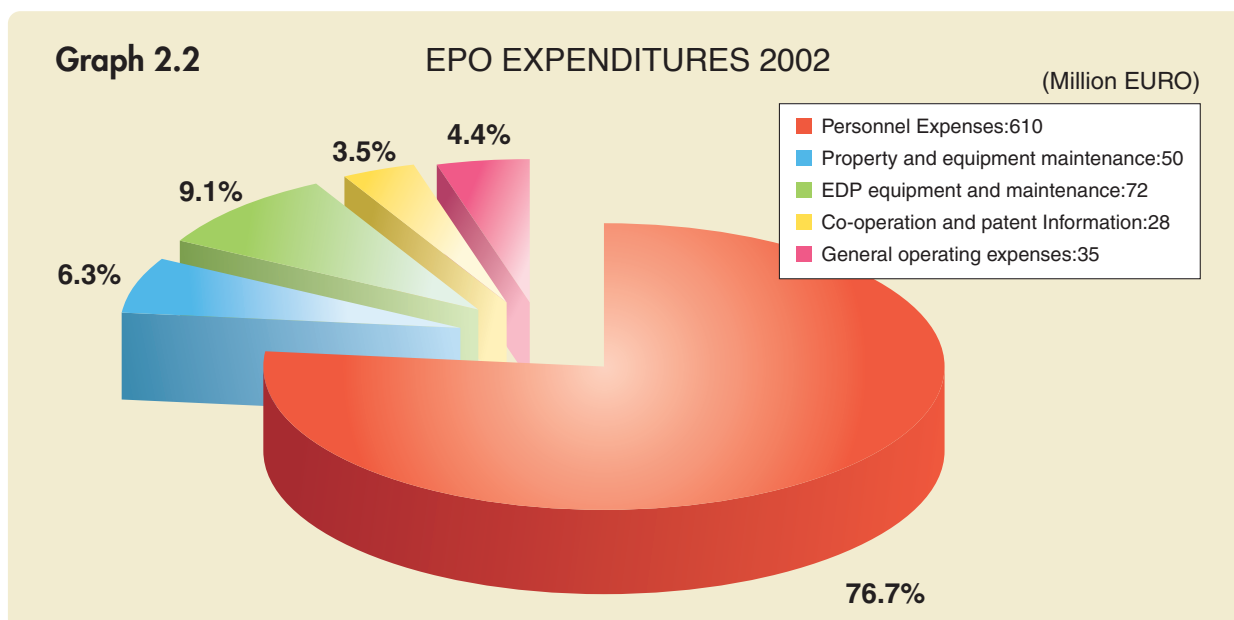
## **Technical Cooperation**

In many countries and regions of the world, the EPO is involved in technical cooperation projects in partnership with national patent authorities, the EU Commission and the WIPO. In 2002, the EPO's "International Academy" offered 18 courses attended by 700 staff from patent and trademark offices along with patent attorneys, patent judges, government officials and scientists. The EPO co-organised two major events in 2002: a seminar on "Information technology concepts and infrastructure for small and medium-sized patent and trademark offices" was held in Athens in September, and an "International Forum on protection of computer-related and business model inventions" was held in November, where more than 400 delegates from more than 50 countries exchanged information and expertise.

In April 2002, a "Symposium on Networking of Training Centers" was attended by EPO and OHIM officials, heads of ASEAN patent offices and European experts. During the meeting, the ECAP II Local Coordination Unit (CU) was opened in Bangkok by the President of the EPO.

In 2002, the EPO pursued co-operation programmes with China, Korea and other ASEAN countries. Contacts were established with Cambodia, Laos, Cuba and El Salvador.

The EPO actively participated in training courses and seminars organised in Latin America, Africa and Middle East countries, concerning IT infrastructure, promoting IP issues, modernisation of patent systems and other matters.



### EPO's budget

The EPO is financially autonomous. Expenditure is met entirely out of income, mainly consisting of fees paid by applicants and patentees. Procedural fees such as the filing, search, examination, 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. From these renewal fees, 50% is kept by the National Offices and 50% is transferred to the EPO.

Total expenditure in the year 2002 (excluding investments) was EUR 795 million. This breaks down into EUR 610 million (77%) for Personnel expenses, EUR 50 million (6%) for Property and equipment (including depreciation), EUR 72 million (9%) for EDP equipment and maintenance (including depreciation), EUR 28 million (4%) for Patent information and co-operation with the contracting states, EUR 35 million (4%) as General operating expenses. Total income to the EPO in 2002 amounted to EUR 840 million, of which EUR 45 million constituted the operating surplus.

### EPO Staff Composition

During 2002, the EPO increased its capacity by continuing its vigorous recruitment drive. In the year, more than 350 patent examiners joined the EPO. By the end of the year, the staff reached a total of 5,421, including 3,157 examiners in search, examination and opposition and 116 members of Boards of Appeal.

Further information can be found from 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 enhance its international competitiveness and revive its society and economy in the present era of intellectual creation, in which information and knowledge generate substantial added value, it is essential to establish a cycle of intellectual creation in which intellectual property is created, firmly protected and actively utilized. The JPO will make maximum efforts to be an engine for this cycle.

## **Basic Law on Intellectual Property**

With the ever-growing importance of intellectual property in recent years, the Japanese Government has been promoting intellectual property strategy as part of its overall national policy. In July 2002, the Strategic Council on Intellectual Property adopted the Intellectual Property Policy Outline declaring that Japan will become a nation built on intellectual property. Following the enactment in November 2002 of the Basic Law on Intellectual Property, in March 2003 the Intellectual Property Strategy Headquarters was established with the Prime Minister as its head to implement actions necessary for realization of this outline. The Headquarters will lead other government organizations in further advancing the Government's intellectual property strategy.

## **Amendments to Relevant Laws**

With the aim of implementing the Intellectual Property Policy Outline, a bill aiming to amend the Patent Law and other industrial property laws was submitted to the 156<sup>th</sup> (2003) ordinary session of the Diet, became law and was proclaimed in May 2003.

The following is an outline of the amendments.

- Restructure patent-related fees from the viewpoints of rectifying imbalance in cost sharing among applicants and promoting appropriate action in requesting examinations.
- Reduce application, registration and annual fees while increasing request-for-examination fees in order to cut the total cost for each application, thereby providing applicants with incentives to make strategic efforts accordingly.
- Introduce a system under which a portion of the request-for-examination fee which the applicant has paid following the filing of such request is refunded if the applicant withdraws his/her application after he/she subsequently finds the prospective right to be unnecessary. This is intended to provide the applicant with the opportunity to cut costs.
- Expand the scheme for the reduction/exemption of annual and request-for-examination fees to include regional public laboratories, etc. Also, under the proposal, those who share the prospective right in question are eligible for fee reduction/exemption in accordance with their share of the prospective right.
- Achieve prompt and precise settlement of disputes relating to patents through the rationalization of the current system.
- Integrate the opposition and invalidation trial systems, both pertaining to the validity of patents, to minimize the time required for related dispute settlement and costs for the disputing parties.

- Prevent patent invalidation trial cases from being passed to and from the JPO and the Tokyo High Court to help facilitate the validity of dispute settlement.
- Harmonize the patent system with global standards from the viewpoint of facilitating the acquisition of patent rights internationally.
- Specifically, the requirements for unity of invention with international standards will be harmonized and a system will be introduced under which an international application submitted under PCT in any Contracting State shall automatically be regarded as that submitted in all Contracting States.

### **Patent Licensing Market**

The JPO has been promoting a patent licensing market through a variety of programs. Since 2001, the National Center for Industrial Property Information (NCIPI), an independent administrative institution, has been in charge of most of these programs. Through such initiatives, the JPO and NCIPI cooperate to raise awareness of patent licensing among small and medium businesses and promote industry-academic cooperation. This has resulted in a total of 1,478 technology transfers and other successful patent licensing contracts over the last five years (as of March 2002). As part of this effort, in March 2003 the JPO and the Intellectual Property Office of Singapore (IPOS) jointly held an international patent licensing seminar in Singapore.

### **Modified Substantive Examination System**

In June 2001, the JPO became a designated Patent Office under Croatia's modified substantive examination (MSE) system. Likewise, in July 2002, Japan became a designated country under Malaysia's MSE system as well as a designated Patent Office in August 2002 under Singapore's MSE system. As a result, an applicant who has filed a patent application in these countries that has already been granted a patent and registered in Japan can speed up the process of obtaining relevant patent rights in these countries by submitting an English-language copy of the patent gazette to the patent office of the country.

### **Counterfeits**

Counterfeiting in East Asian countries of products manufactured by Japanese companies has emerged as one of the most pressing trade problems. The JPO continued its efforts through 2002 to urge infringing countries through bilateral and multilateral negotiations to step up their crackdown on counterfeits. Amidst this trend, the International Intellectual Property Protection Forum (IIPPF) was formed in April 2002 as a platform for cross-sector coordination in fighting counterfeits and pirated products overseas in conjunction with the national Government. As part of this effort, in December 2002, the IIPPF and the Japanese Government jointly dispatched a mission to the central and local governments of China to request implementation of more effective anti-counterfeiting measures.

### **Electronic Applications**

The JPO started accepting online applications for patents and utility models more than ten years ago, thereby becoming a pioneer in the concept of electronic government, which is the mainstay of the e-Japan priority plan adopted in March 2001. As of July 2002, more than 9,000 copies of electronic filing software were provided free of charge, enabling more than 20,000 users to conduct online procedures. In January 2000, the JPO also started accepting online procedures for applications for designs, trademarks, the national phase of PCT applications and appeals. As of March 2002, the online filing rate reached 97% for patents and utility models. This indicates that the online filing system has been fully established. The JPO will



continue to be a leader in electronic government through implementation of various measures such as adopting internationally standardized formats (XML formats) for application documents and gazettes for patents and utility models.

### **Patent Information**

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.

As of March 2003, the IPDL is accessed approximately 4 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.

### **Cooperation with Developing Countries**

To help developing countries with the establishment and implementation of intellectual property right systems, the JPO, in a joint scheme with WIPO, JICA and other organizations, received a total of 1,653 trainees from both the public and private sectors of 43 countries and regions between 1996 and March 2003. 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 budget**

The JPO FY2002 budget totaled approximately 110,861 millions yen. The breakdown of expenses is as follows:

23,928 million yen: for realizing prompt and correct examinations and appeals / trials

6,454 million yen: for establishing the cycle of intellectual creation

2,494 million yen: for globalization of IP policies

28,063 million yen: for patent processing computerization

5,716 million yen: for patent gazette publication

1,051 million yen: for JPO facility improvement

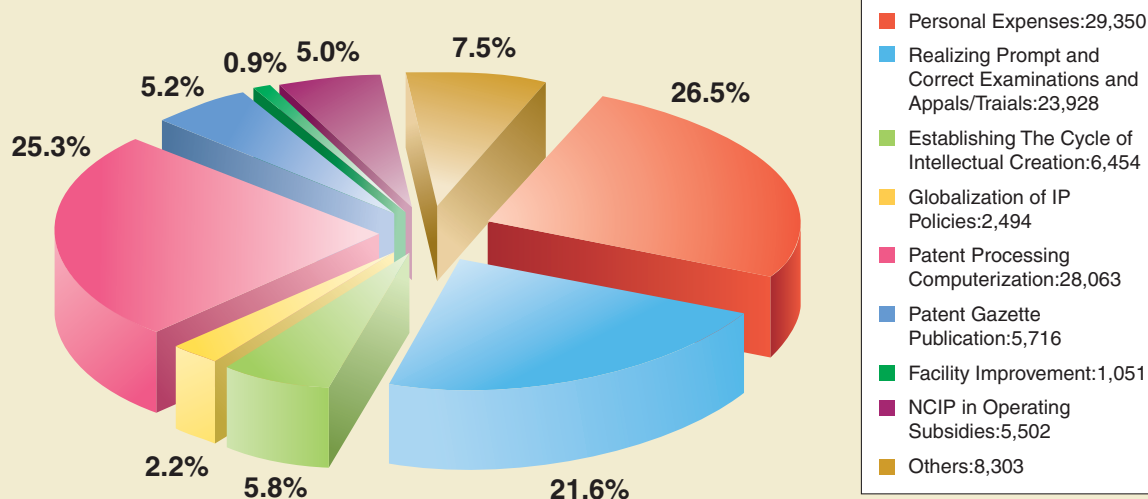
5,502 million yen: for the National Center for Industrial Property Information (NCIPI)  
in operating subsidies

29,350 million yen: for personnel expenses.

**Graph 2.3**

**JPO EXPENDITURES 2002**

(Million Yen)



**JPO Staff Composition**

As of the end of FY2002, the JPO employed a total of 2,470 staff. This included an increased number of examiners and appeal examiners to further cut the time required for examination / appeal procedures.

- Examiners: 1,304
  - Patent / Utility model: 1,105
  - Design: 51
  - Trademark: 148
- Appeal examiners: 395
- General staff: 771

**Table 2.2: PRODUCTION INFORMATION JPO**

<b>PRODUCTION FIGURES</b>	<b>2001</b>	<b>2002</b>
<b>Application filed</b>		
Domestic	386,767	369,458
Foreign	52,408	51,586
Total	439,175	421,044
<b>Grants</b>		
Domestic	109,375	108,515
Foreign	12,367	11,503
Total	121,742	120,018
<b>Applications in appeal (Acceptance)</b>	19,962 (4,945)	21,847 (4,552)
<b>Applications in appeal (Acceptance)</b>	3,536 (1,281)	3,150 (987)

**More information**

A wide variety of the latest information regarding the JPO is available on our homepage. Please go to the URL below to access the information you need.

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

# UNITED STATES PATENT AND TRADEMARK OFFICE

The mission of the United States Patent and Trademark Office (USPTO) is to ensure that the intellectual property system contributes to a strong global economy, encourages investment in innovation, fosters entrepreneurial spirit, and enhances the quality of life for everyone.

The USPTO accomplishes its mission through the examination of patent and trademark applications, issuance of patents and registration of trademarks, dissemination of patent and trademark information to the public, and encouraging a domestic and international climate in which intellectual property can flourish. The agency has evolved into a unique government agency. Since 1991 – under the Omnibus Budget Reconciliation Act (OBRA) of 1990 – the USPTO has operated in much the same way as a private business, providing valued products and services to our customers in exchange for fees that are used to fund our operations. The powers and duties of the USPTO are vested in an 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, resource limitations, establishment as a performance based organization and new legislative mandates. 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 the *21<sup>st</sup> Century Strategic Plan*. This 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. The Strategic 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 patent and trademark quality, 2) aggressively implement e-government, and 3) reduce patent and trademark pendency.

In pursuit of e-government, the USPTO and the European Patent Office (EPO) reached an agreement to foster collaborative development in the areas of e-filing and e-processing of patent applications. In accordance with the agreement, the Patent Organization implemented an electronic application processing prototype based on the EPO's Phoenix image-based system. The prototype will provide an opportunity to study the integration of EPO's capabilities into the Patent Organization's current automation systems. The use of EPO's system will allow the USPTO to accelerate its transition to a completely electronic environment, and will leverage its experience with processing image-based applications into the redesign of USPTO application processing.

The USPTO receives patent applications from all over the world. International applicants file roughly 45 percent of patent applications, with 55 percent filed by United States applicants. All three of the Trilateral partners have experienced the rapid increase in demand for intellectual property. The USPTO has been working with the JPO and the EPO to address the increasing amount of work in each of the offices and seeking opportunities for work sharing and efficiency. Progress on issues such as harmonizing classification systems and electronic filing systems could garner substantial efficiencies for all three offices and their customers.

**Table 2.3: PRODUCTION INFORMATION USPTO**

<b>PRODUCTION FIGURES</b>	<b>2001</b>		<b>2002</b>	
<b>Applications filed<sup>1</sup></b>	<b>326,508</b>		<b>334,445</b>	
<b>First Actions</b>	<b>249,649</b>		<b>271,624</b>	
<b>Grants</b>				
U.S. Residents	87,607	52.8%	86,980	52.0%
Foreign	78,432	47.2%	80,354	48.0%
Japan	33,223	20.0%	34,859	20.0%
EPC states	28,459	17.1%	28,428	17.0%
Others	16,750	10.1%	17,067	10.2%
Total	166,045	100.0%	167,334	100.0%
PCT Chapter II	18,179		17,505	
<b>Applications in appeal and interference proceedings</b>				
	Appeals	Interference	Appeals	Interference
Contested	3,762	126	3,253	108
Disposed	4,978	180	4,851	155
<b>Patent cases in litigation</b>				
Cases filed	49		49	
Cases disposed	62		55	
Pending cases (end of calendar year)	40		33	

1: For utility patents only.

### **USPTO 's budget**

The USPTO funding is derived from user fees collected from its customers. During 2002 USPTO expenditures were comprised of patent expenditures of \$ 967 million dollars and the trademark expenditures of \$129 million dollars. Expenditures for salaries and benefits constituted the largest cost at 59% of overall expenditures. A breakdown by major spending categories is shown in the Graph 2.4.

### **USPTO Staff Composition**

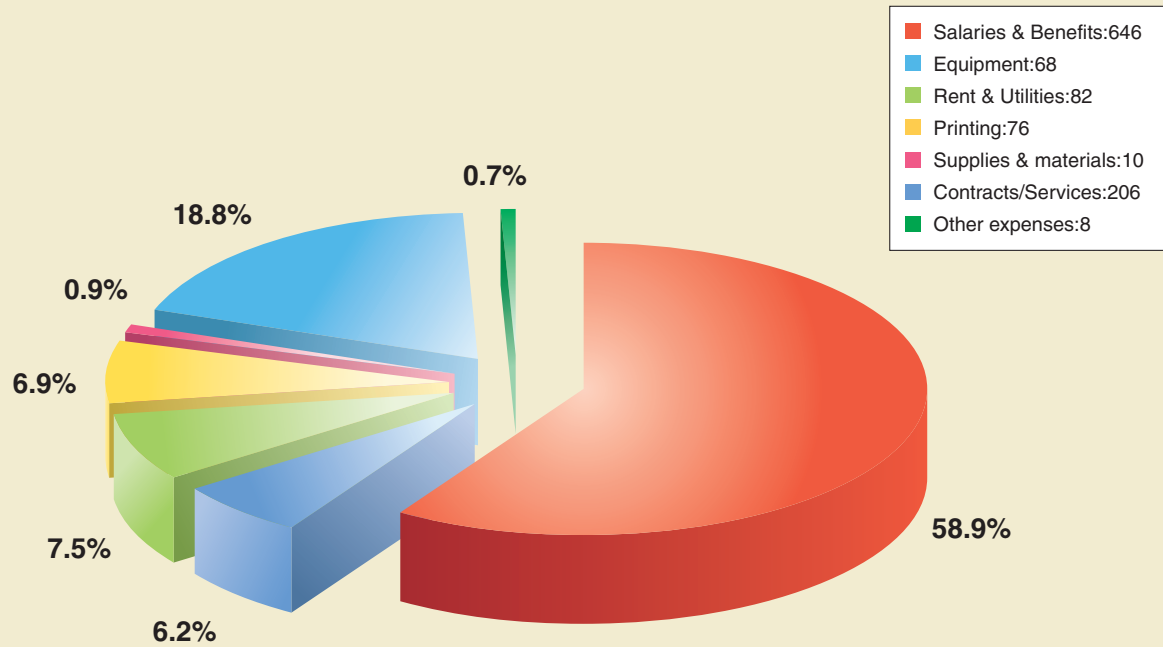
At the end of the Calendar Year (December 31,2002), the total staff at the USPTO was 6,721. The Patent staff total was 4,487. This total was comprised of 3,489 Utility, Plant and Reissue (UPR) examiners, 60 Design examiners, 806 managerial, administrative and technical support staff, 22 members of the Patent Quality Review staff, and 110 members of the Board of Patent Appeals and Interferences <sup>1</sup>.

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

**Graph 2.4**

**USPTO EXPENDITURES 2002**

(Million Dollar)



**More Information**

Please go to the URL below to access the information you need.

USPTO Homepage: <http://www.uspto.gov>

## Chapter 3

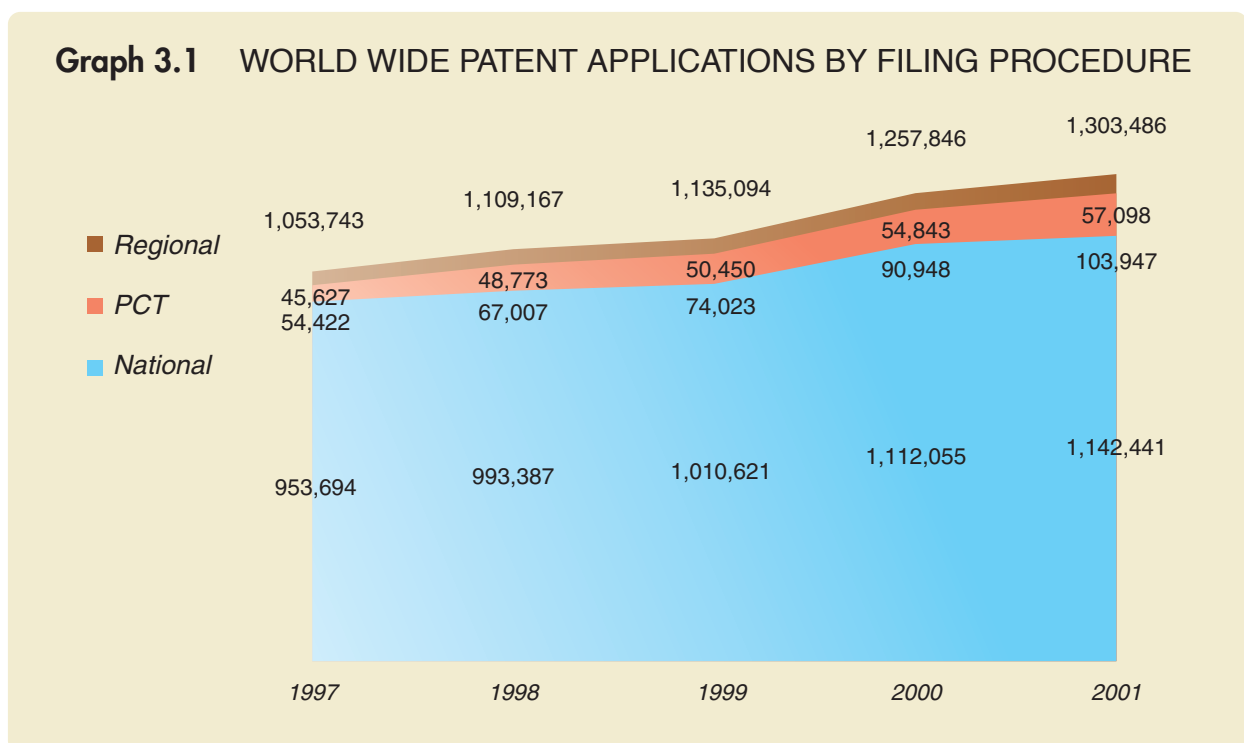
# WORLD WIDE PATENT ACTIVITIES

In addition to the statistics from the Trilateral Offices, statistics from other Offices are necessary in order to present a picture of world wide activities in terms of patent applications and grants. The statistics in this chapter mostly cover a five-year period from 1997 to 2001. Data for the year 2001 are the most recent data available on world wide patent filings, although specialised data from the Trilateral Offices for 2002 are given in Chapter 4.

This chapter considers applications counted by the calendar year of filing, and grants by the calendar year of granting. For supranational applications, it is possible to make 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. In this chapter graphs and statistics are presented with each such application 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 numbers of applications filed all over the world.

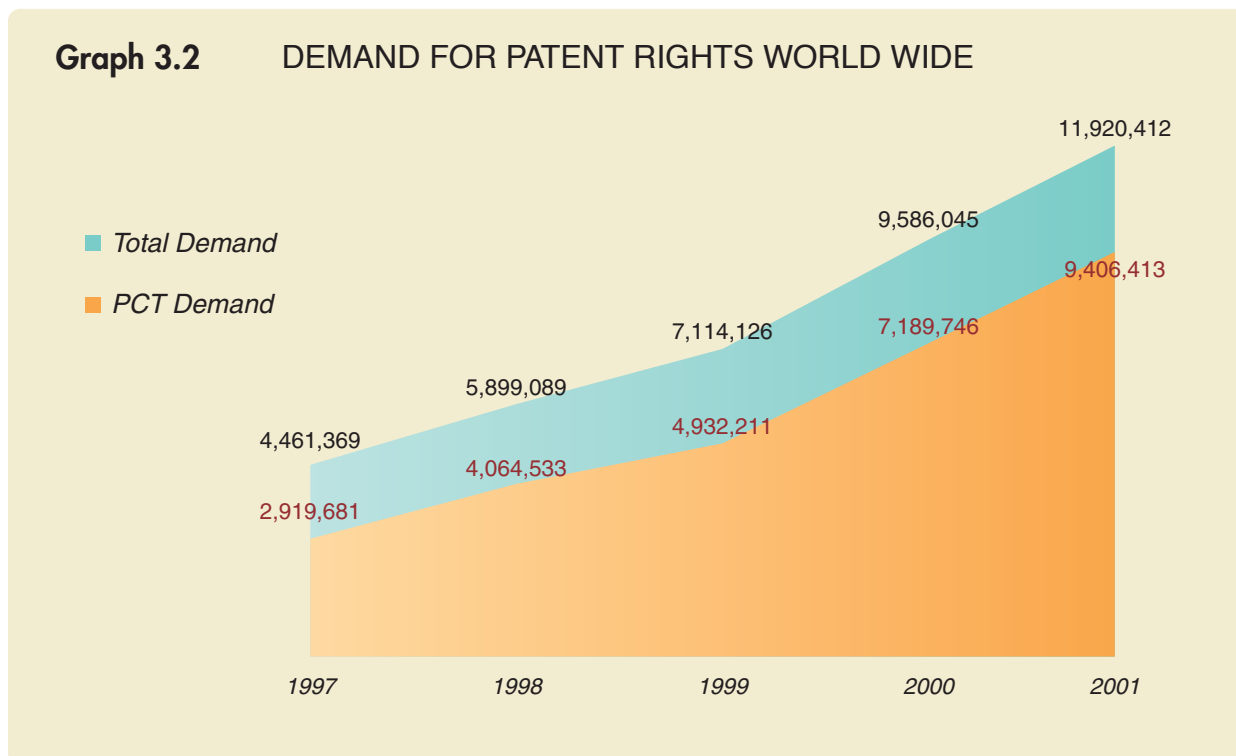


There were a total of 1,303,486 filings world wide in 2001. This represents an average compound rate of increase of 5.5% per year since 1997. From 1997 to 1999, the average compound rate of increase was relatively modest rate at 4% per year. Although this rate increased to 10.8% between 1999 and 2000, it was down to 4% again from 2000 to 2001. Further increases are forecast for filings and special attention should be paid to PCT

applications, which are increasing steadily.

Though during the period, most of the applications were filed according to national procedures, an increasing proportion was made via the PCT.

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



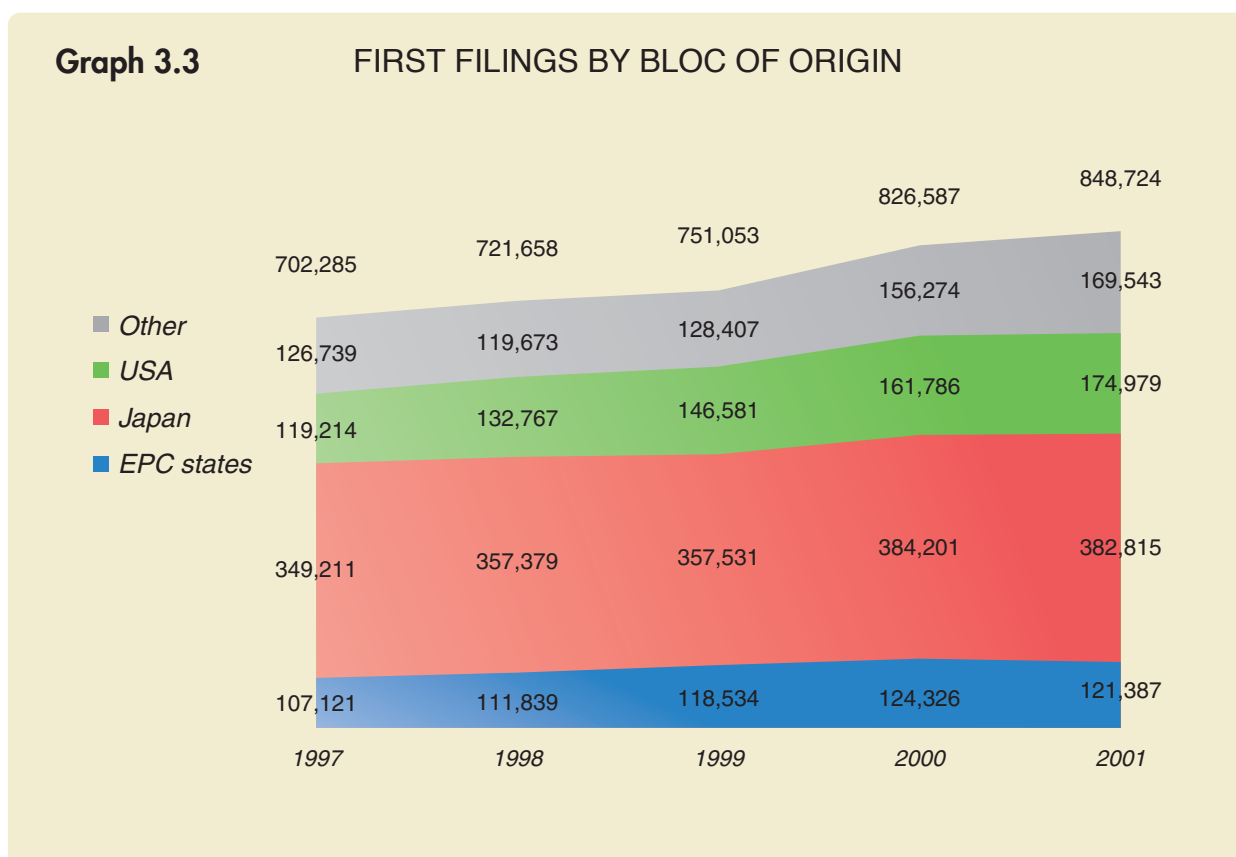
Demands for patent rights had been increasing at an average compound rate of 29.3% up to the year 2000, and broke the 10million level in 2001 to total 11,920,412. 78.9% of filings designate multiple countries via the PCT route.

Although most of the applications were filed according to national procedures, in fact a large part of the demand arises from multiple designations under the PCT system. On average in 2001, 9.1 designations were made for each application. In 1997 the comparable figure was only 4.2 designations for each application.

# PATENT ACTIVITY BY BLOCS

## FIRST FILINGS

The process of patent protection starts with 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. Although the rate of increase reached 10.1% from 1999 to 2000, the increase was only 2.7% from 2000 to 2001. Japan recorded the highest number of first filings in 2001, but the figure of 382,815 represented a slight decrease compared to the previous year's total of 384,201. The EPC contracting states have also recorded a slight fall in the average number of filings, from 124,326 in 2000 to 121,387 in 2001.

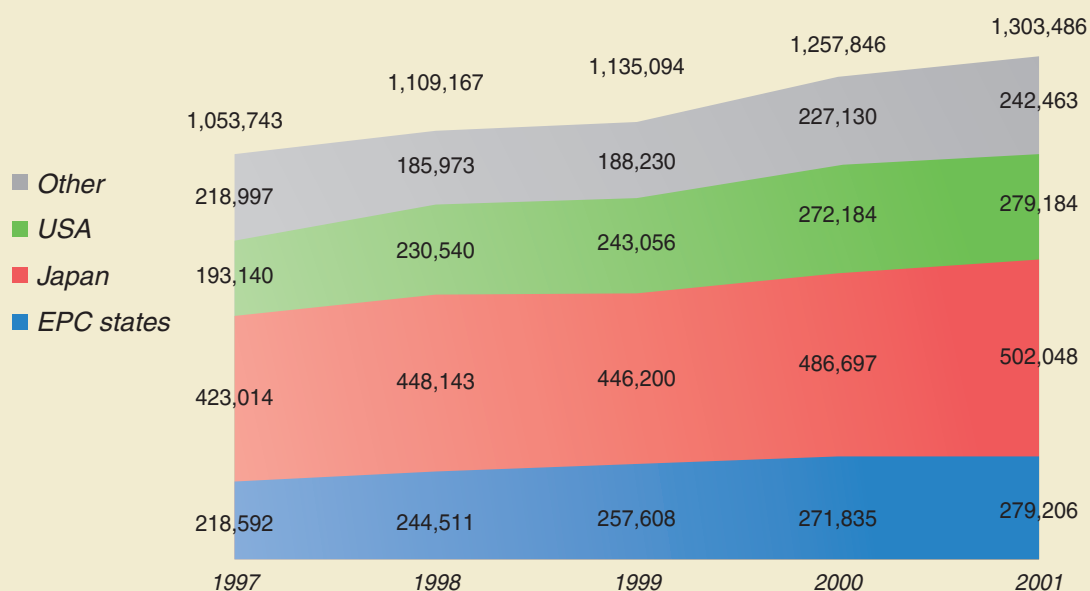
The total number of first filings in 2000 was 826,578. From these first filings, one year later, in 2001, 454,762 subsequent filings were registered. Thus on average one invention, for which one first filing was made, led to 0.55 subsequent applications. Considering the demand for patent rights generated by one first filing, for one invention a first filing in 2001 led to 13.4 subsequent applications for patent rights. Three years ago, the rate was at 7.4. This shows the ongoing internationalization of the patent system.

## ORIGIN OF THE APPLICATIONS

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



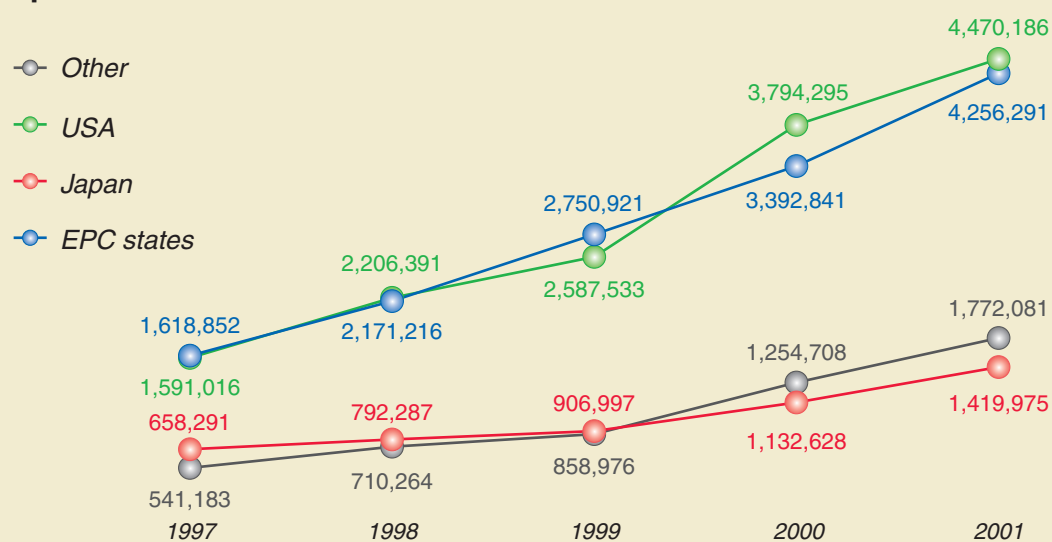
**Graph 3.4** WORLD WIDE PATENT APPLICATIONS BY BLOC OF ORIGIN



The number of filings world wide increased by 10.8% from 1999 to 2000 and by 3.6% from 2000 to 2001. Although filing from nations other than Japan, the US and those in Europe (“Others”) saw an increase of 20.7% in 2000; the increase was only 6.6% from 2000 to 2001. In 2001, 114 Offices reported basic figures. As reflected in the fact that there were 178 WIPO member nations in 2001, the number of reporting Offices changes from year to year. There are therefore only limited possibilities to compare 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. From the US, demand increased by 46.6% in the year 2000 and by 17.8% the following year. Countries other than Japan, the US and EPC contracting states also witnessed a 46.1% increase in demand in 2000 followed by a 41.2% increase in 2001.

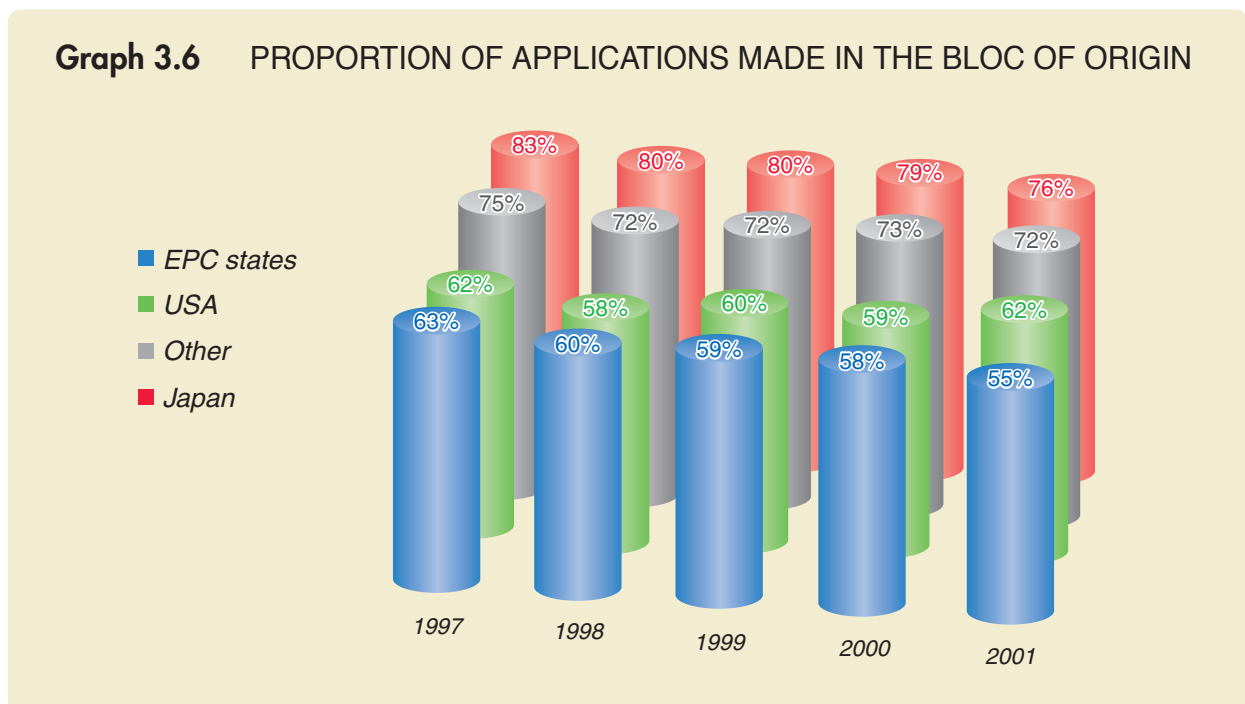
**Graph 3.5** WORLD WIDE DEMAND FOR PATENT RIGHTS BY BLOC OF ORIGIN



## 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, followed in order by "Others", USA and EPC contracting states. A declining trend can be seen for EPC contracting states and Japan. USA shows no trend, but there is quite a lot of variability from year to year in USA.

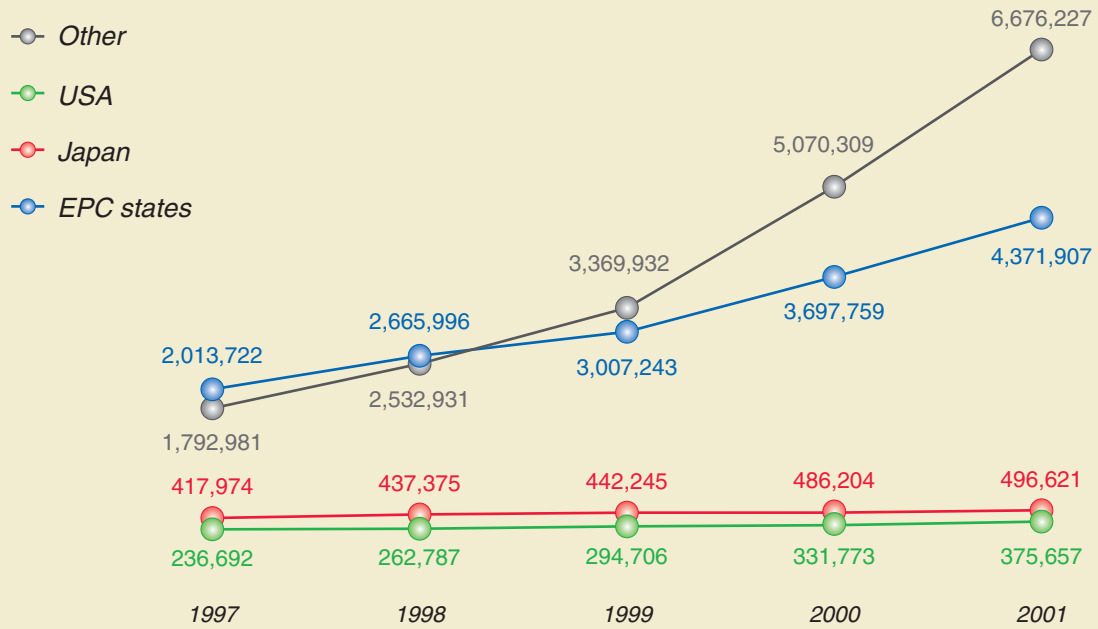


Graph 3.7 shows information on demand for patent rights including cumulated designations categorised by the target blocs in which patent rights are sought.

Demand in "Others" is the highest followed by the EPC contracting states (being the sum of the demand for national patent rights in all Contracting States), followed by Japan and the USA. The demand increased in all blocs over the period 1997-2001. Within the trilateral blocs the relative change was the highest in the EPC contracting states (217% increase 1997-2001), followed by the USPTO (159%), and Japan (19%). The development in bloc "Others" (+372%) is due to several factors: higher attractiveness of certain markers (countries setting up new protection right systems, new memberships to the PCT, ...), and statistics becoming available for more countries.

<sup>1</sup> PCT applications are considered to be outside the bloc of origin.

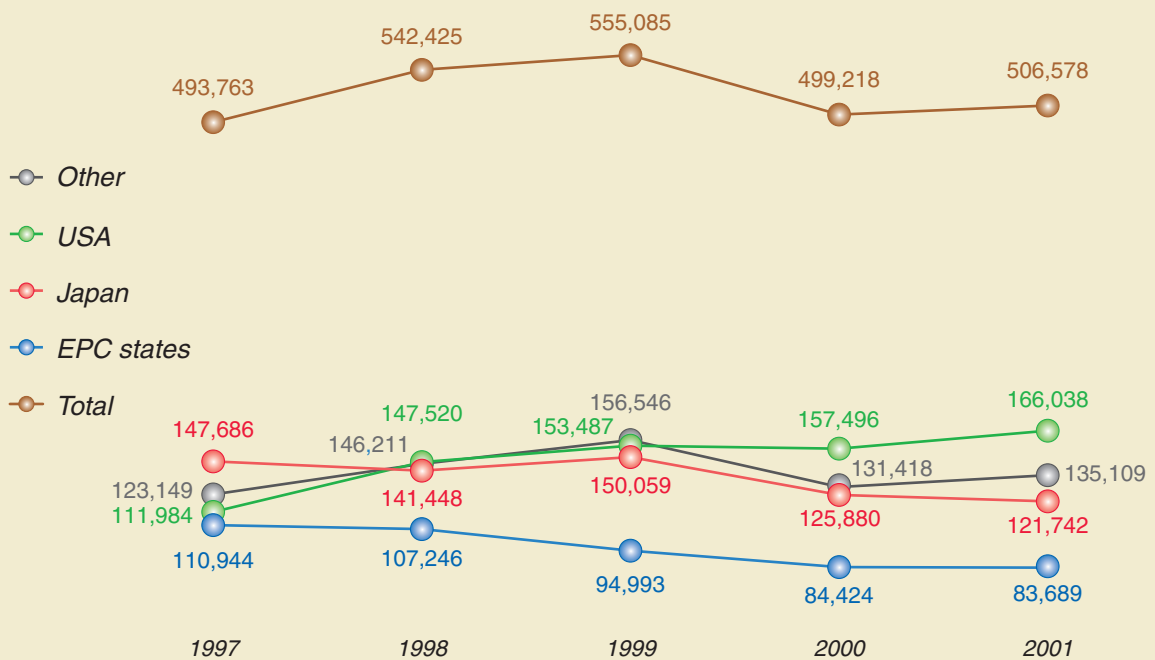
**Graph 3.7** WORLD WIDE DEMAND FOR PATENT RIGHTS BY FILING BLOC



## GRANTS

The development of the use of patent systems is shown in Graph 3.8 in terms of the cumulative numbers of patents granted by the various offices in each bloc.

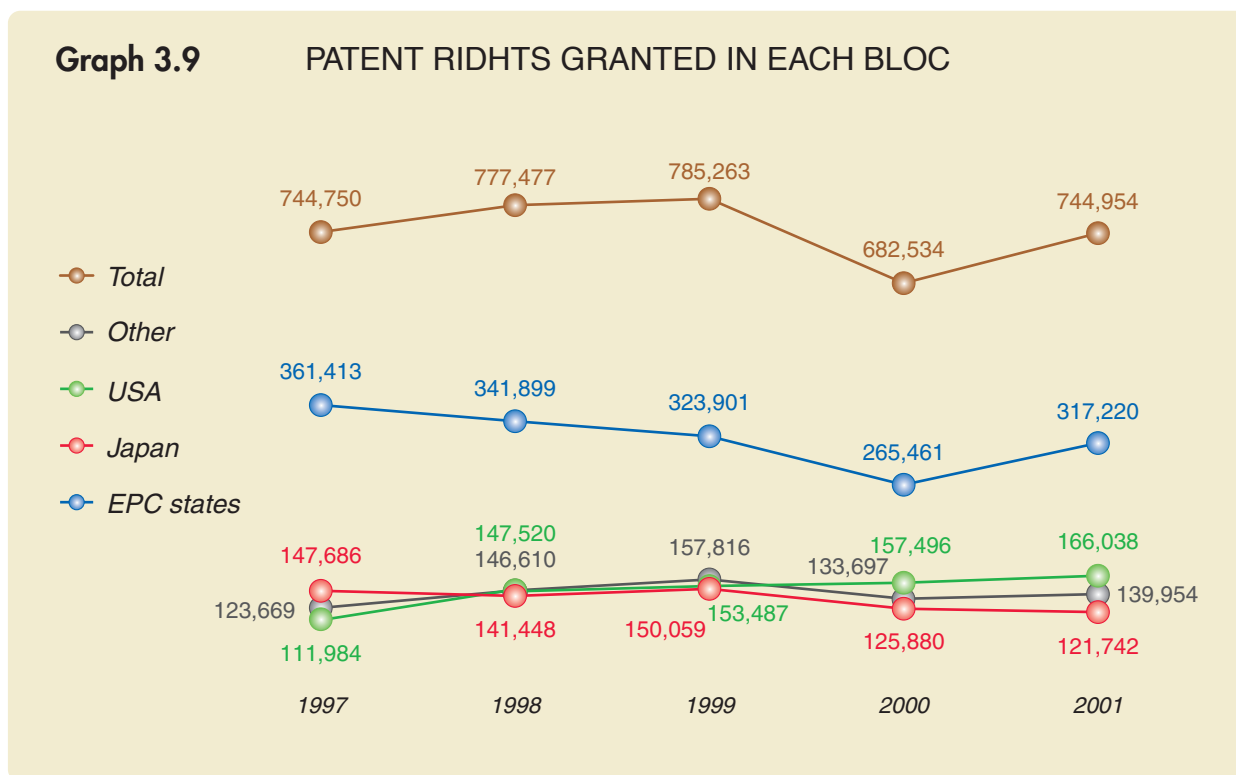
**Graph 3.8** PATENTS GRANTED IN EACH BLOC



Number of granting actions by patent offices

There have been noticeable developments and changes in trends in the number of patent rights registered world wide. Although an overall downward trend was seen in 2000, Japan, which recorded an extremely high number of registrations in 1996, has gradually declined. EPC member nations have shown a decreasing number of patent right registrations since 1997. The number of registration in the US, on the other hand, continues to rise, increasing by 5.4% in 2001.

Regional granting procedures lead 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”).



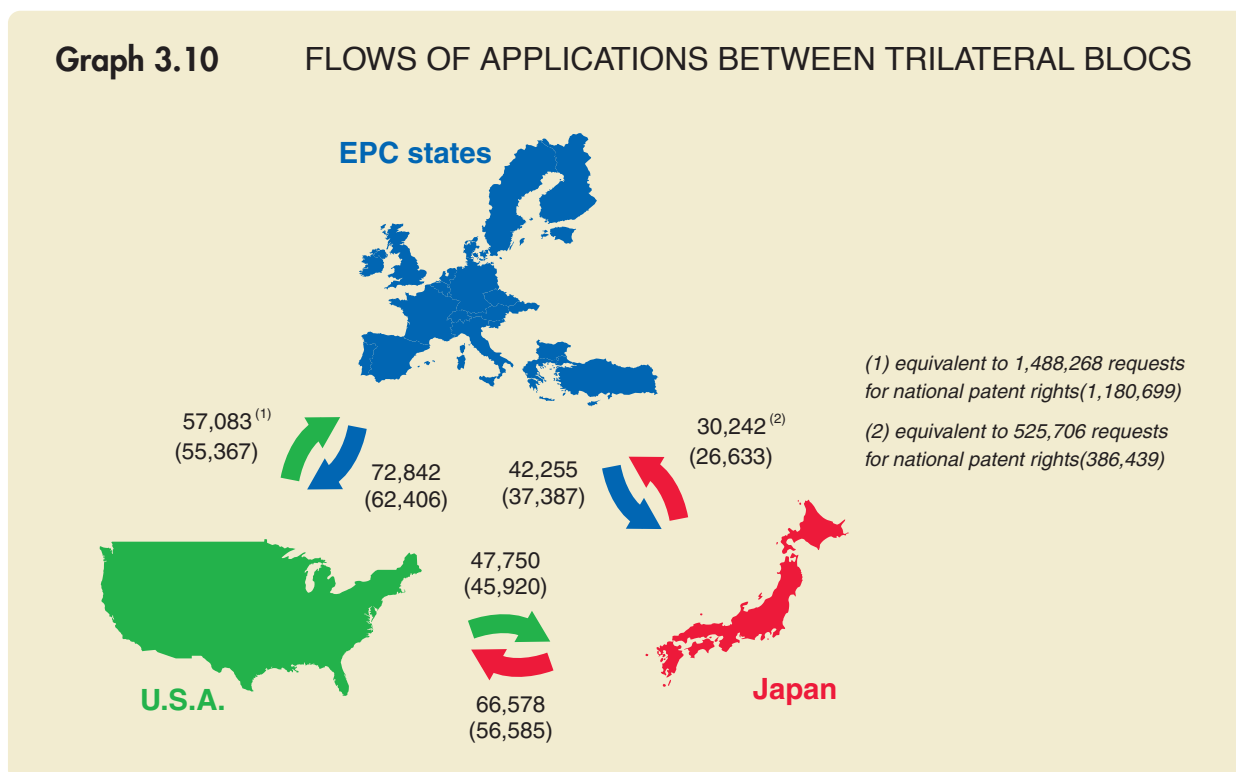
Patent registrations decreased by 13.1% from 1999 to 2000 for a total of 682,534. In 2001, however, this total increased outside of Japan for an overall 9.1% increase and a total of 744,954.

# 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 2001. The 2000 figures are given in brackets.

Japanese applicants file more applications in the USA 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 USA than they do in Japan. This phenomenon is the same as that of 2000.

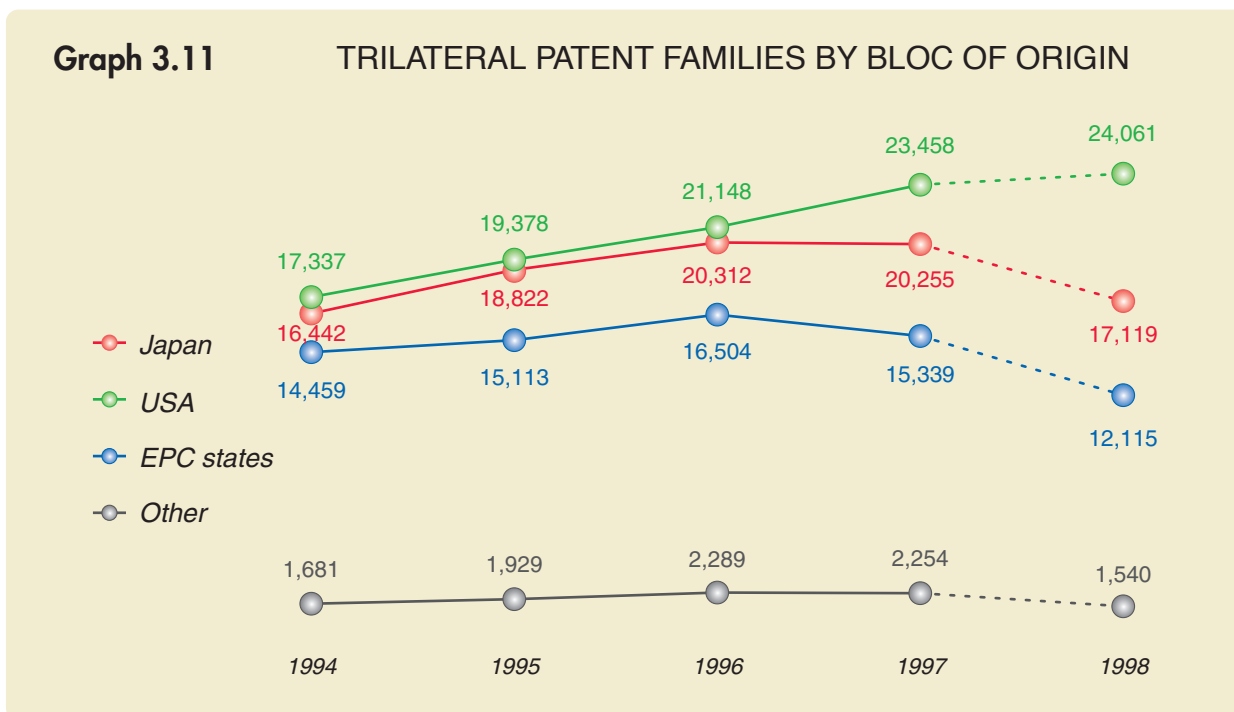


Notes (1) and (2) in the graph allow a comparison of the flows of applications to EPC contracting states with the equivalent flows expressed in terms of rights including cumulative designations. US applicants filed 57,083 applications in the EPC contracting states, equivalent to 1,488,268 national patent applications (26.1 per application; 21.3 in 2000). Japanese applicants filed 30,242 applications in the EPC contracting states, equivalent to 525,706 national patent applications (17.5 per application; 14.5 in 2000). 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 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 world wide 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.

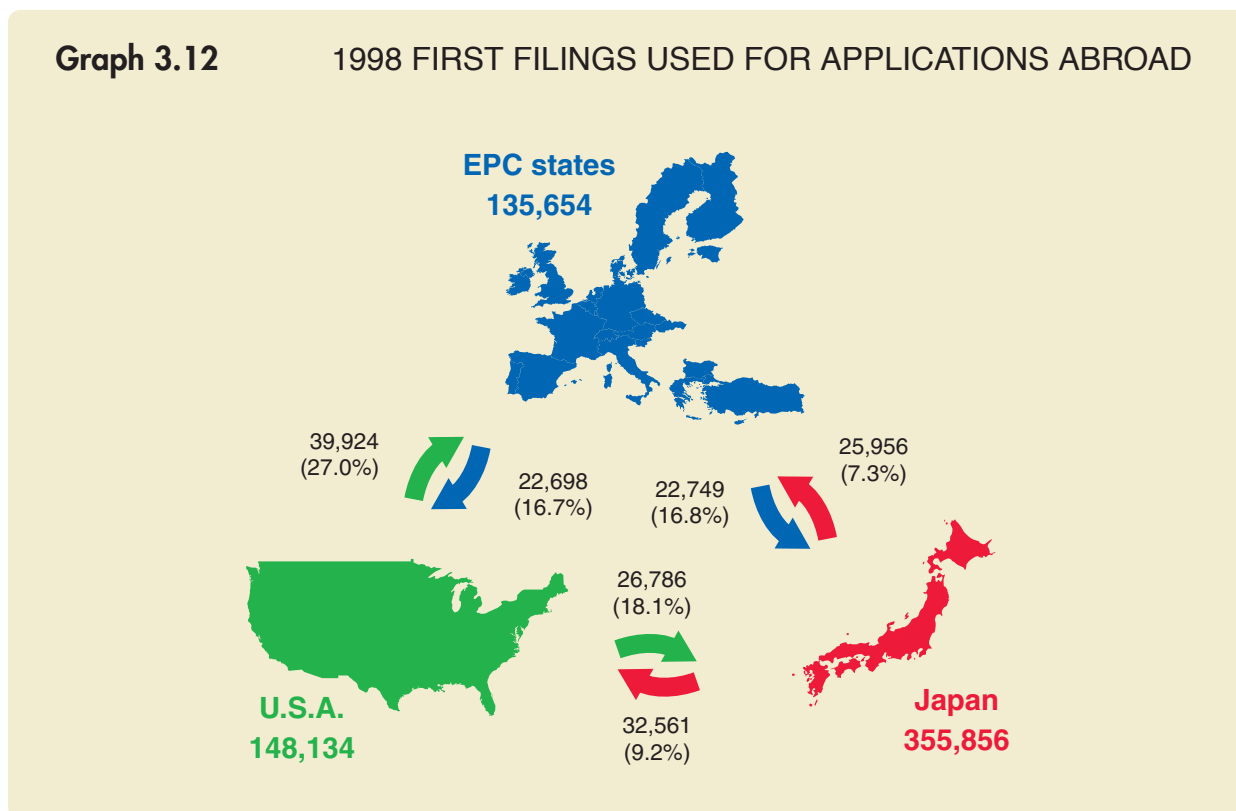
The development over time of trilateral patent families is shown in Graph 3.11. Due to the delay in publication (from the moment of filing), in particular in the patent system of the USA where up to year 2000 patents have been published only after grant, the figures can only be reported with any degree of accuracy after several years of delay. The figures for references to priorities and flows between trilateral blocs are accurate up to the year 1998, but the figures for trilateral patent families seem to be accurate only up to the year 1997 because of delays in recording evidence of activity in all three blocs.



The trilateral patent families data trended upwards for USA until 1997, while the data for Japan and EPC states contracting states rose until 1996 and then declined in 1997. The total number of trilateral patent families in 1997 was 61,306, of which 25% originated from EPC contracting states, 33% from Japan, 38% from the USA and 4% from “Others”. The corresponding figures for 1996 were a total of 60,253 trilateral families, of which 27% originated from EPC contracting states, 34% from Japan, 35% from the USA and 4% from other states. Out of all priority forming filings in the trilateral area, 9.4% formed trilateral patent families.

The proportions of priority forming first filings in 1997 that generated trilateral patent families differed considerably according to the bloc of origin of the priority forming filings. For EPC contracting states, 11.9% of priority forming filings formed trilateral families (was 13.4% in 1996); for USA 15.5% (was 16.1%); for Japan 5.8 (was 6.0%), and for other countries 1.7% (was 1.7%).

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 referenced priority filings in 1998. 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 1998.



Out of all first filings in the trilateral area in 1998, only 18.4% 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 (24.6% for EPC contracting states, 11.6% for Japan, 28.8% for USA). However the absolute number of such filings for Japan (41,398) was comparable to filings from the other blocs (EPC states 33,332, USA 42,649) due to the large number of first filings in Japan. When the blocs receiving the subsequent applications are considered, a larger proportion of world wide first filings was received by Japan than by the other blocs (13.1% by EPC contracting states, 17.5% by Japan, 11.2% by USA). From all the priority forming first filings throughout the world in 1998, 16.4% formed patent families including at least one trilateral bloc.

## Chapter 4

# PATENT ACTIVITY AT TRILATERAL OFFICES

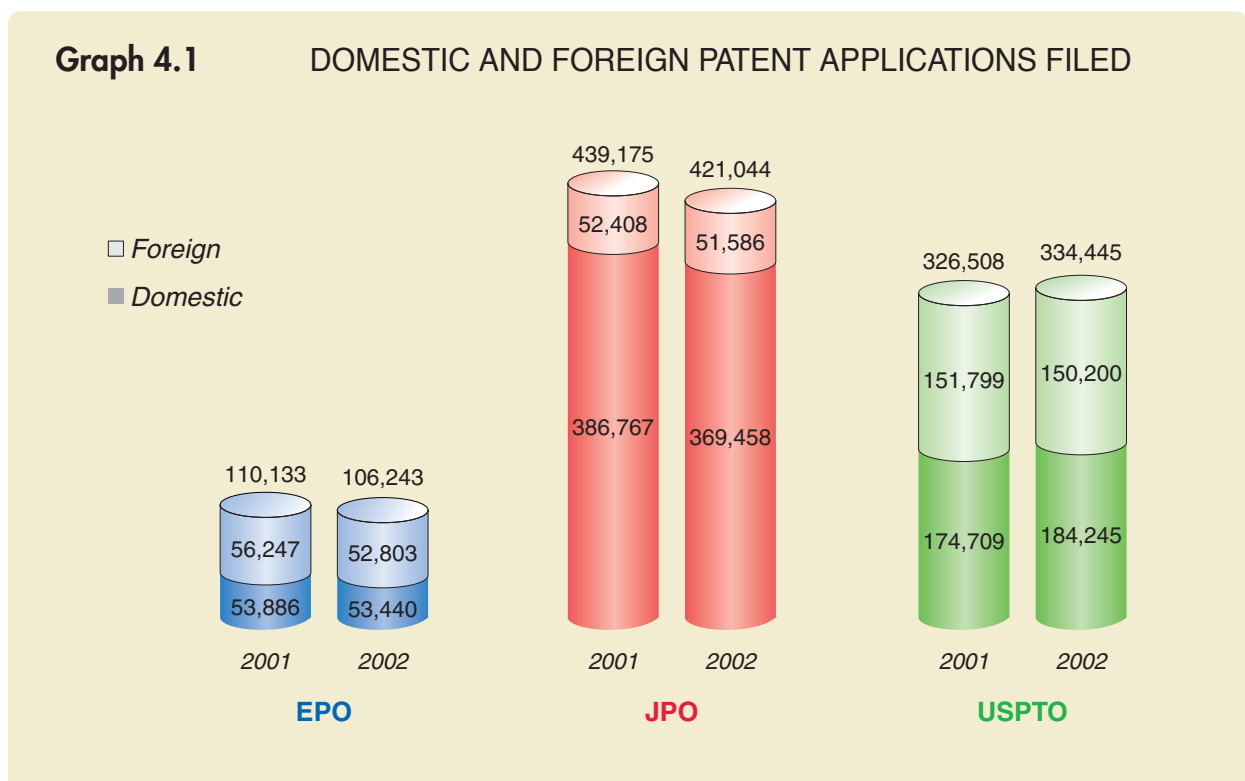
Chapter 4 introduces trends in patent application filings and grants of registration at Trilateral Offices. Trends in EPC contracting states are not covered. Therefore please take care not to confuse the terms “EPO” and “EPC contracting states.” Whereas the EPO is indicated from the viewpoint of an Office, EPC contracting states are indicated as individual states.

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.

In the statistics on grants, direct, regional and international applications granted are taken into account. Since in this context the statistics are meant to give an insight to 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

For each Trilateral Office, application numbers in Graph 4.1 separately indicate domestic (residents of the country) and foreign (non-residents). Graph 4.2 indicates the respective shares occupied by domestic and foreign applicants and compares 2001 and 2002.

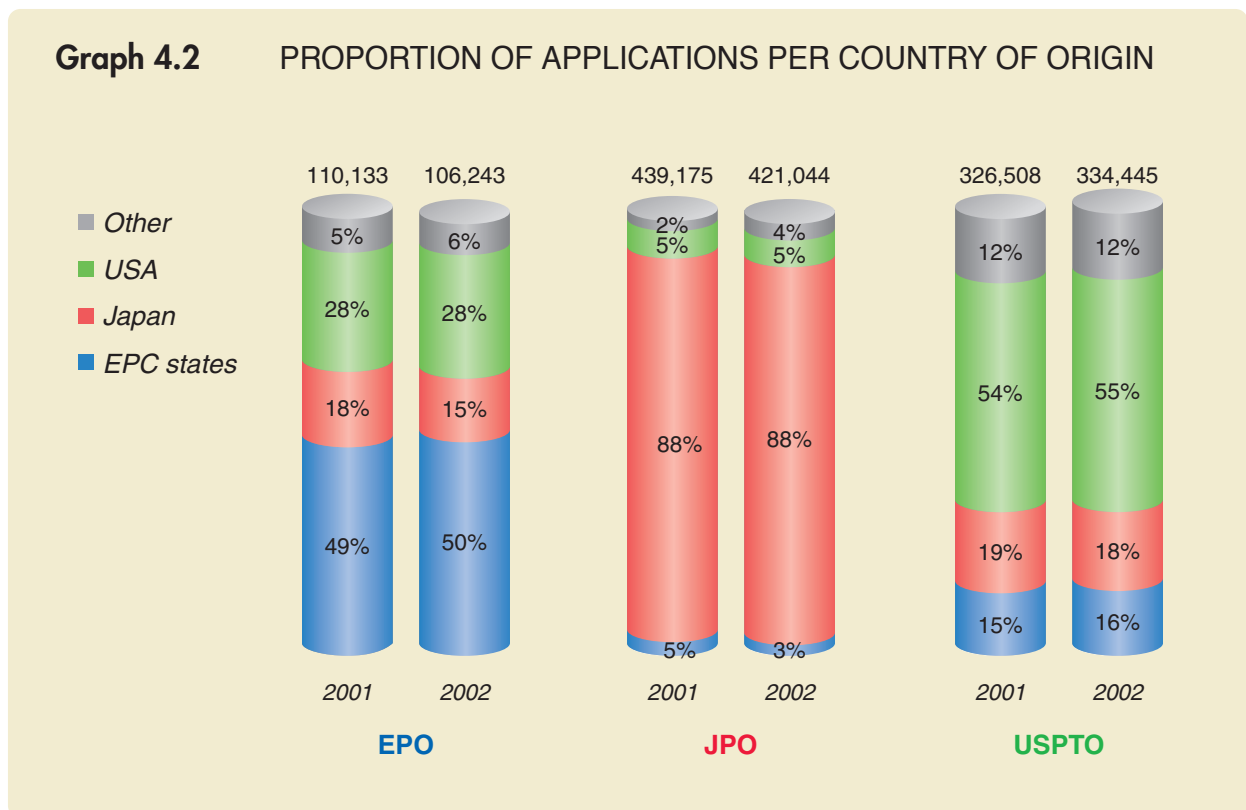


421,044 patent applications were filed to the JPO in 2002, a decrease of 18,131, or 4.1%, over the previous year. The 2002 total remains, however, far and away the highest among the



Trilateral Offices. Only the USPTO experienced a rise in applications in 2002, increasing from 326,508 to 334,445. This marked an increase of 7,937 applications or 2.4%. In 2002, the EPO received 106,243 applications, a decrease of 3,990 applications, or 3.5%, since 2001, partly due to an extension in the time delays for those PCT applications that enter the regional phase without a preliminary examination being carried out.

The breakdown of applications in Trilateral Offices by country of origin in 2001 and 2002 is given in Graph 4.2.



In 2002, domestic filings in the JPO formed 88% of total filings; for the USPTO and the EPO they formed 55% and 50% of total filings respectively. The numbers of domestic filings in the JPO and the USPTO are approximately equivalent to the number 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 9,314 in 2001 and 10,465 in 2002, respectively 17.3% and 19.6% of domestic European filings.

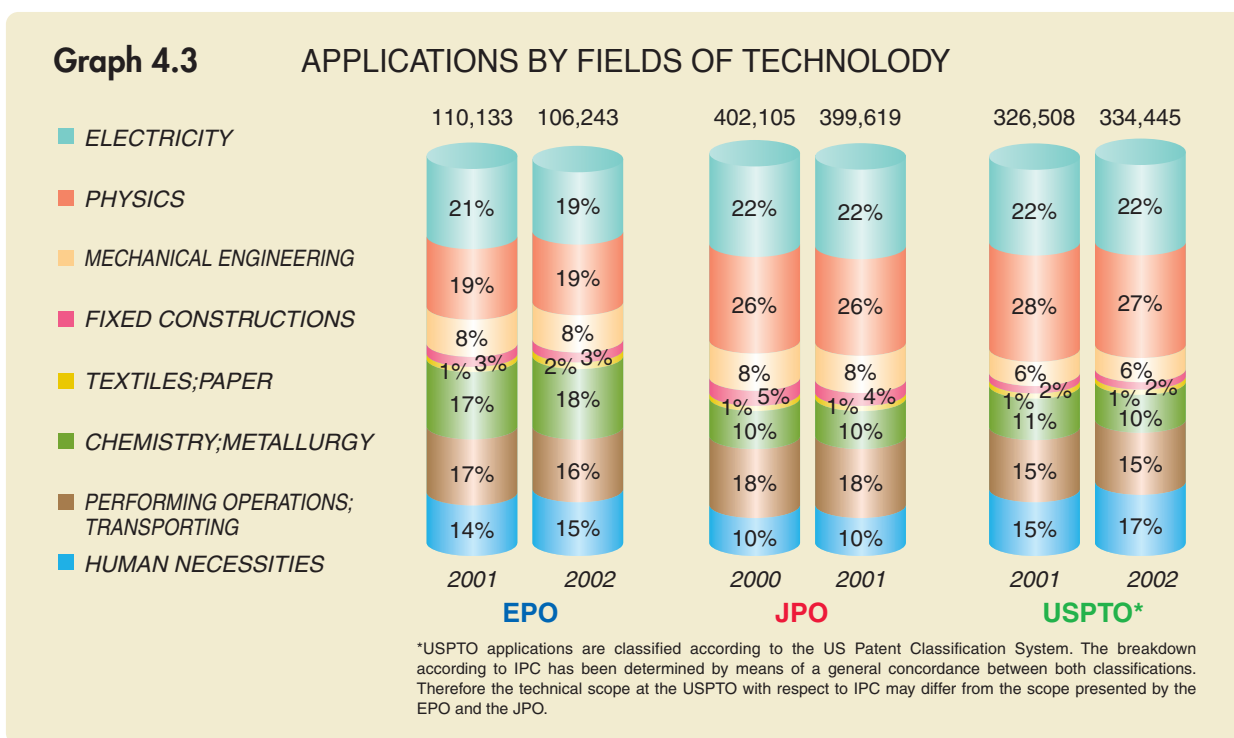
Due to the differences in behaviour of the applicants from different countries, comparison of the number of applications at the Trilateral Offices should be made with caution. For example the number of claims given in applications are significantly different among the three offices. On average in 2002 an application filed at the EPO contained 17.4 claims (15.3 in 2001), one filed at the USPTO had 22.4 claims (20.5 in 2001) and one application at the JPO contained 7.6 claims (7.6 in 2001).

## 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, the comparability of the data reported. Graph 4.3 shows data for the EPO and the USPTO for the filing years 2001 and 2002, while for the JPO the breakdown is given for the filing years 2000 and 2001. The JPO graph for 2001 is the most recent figure 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 June 17, 2003.

Graph 4.3 indicates the share of applications in each technological field at each Office. The following 8 fields of technology are represented.

- 1) Human necessities
- 2) Processing operations, transportation
- 3) Chemistry, metallurgy
- 4) Textiles, paper
- 5) Fixed constructions
- 6) Mechanical chemistry, lighting, heating, weapons
- 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 occupies a smaller share at the EPO than the other Trilateral Offices, the field of chemistry and metallurgy occupies a larger portion there than at the JPO and USPTO. Human necessities occupy a smaller share at the JPO than the other two Offices.

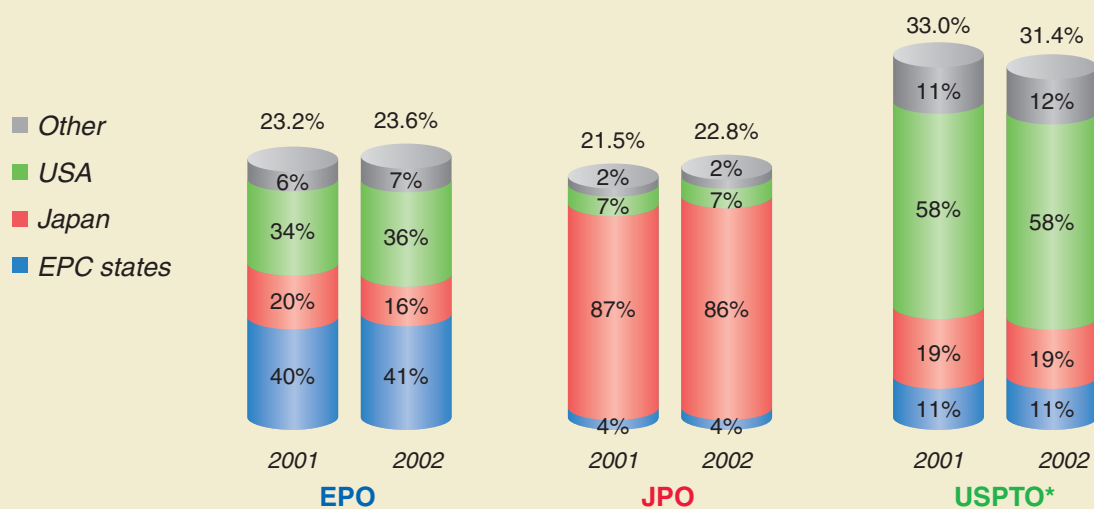
Comparing 2002 to 2001, the share occupied by human necessities increased by 2% at the

USPTO and the electricity share fell by 2% at the EPO, the EPO also witnessed a slight increase in chemistry and metallurgy as well as human necessities. The JPO decreased 1% in fixed constructions only.

An increasing proportion of applications filed to Trilateral Offices are from high technology areas. In Graph 4.4, this proportion is given for each Office for applications filed in 2001 and 2002, 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;
- Microorganism and genetic engineering;
- Aviation;
- Communications technology;
- Semi-conductors;
- Lasers;

**Graph 4.4** POROPORTION OF APPLICATIONS IN HIGH TECHNOLODY AREAS AND PER COUNTRY OF ORIGIN



\*USPTO applications are classified according to the US Patent Classification System. The breakdown according to IPC has been determined by means of a general concordance between both classifications. Therefore the technical scope at the USPTO with respect to IPC may differ from the scope presented by the EPO and the JPO.

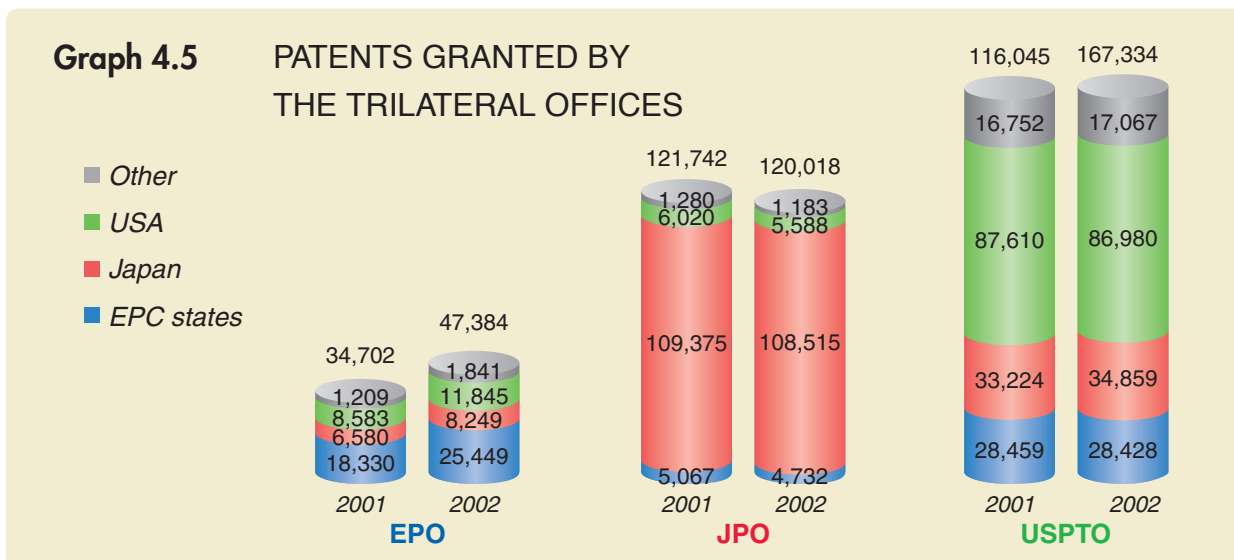
The USPTO has the highest share of patent applications in the high-tech field, with 31.4% of all applications occurring in this area. Of this number, 58% are from domestic applicants. At the JPO, where high-tech patent applications occupy a lower share than other Offices, at 22.8%, 86% of applications are from domestic applicants. At the EPO, where 23.6% of patent applications are in the high-technology areas, the number of applications filed by Japanese has decreased while applications filed by Americans and those living in EPC contracting states have increased.

It is noticeable that , the share of applications 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 comparable to their overall share of applications at the Trilateral Offices.

## PATENTS GRANTED BY TRILATERAL OFFICES

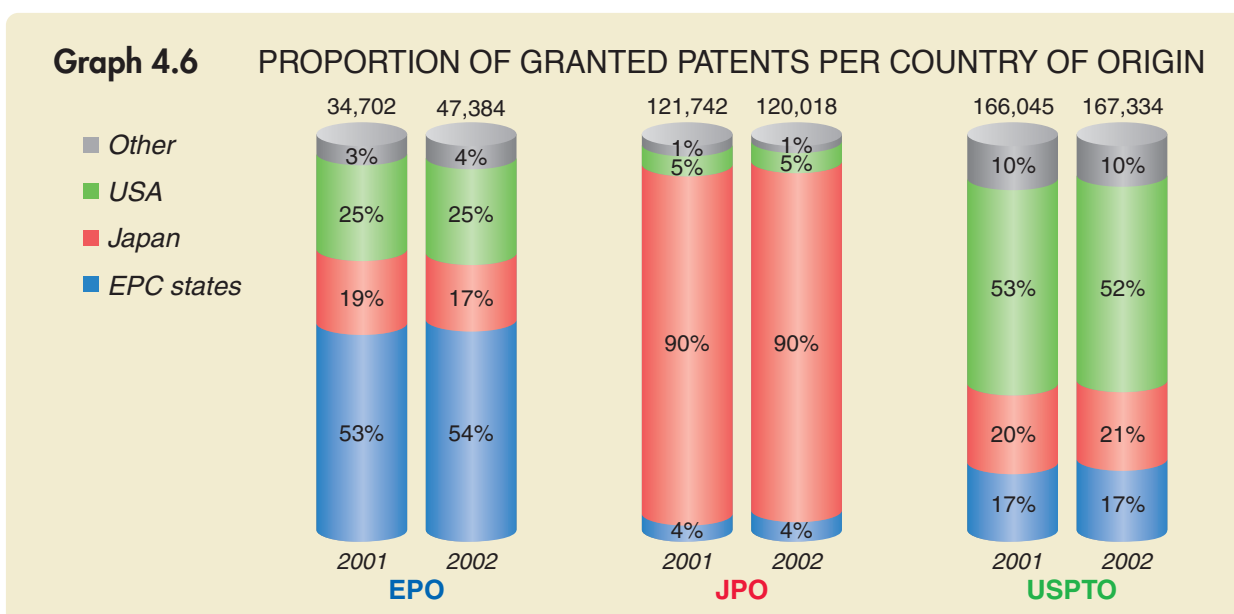
Graph 4.5 shows the number of patents granted by the Trilateral Offices. The overall figure increased by 3.7% in 2001 and by 3.8% in 2002.

Patents granted by the JPO decreased by 1.4% in 2002, continuing a decreasing trend which started in 2000. The EPO, on the other hand, experienced a further increase to 47,384 published granted patents, or 36.5%, in 2002, after a 26% increase in 2001. The USPTO has also experienced an increase in the number of patents granted, with 167,334 registrations in 2002, an increase of 0.8% over the previous year. This is the highest number of grants among the Trilateral Offices.



Graph 4.6 indicates the percentage of total patent applications occupied by the patents granted in Graph 4.5. 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.

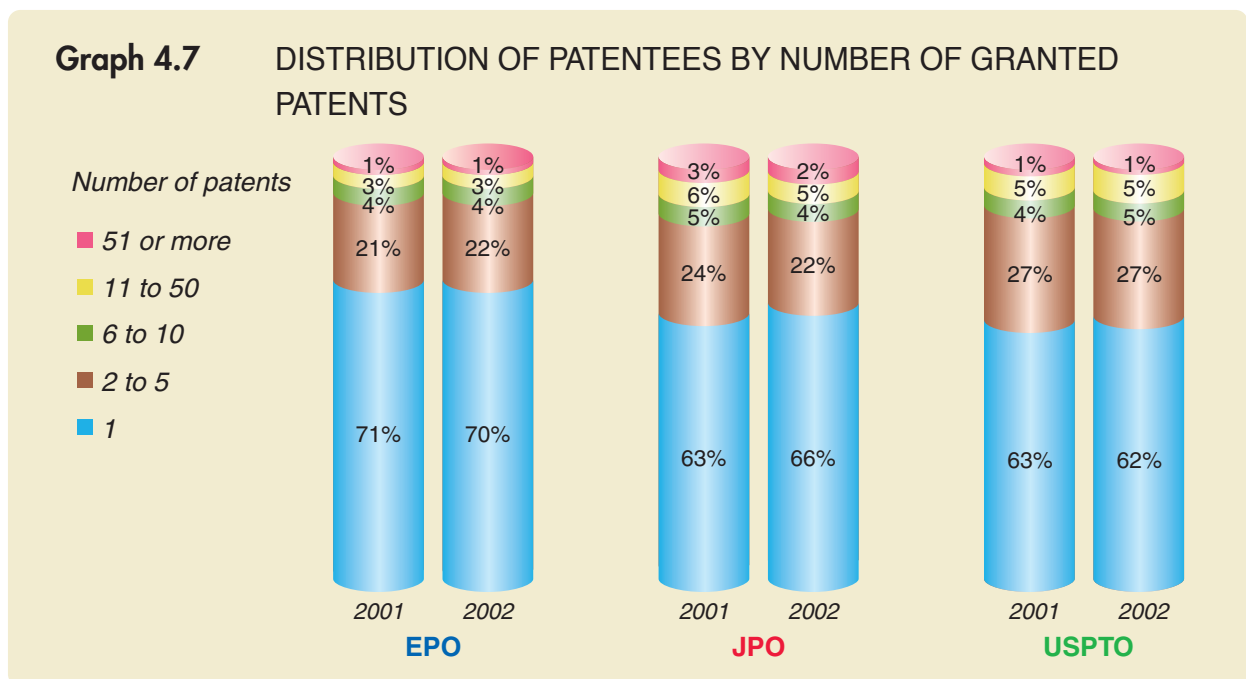


In 2002, the maximum number of patents granted to a single applicant was 808 at the EPO, 4,420 at the JPO, and 3,288 at the USPTO.

The breakdown of patentees by number of patents granted is shown in Graph 4.7.

The proportion of patentees receiving one patent grant is higher at the EPO (70%) than at the JPO (66%) or the USPTO (62%).

The distribution of patentees remained essentially unchanged between 2001 and 2002 at EPO and USPTO. However at the JPO the proportion of patentees receiving only one granted patent increased by 3%, at the expense of the proportions of patentees receiving higher numbers of patents.



A patent granted by an office has a maximum term fixed by law. 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.

In all three offices, a patent has a twenty-year term from the date of filing.

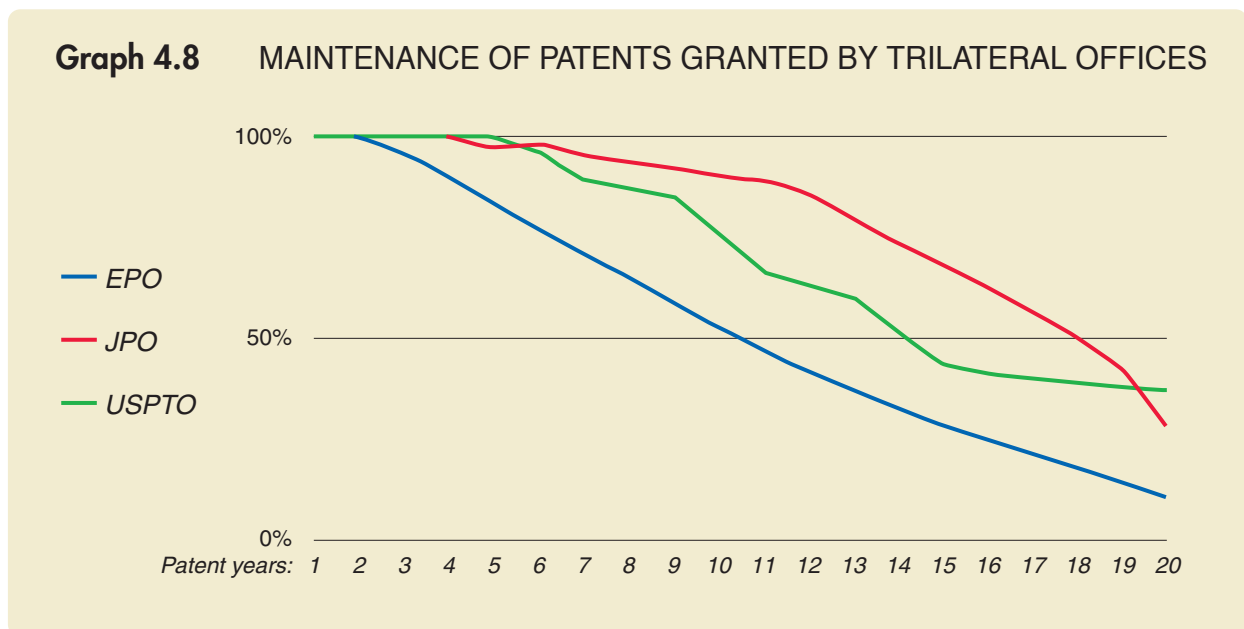
For a European patent, renewal fees have to be paid to the EPO from the third patent year onwards to maintain the application. After the application has been granted, annual renewal fees have to be paid to the national office of each designated contracting state where the patent is to be maintained.

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 50% of the patents granted are maintained for at least 14 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 the Graph 4.9.

#### Examination: search and substantive examination

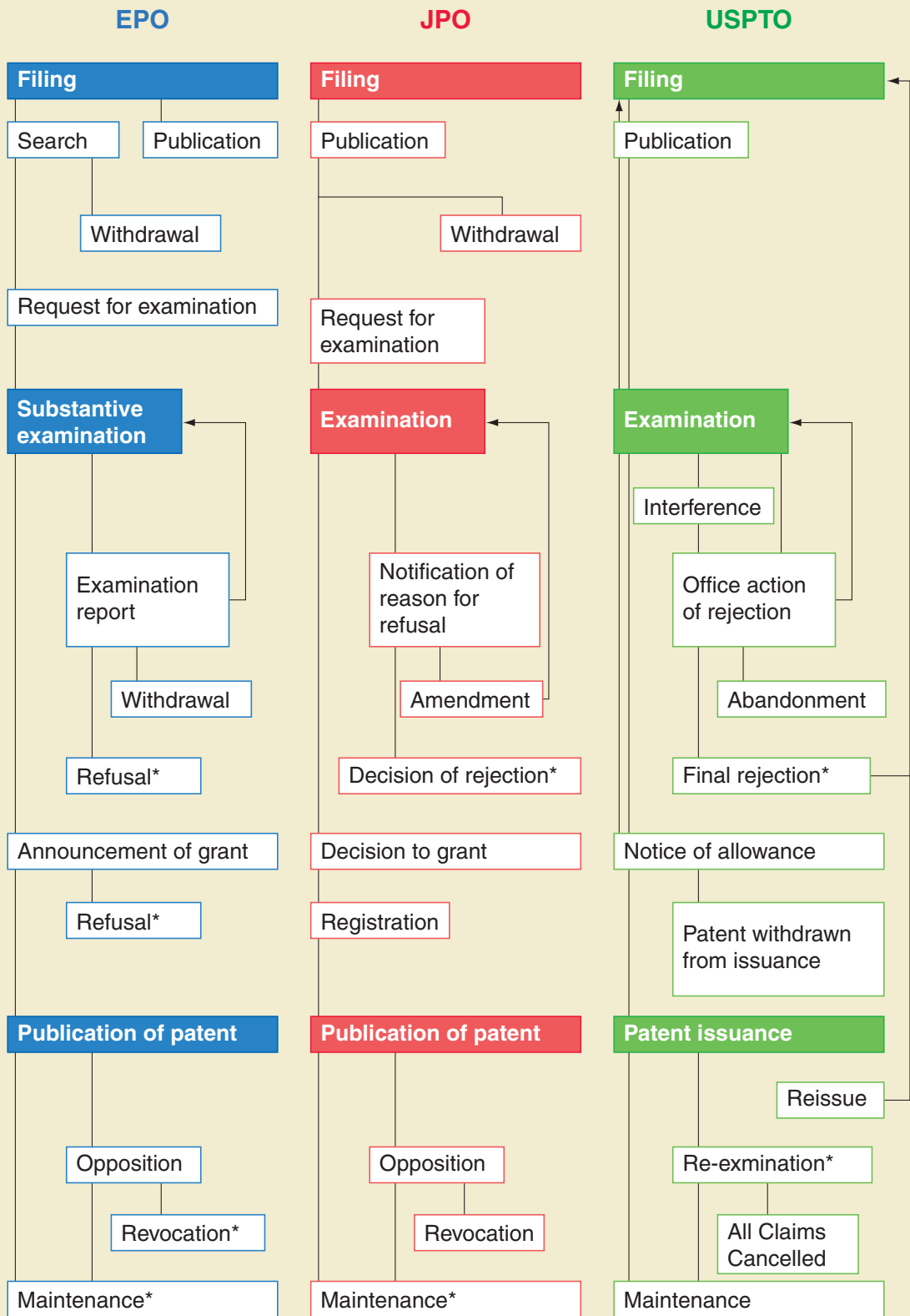
Each of the Trilateral Offices will examine a filed patent application based upon novelty, inventive step and industrial applicability. At the EPO this examination is done in two phases: first a search is done in order to establish the state of the art with respect to the invention. In a second phase 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 not 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 at 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 and 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 to 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 features that may lead to the cancellation of a granted patent: interference proceedings and re-examination. These features are not comparable to opposition procedures in the EPO and the JPO. In the USPTO, the first feature is a priority contest between applicants/patentees seeking to protect the same invention and the second feature may be requested by third parties or by the patentee during the life-time 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 2001 and 2002 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, slightly decreased to 58%. The number of decisions taken in 2002 was higher than in 2001.

In the JPO, the grant rate decreased further to 51.4% in 2001.

In the USPTO, the grant rate is related to the decisions made in the examination procedure, and it decreased to 65% in 2002.

The opposition rate in the EPO slightly declined in 2002 at 5.4%, and 67% of the opposed patents were maintained even though in some cases in amended form.

In the EPO, 546 appeals were received in 2002 i.e. about 45% of decisions in examination to reject the application (1,208). In the USPTO, 3,253 appeals were received being 4% of final rejections (87,126).

In the EPO, 49% of appealable decisions in the opposition procedure (2,276 in 2002) were appealed against, the number of appeals being 1,120.

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 21,847 in 2002 (19,962 in 2001).

**Table 4: STATISTICS ON PROCEDURES**

<b>Progress in the procedure</b>		<i>Year</i>	EPO	JPO	USPTO
<b>Rates in percentage</b>					
Examination		<i>2001</i>	90	54.1	100
		<i>2002</i>	89	54.0	100
Grant		<i>2001</i>	60	55.4	70
		<i>2002</i>	58	51.4	65
Opposition		<i>2001</i>	5.7	3.3	—
		<i>2002</i>	5.4	2.9	—
Maintenance after opposition		<i>2001</i>	68.4	n.a.	—
		<i>2002</i>	67.4	n.a.	—
Appeal	on examinations	<i>2001</i>	48	—	5.0
		<i>2002</i>	45	—	4.0
	on oppositions	<i>2001</i>	49	—	—
		<i>2002</i>	49	—	—
	on examinations and oppositions*	<i>2001</i>	—	19,962	—
		<i>2002</i>	—	21,847	—
<b>Pendency in the procedures</b>					
Search	Number of pending applications	<i>2001</i>	109,800	—	—
		<i>2002</i>	118,300	—	—
	Pendency time in search (months)	<i>2001</i>	27.3	—	—
		<i>2002</i>	26.0	—	—
Examination	Number of applications awaiting request for examination	<i>2001</i>	15,760	2,175,739	—
		<i>2002</i>	16,410	2,189,727	—
	Number of pending applications	<i>2001</i>	212,200	478,363	n.a.
		<i>2002</i>	223,700	500,420	n.a.
	Time to first office action (months)	<i>2001</i>	20.7	22.0	14.4
		<i>2002</i>	23.0	24.0	16.6
	Pendency time in examination (months)	<i>2001</i>	46.1	27.7	24.7
		<i>2002</i>	40.6	28.7	24.8
Opposition	Number of pending applications	<i>2001</i>	1,360	n.a.	—
		<i>2002</i>	1,250	n.a.	—
	Pendency time in opposition (months)	<i>2001</i>	6.6	n.a.	—
		<i>2002</i>	6.6	n.a.	—

n.a. : indicates unavailable data — : indicates not applicable \* for JPO only numbers are available

## **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 responding to actions communicated to the applicant.

Pending applications in search at the EPO increased from by 8% to 118,300 in 2002, and pending search in months decreased in from 27.3 to 26 months.

The number of pending applications awaiting a request for examination by the applicant increased at the EPO with around 16,410 cases.

In the JPO, the number of pending applications (2,189,727) 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 223,700 in 2002, and the pendency in months decreased to 40.6 months, since more decisions were taken in 2002. In the JPO, the number of pending applications increased by 10% to about 478,400. In the USPTO, the average time for either abandoning or issuing an application is about 24.8 months.

The pendency to first office action increased in 2002 to 23 months in the EPO. It increased slightly in the JPO to 24 months, and to 16.6 months in the USPTO.

Pendency in opposition remained stable at the EPO to 6.6 months in 2002.

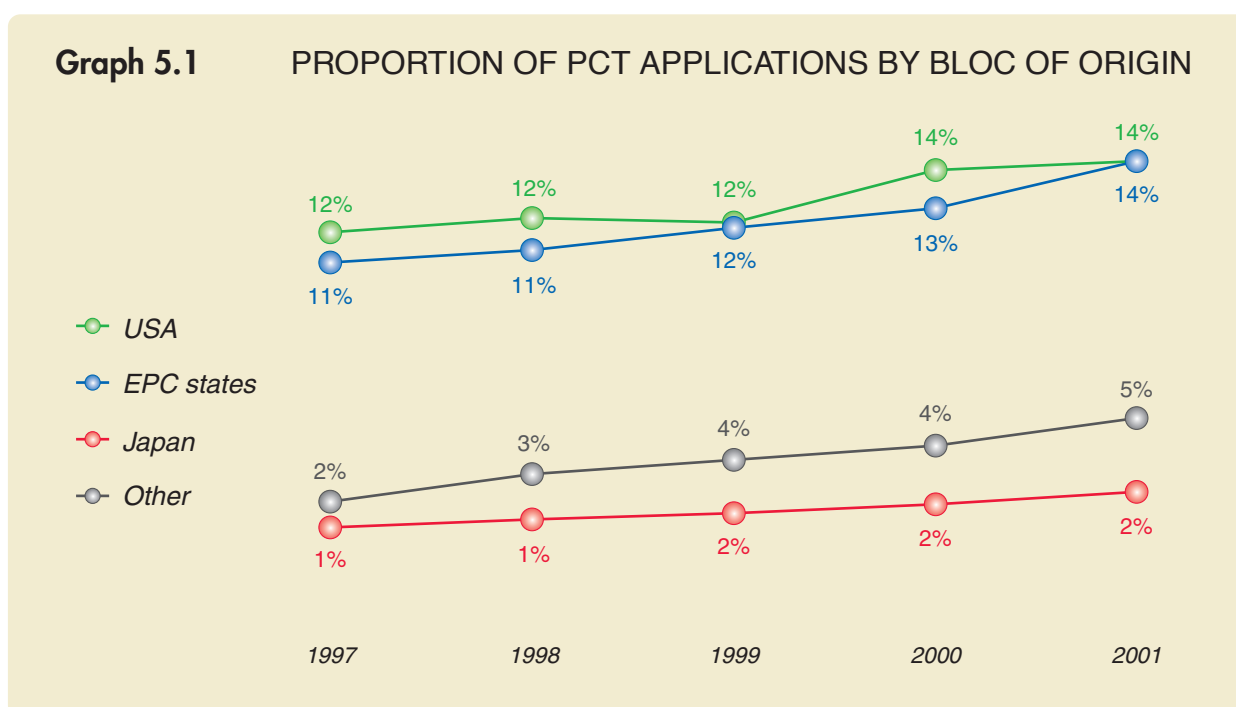
## Chapter 5

# USE OF THE PATENT COOPERATION TREATY

This chapter explains the role of the PCT route in patent-related activities as well as its importance to the Trilateral Offices. In reference to statistical graphs appearing in Chapters 3 and 4, the share of applications using the PCT route is outlined.

## THE PCT AS A FILING ROUTE

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

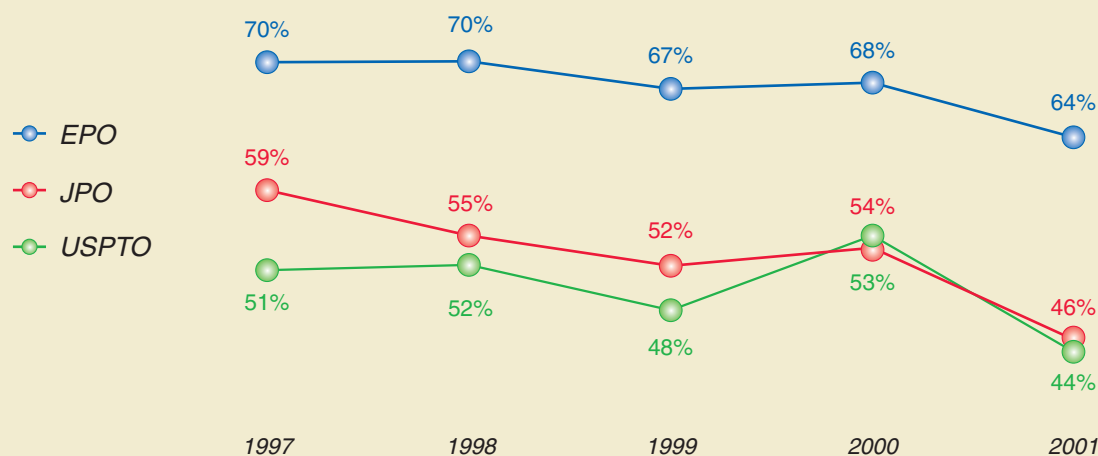


## PCT APPLICATIONS ENTERING THE NATIONAL / REGIONAL STAGE

After the international phase of the PCT procedure, applicants have to decide whether their applications are maintained in each of the national/regional procedure of the PCT contracting states they had designated. In the EPC contracting states, this can be either in 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 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.

**Graph 5.2** PCT APPLICATIONS ENTERING THE NATIONAL/REGIONAL PROCEDURE

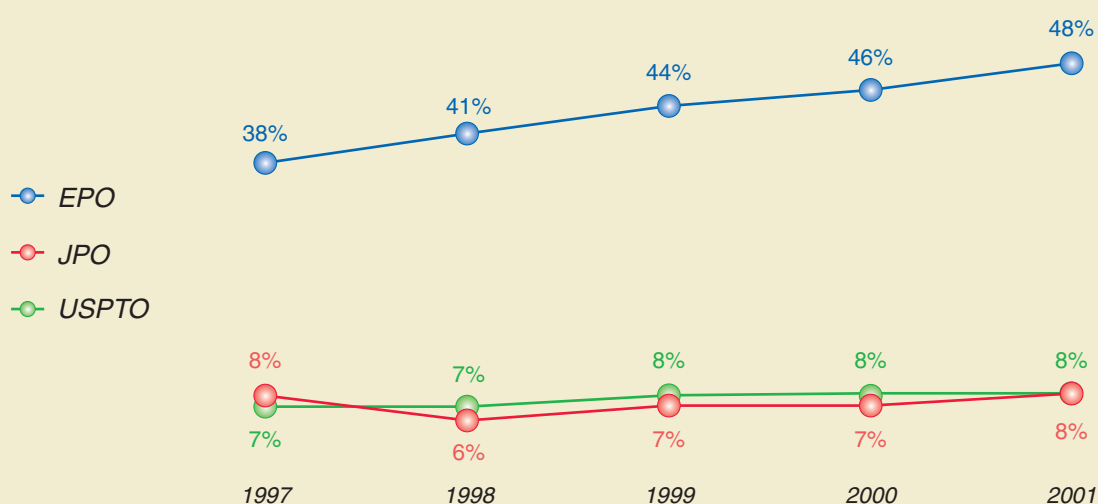


The rate of patent applications entering the national/regional phase decreased among the Trilateral Offices in 2001. Comparing 2000 to 2001, the rate at the EPO decreased from 68% to 64%, that at the JPO from 53% to 46%, and that of the USPTO from 54% to 44%.

## PCT APPLICATIONS AT THE TRILATERAL OFFICES

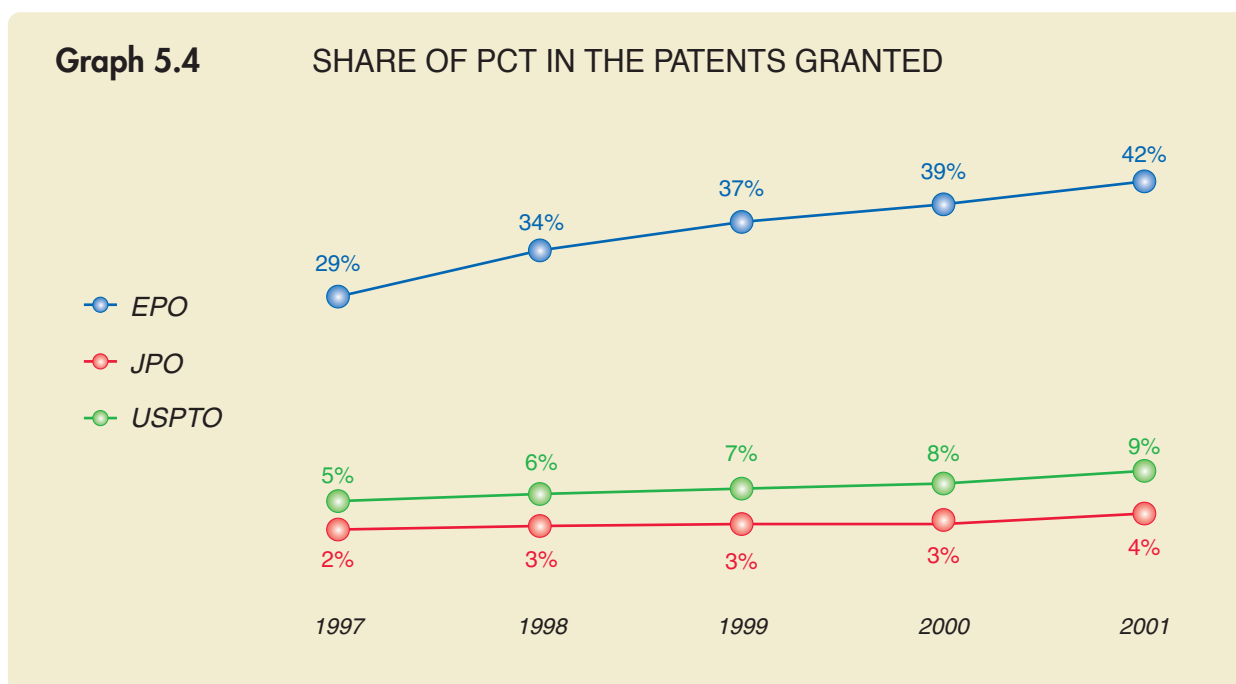
Graph 5.3 shows the proportions of PCT applications within the overall applications at each Trilateral Office. As in Chapter 4, only PCT applications entering the national/regional phase are taken into account. The proportions of PCT are increasing at all offices (except at the USPTO since 2000). The 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.

**Graph 5.3** SHARE OF PCT IN PATENT APPLICATIONS



## PCT GRANTS BY TRILATERAL OFFICES

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



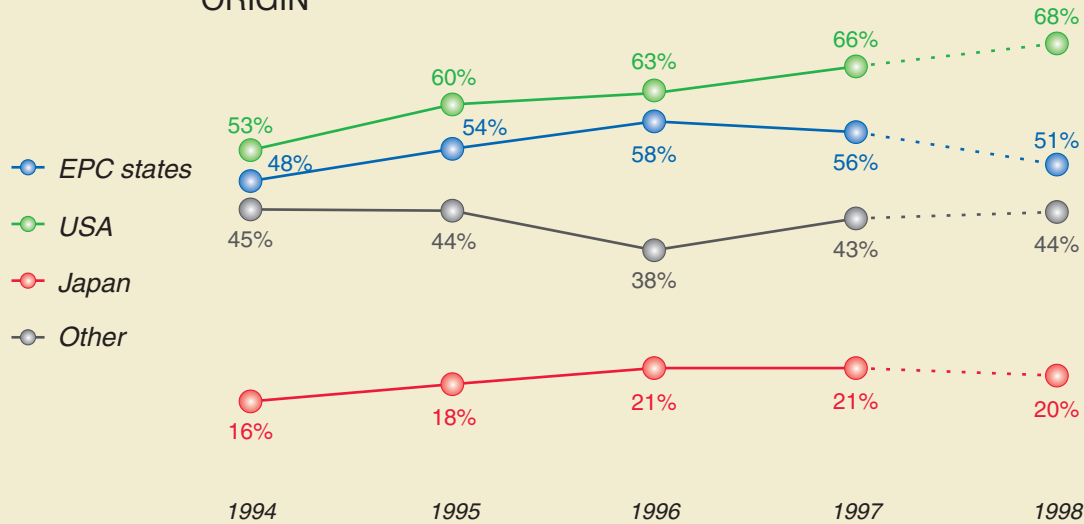
The EPO, which has witnessed an increase in applications using the PCT route, has also seen a rise in the share of PCT applications among all applications granted patent registration. On the other hand, in the same manner as the share of applications using the PCT route, at the USPTO and JPO there has 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 1998 are provisional.

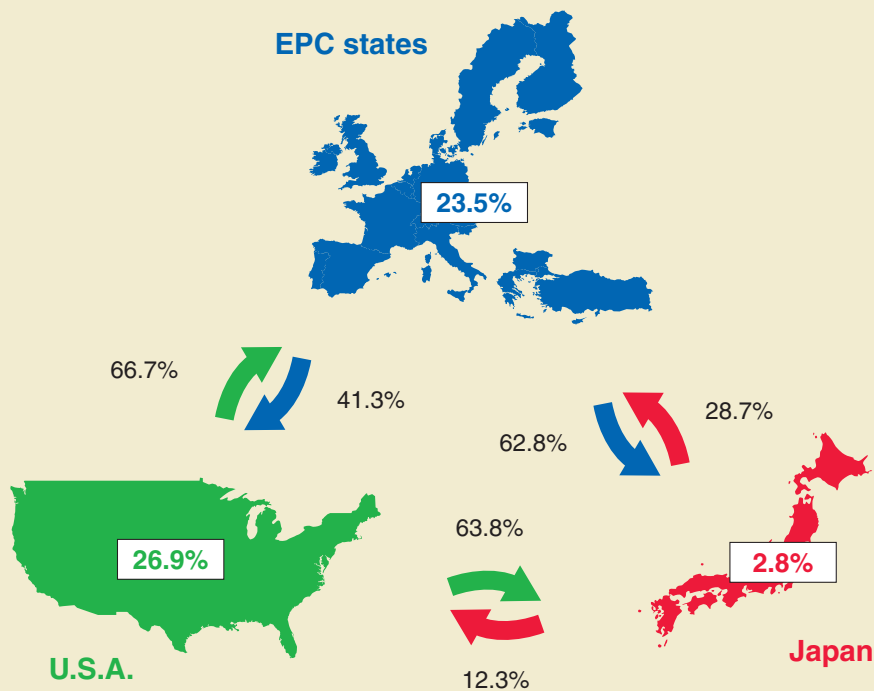
**Graph 5.5** TRILATERAL FAMILIES USING THE PCT ROUTE BY BLOC OF ORIGIN



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, except for a slight decline for EPC states in 1997 and a dip for other countries with a minimum in 1996. In 1997, 47.9% Trilateral patent families made some use of the PCT system. About 66% of Trilateral patent families originating from the USA and about 56% of Trilateral patent families originating from EPC contracting states involved PCT applications. This compares to about 21% from Japan and about 43% 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.

**Graph 5.6** PROPORTION OF 1998 BASED FAMILIES INVOLVING THE PCT



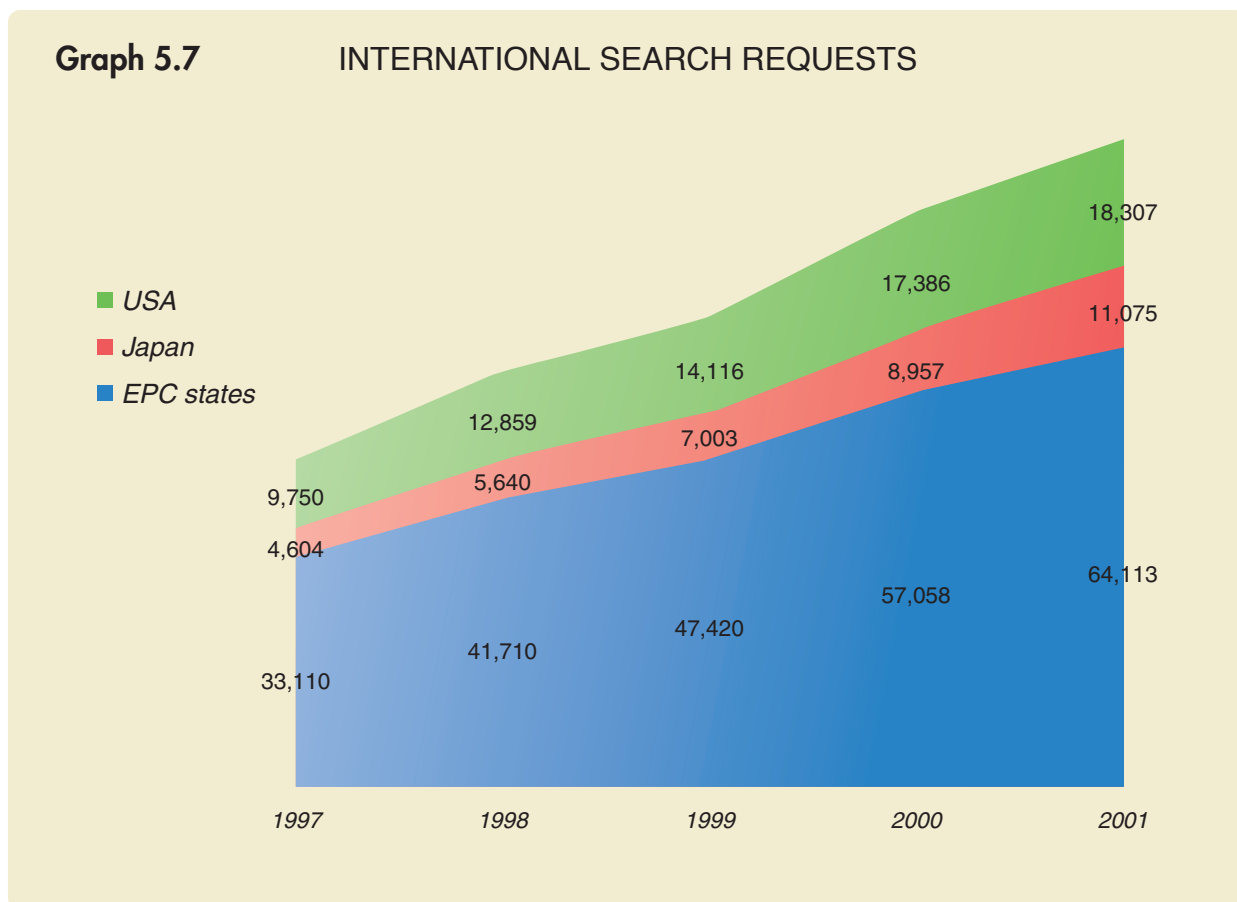
The percentage given in the centre of each bloc is the share of distinct referenced priorities for the bloc that generated families using the PCT route. This is an indicator of the share of the total first filings in the bloc that led to the use of the PCT system.

Out of all first filings in the Trilateral area in 1998, 12.8% 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, 44.0% made some use of the PCT system. However, when considered by the bloc of the priority applications, the proportions varied widely (52.4% from EPC contracting states, 19.5% from Japan, 63.8% 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 (51.7% in EPC contracting states, 63.3% in Japan, 24.2% 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.

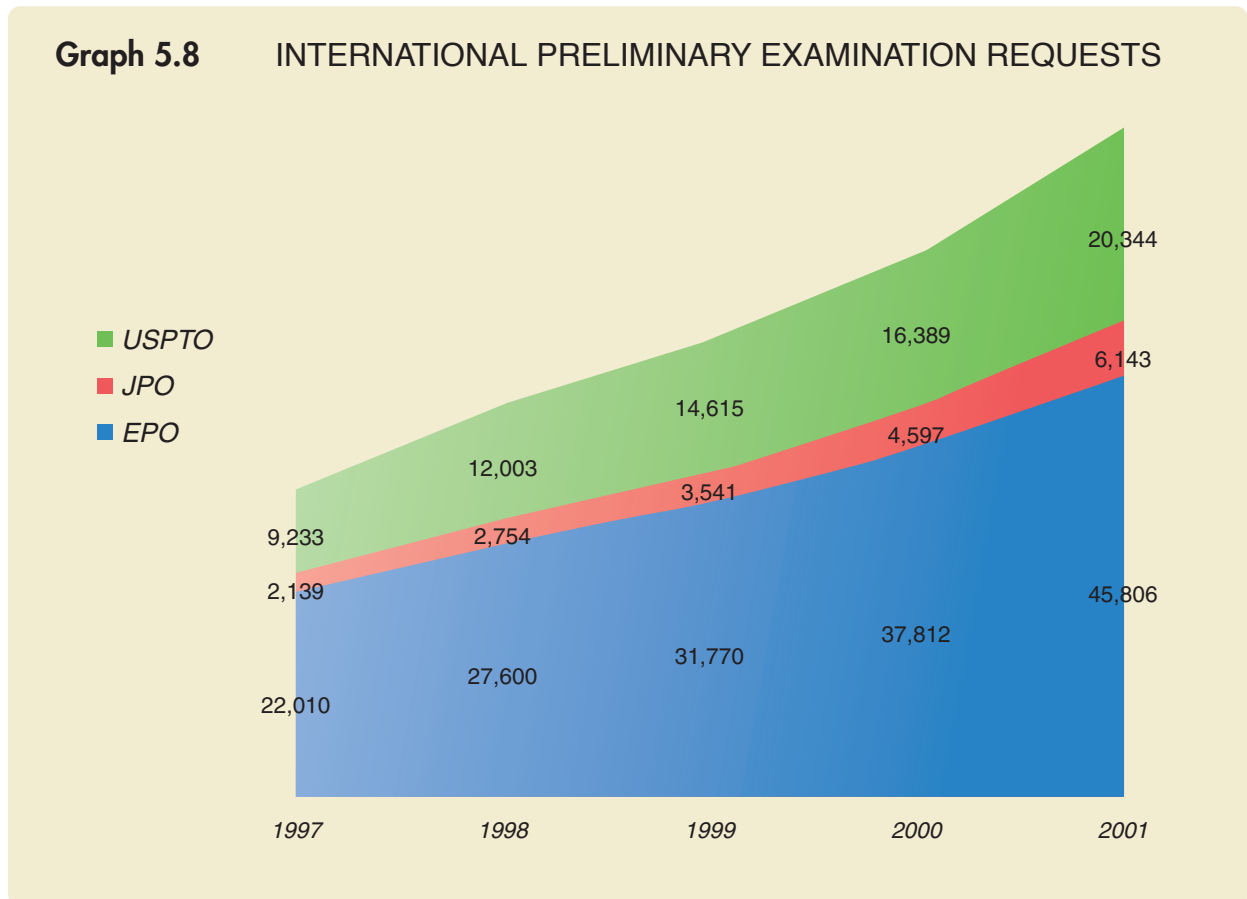
## THE TRILATERAL OFFICES AS PCT AUTHORITIES

Graphs 5.7 and 5.8 indicate the numbers of international searches and the numbers of preliminary examinations requested to the EPO, USPTO, and JPO in their quality of International Searching Authority (ISA) and International Preliminary Examination Authority (IPEA) under the PCT. There was a rapidly increasing awareness and use of both.





The EPO received 64,113 international search requests in 2001, followed by the USPTO at 18,307 and the JPO at 11,075. The number of such requests filed to the Trilateral Offices increased in the five total years between 1997 and 2001. Although the JPO received the lowest number of international search requests in 2001, from 1997 to 2001 it saw the largest increase in this area, with a rise of 250%.



There has also been a substantial increase in the number of international preliminary examination requests received by the Trilateral Offices. The EPO received 45,806 requests in 2001, followed by the USPTO with 20,344 and the JPO with 6,143.

## 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, design patent 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 these types of other work are shown in the table below for 2001 and 2002.

**Table 6: STATISTICS ON OTHER WORK**

<b>Activities</b>	<i>Year</i>	EPO	JPO	USPTO
Searches for National Offices/Third Parties	<i>2001</i>	18,480	—	—
	<i>2002</i>	16,940	—	—
Design Patent Applications	<i>2001</i>	—	39,423	18,820
	<i>2002</i>	—	37,230	20,904
Utility Model Patents Applications	<i>2001</i>	—	8,806	—
	<i>2002</i>	—	8,603	—
Plant Applications	<i>2001</i>	—	—	944
	<i>2002</i>	—	—	1,144
Re-Issue Applications	<i>2001</i>	—	—	823
	<i>2002</i>	—	—	982
Trademark Applications	<i>2001</i>	—	123,754	294,358
	<i>2002</i>	—	117,406	264,053

## **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 not later than 6 months after publication of the search, the rate for 2002 relates to applications mainly filed in the years 2001 and 2002.

Since the JPO has allowed a three-year period to file a request for examination since October 01, 2001 but a seven-year period before that, the rate for the JPO in 2002 relates to applications filed since 1995.

### **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 grant rate given for the USPTO includes plant patents and re-issue patents in addition to utility patents. However, since utility patents comprise over 99% of patent applications, and over 99% 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 for 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.

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

## **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 Office, 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 Japan Patent Office (JPO), the European Patent Office (EPO) and the United States Patent and Trademark Office (USPTO) would appreciate receiving your answers to the following questions. Your comments will contribute to enhance further the content of future editions of the Trilateral Statistical Report (TSR). This questionnaire can also be found under: [www.jpo.go.jp/torikumi\\_e/kokusai\\_e/tws/sr.htm](http://www.jpo.go.jp/torikumi_e/kokusai_e/tws/sr.htm). from where it can be returned automatically.

Please cross 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 organisation is active in  *Industry*  
 *Services*  
 *Government*  
 *Intergovernmental organisations*  
 *Research*  
 *Education*  
 *Other: \_\_\_\_\_*
  
5. I am resident of: \_\_\_\_\_
  
6. I or my organisation has already  *no*  
applied for patents?  *yes, at the EPO*  
If Yes where?  *at the JPO*  
 *at the USPTO*  
 *elsewhere*
  
7. I have the following comments regarding the content and the presentation of the report:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Once completed, please return this form to:

Ms Akemi TOKAI  
Japan Patent Office (JPO)  
3-4-3 Kasumigaseki, Chiyoda-ku, Tokyo 100-8915. JAPAN  
Facsimile (+81) 3 3581 0762  
E-mail: tokai-akemi@jpo.go.jp

