

Trilateral Statistical Report

2005 edition

PREFACE

Since the early 1980s, three key intellectual property offices in Asia, Europe and North America have combined their efforts to better understand and harmonize procedures and activities with respect to patent protection. Collaboration among the European Patent Office (EPO), the Japan Patent Office (JPO), and the United States Patent and Trademark Office (USPTO), has led to many accomplishments, especially in the area of patent statistics. The three offices, which are commonly referred to as the Trilateral Offices in the patent community, have once again jointly produced the Trilateral Statistical Report (TSR).

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

Applications for patent rights among the Trilateral Offices increased again in calendar year 2005. Together the Trilateral Offices recorded a 4.7 percent increase in patent applications compared to 2004. The USPTO experienced the highest percentage growth in 2005, with total patent application filings increasing by 9.5 percent from 2004 levels. At the EPO, patent application filings increased by 4.0 percent. Total patent application filings at the JPO increased by 0.9 percent. As expected, most filings were of domestic origin at each office, with the proportions ranging from 50 percent at the EPO to 86 percent at the JPO. In terms of fields of technologies, as defined by International Patent Classification, physics-related technologies represented the highest share at each office, and textiles and paper technologies represented the lowest. The offices granted a combined total of 320 009 patents in 2005, which is 7.8 percent below the 347 212 patents granted in 2004.

There are a variety of factors that have influenced patent filing trends in the past. These include changes to patent fees and rules. For example, the supranational systems such as the EPC and the PCT where applicants have to choose those countries for which they intend to seek patent protection, have changed by steps to a full open option system allowing applicants to delay their decisions on the targeted markets. The average numbers of designated countries per application in these systems has increased over the recent years. This led progressively to a higher level of demand for patent rights. In 2004, the last constraint on designation choices in the PCT system was lifted and, unless applicants decide otherwise, all PCT member countries are automatically designated at the outset. This gives the applicants a completely open option to obtain patent protection in many more countries. The set of countries that is chosen still tends to be restricted later on when applicants have to formalise their geographical choice by paying designation fees and/or entering the national/regional phases of the granting procedure.

Economic activity is often also cited as a key factor on patenting levels. However, interpreting worldwide patenting activity in terms of economic factors is not an exact science. Other important factors, such as political and technological considerations, also need to be considered. With this understanding in mind, a brief overview of recent economic activity follows.

Once again, the global economy expanded in 2005, and it has gained momentum. Business and consumer confidence continued to strengthen, and investment growth improved in almost all regions. According to the International Monetary Fund (IMF), world output in calendar year 2005 increased by

4.9 percent over 2004 levels. The growth rate in 2004 was also healthy at a 5.3 percent annual rate.

This calendar year (2006), global economic activity continues to remain positive¹. European countries are expected to grow more than in the recent past. Output in the Euro area should pick up to about 2.4 percent this year as compared to 1.3 percent in 2005. Growth in Asia will continue to be significant, especially in China and India where growth rates are expected to be 10.0 percent and 8.3 percent respectively, while Japan appears to be in a recovery phase although growth is more moderate there. In the United States, the economic outlook also remains positive with a growth rate of 3.4 percent expected by the end of 2006. World output is expected to increase at a rate of 5.1 percent in 2006. Overall, the economic outlook is expected to be positive despite ongoing risks, such as the surge in oil prices that may have peaked out during the summer months but can always be subject to further shocks.

There are many other factors that should be considered when examining patenting trends. In particular, measures of resources allocated to innovation-related activities and the perception of intellectual property in general are important factors. Research and development expenditures are often cited as a key measure of innovation. On a global scale, R&D expenditures have continued to trend upwards, but still at slower pace. 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 attracting new capital. With a greater emphasis on patenting, there is an expectation that demand will follow.

Strongly developing countries such as China and India record large growth rate increases in domestic patent filings. 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). This goes together with a tendency to harmonize patent laws towards common international standards and stimulates further the flow of patent applications across borders. All of these factors contribute to worldwide patent growth from year to year.

The Trilateral Offices hope that this report brings useful information to the reader. The offices will continue to improve and to refine the report to better serve expectations and objectives of the public. This report is also available on the web sites of the Trilateral Offices, as listed on the back cover, and at the [Trilateral Co-operation web site](http://www.trilateral.net/tsr/)². An additional Annex appears in the web version that gives data from the report over several additional previous years.

Trilateral Statistical Report 2005 Edition
Jointly produced by EPO, JPO, and USPTO
With co-operation of WIPO

October 2006

¹ All economic data from the IMF World Economic Outlook Database as of September 2006.

² <http://www.trilateral.net/tsr/>

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Chapter 1

INTRODUCTION

DEFINITIONS OF TERMS

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

- Patents of invention,
- Utility model patents,
- Industrial design patents,
- Trademarks, and
- Copyrights.

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

Despite the existence of regional and international procedures, patent rights do differ between countries. One reason is that patent law varies from country to 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, consisting of:
 - **regional** procedures (for example the European or the African Intellectual Property Organization), and the
 - **international** Patent Cooperation Treaty procedure (PCT).

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

Statistics are presented in accordance with the following definitions:

- Four geographical blocs are defined. The **European Patent Convention (EPC) contracting states**² (corresponding to the territory of all the states party to the EPC at the end of the reporting year), **Japan**, the **USA** and the rest of the world referred to as the bloc "**Others**".
- Demand for patent protection is considered principally by 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.

² Referred as "**EPC States**" in the graphs.

- 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 filings³, and that PCT filings are subsequent filings.
- **Grants** are reported as recorded by the WIPO in its Industrial Property Statistics series⁴. They are counted in the year they are issued or published.
- 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 the set of aggregated domestic national filings added to first filings at the EPO. **Trilateral patent families** are a filtered subset of patent families for which there is evidence of patenting activity in all trilateral blocs. Other types of filters can be applied to select patent families of high importance. For example, the subset of Trilateral patent families known as “Triadic patent families” that are currently reported in OECD publications. These require achievement of an application to the JPO and the EPO itself rather than to any patent office in the EPC contracting states. They also require that there be a grant at the USPTO rather than only an application there.

Further definitions for statistics on procedures are given in Annex 2.

Chapter 2

In this chapter, a summary of the recent developments in the Trilateral Offices is presented. Further information on budget item definitions is given in Annex 1.

Chapter 3

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

³ 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. In the section on patent families, data are available on first filings as those that do not quote the priority of other filings.

⁴ WIPO's Industrial Property Statistics are available at <http://www.wipo.int/ipstats/en/statistics/patents/index.html>

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

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

Chapter 4

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

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

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

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

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

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

Chapter 5

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

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

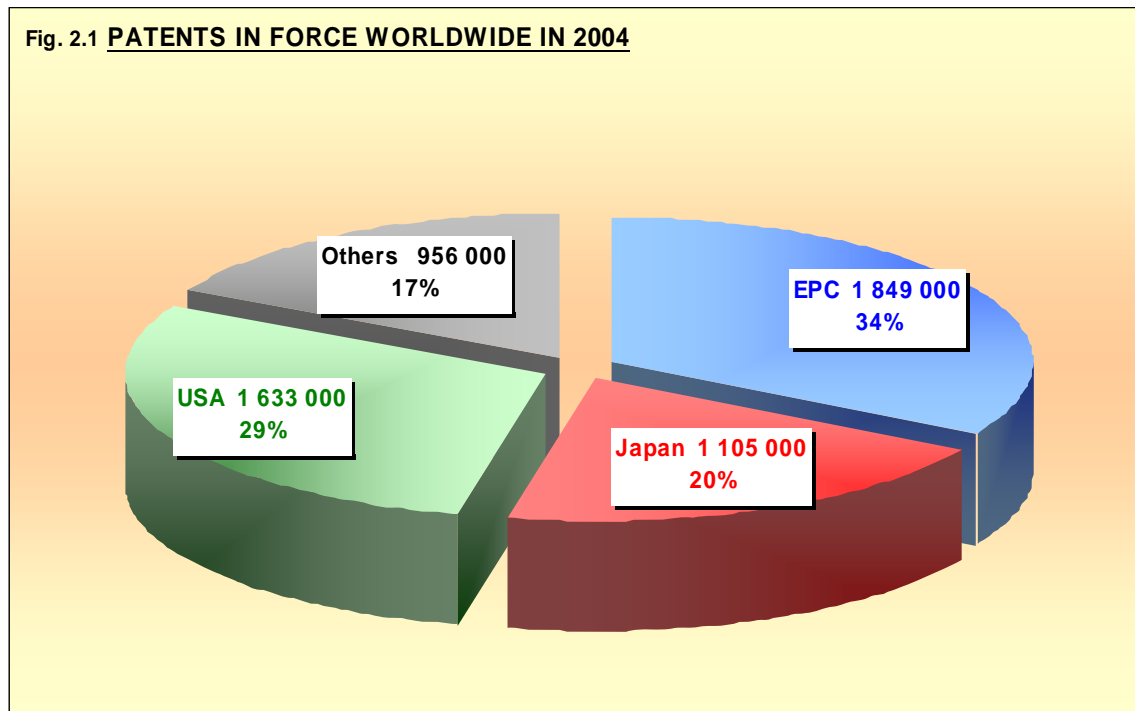
Chapter 6

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

Chapter 2

THE TRILATERAL OFFICES

Patent rights are well used throughout the world. The most recent information on worldwide patent rights is available from the 2004 WIPO Industrial Property Statistics. At the end of the year 2004, a total of 5.5 million patents were in force. The EPC contracting states, the JPO and the USPTO, together cover about 83% of the total patents worldwide. In the EPC contracting states, patents are granted either by the national offices or by the EPO.



EUROPEAN PATENT OFFICE

The European Patent Office (EPO), the main patent granting authority for Europe, represents a good example of economic and political cooperation, providing patent protection in up to 36 European countries on the basis of a single patent application and a unitary grant procedure. The EPO currently receives about twice as many patent filings as it did in 1996.

The Organization continues to expand. In 2005 the European Patent Convention entered into force in Latvia, which so became the 31st EPC Contracting state. By the end of the year, the members of the underlying European Patent Organization were:

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

Other states have agreements with the EPO to allow applicants to request an extension of European patents to their territory. No new such agreements entered recently into force. At the end of 2005, extensions of European patent could be requested for:

Albania, Bosnia-Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, and Serbia and Montenegro.

Together, the above states build a market of about 590 million people.

Some other states that have expressed recently their intention to join the Organisation are Norway, Malta and Croatia.

Grant Procedure

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

To keep pace with the higher demand for its services, the Office continued with its internal adjustments. With the completed deployment of the BEST⁵ project, a number of changes have been made to the grant procedure to speed up patenting without sacrificing quality.

Since July 2005, all applications entering the European granting procedure are subject to an extended European search. Considering the success of the project when used for first filings, the EPO decided to expand the new process to all applications. The search report is now supplemented with the first substantive examination communication. This gives the applicants added value on the top of the

⁵ Bringing Examination and Search Together

search report and enables earlier risk management.

A new comprehensive quality management system was introduced at the EPO in 2005. By having implications at every stage of the procedure, as well as on training and equipment provided to examiners and including internal auditing of granted patents, the system aims at establishing a quality standard to reinforce the innovation support function of the EPO.

The EPO launched a "Scenario Project" to prepare its future, in order to realign if and where necessary the patent system and its significance in the years to come. The project is based on a series of interviews with different partners such as patent system users, experts and critics around the world to gather enough material to establish meaningful scenarios for the future development of the patent system. Results are expected to be presented in 2007.

Table 2.1: PRODUCTION INFORMATION EPO

PRODUCTION FIGURES	2004	2005
Filings		
Total Euro-direct & Euro-PCT international phase	180 662	193 623
Total Euro-direct & Euro-PCT regional phase	123 775	128 679
Searches carried out		
European searches (Euro & Euro-PCT supplementary)	77 984	74 068
PCT international searches	65 898	69 722
Searches on behalf of national offices and other searches	21 964	19 354
Total production search	165 846	163 144
Examination: final actions performed		
European examination	76 328	84 026
PCT Chapter II	27 805	17 975
Opposition (final action)	1 979	2 331
Total final actions examination / opposition	106 112	104 332
Appeals settled		
Technical appeals	1 369	1 395
PCT protests	32	37
Other appeals	50	50
Total decisions	1 451	1 482

In Table 2.1, the latest production figures for search (European, PCT and national searches), for examination (European and PCT Ch. II), for opposition and for appeal in the European procedure are given for the years 2004 and 2005.

In 2005, the Office production in search decreased by 2% to about 163 100 completed searches. While the examination work under the PCT has been further reduced, the number of final actions in European examination increased by 10% to 84 000. In 2005, 1 480 decisions in appeal were completed (2% more than in 2004).

Documentation

The Office further improved the range and quality of its databases and online search tools. The EPO documentation database grew further in 2005. The electronically searchable EPO database contains more than 53 million patent documents. The non-patent literature now contains 62 million searchable abstracts. New databases were acquired in the fields of telecommunication standards and traditional knowledge. Special efforts helped to give users access to 1.3 million Chinese patent documents.

The EPO citation database currently contains 14 million references relating to 5 million applications or publications.

In 2005, a total of 236 million documents were viewed from EPOQUE, a rise of 25% over 2004.

The EPO's in-house classification system (ECLA⁶) is an expanded form of the IPC⁷. With 130 000 subclasses, it allows for fast and systematic access to the search documentation available in each technical field. The ECLA system is also used in esp@cenet, the free Internet service to access patent documents. A major activity in 2005 was the implementation of the IPC reform in the EPO's tool to make it ready for the new IPC to enter into force at the beginning of 2006.

The electronic filing tool epoline[®] made available by the EPO received a growing response from the users. About 23% of European applications were made using the online-filing offered within epoline[®].

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 EPIDOS⁸. These 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 (PATLIB⁹) is one of the key elements for 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.

On 1 April 2005, the European Publication Server became the official vehicle for the publication of European patent documents. This allows free publication of all European patent applications and patents on the Internet to replace the paper versions. The paper version of the European patent bulletin was discontinued at the end of 2004 and is replaced by the Internet version.

On 1 January 2005, the European Patent Academy opened its doors. In partnership with the IP offices of the member states, it will support the development and harmonization of patent-related intellectual property law and practice in the EPC contracting states by improving IP-related training and education structures in Europe.

The 2005 Patent Information Conference was held in Budapest in November in parallel with the European Commission's PATINOVA conference. Some 630 delegates and 40 exhibitors attended this

⁶ EPO CLAssification

⁷ International Patent Classification. See www.wipo.int/classifications/ipc/en/preface.htm

⁸ European Patent Information and DOcumentation Services - formerly INPADOC

⁹ PATent LIBrary

joint event. The 2005 PATLIB conference took place in Romania in May. Co-organized with the Romanian Patent Office, it attracted 450 participants from 39 countries. The “Far East meets West” meeting was organised in Vienna, where patent information experts from Japan, China and Korea met with European patent users.

Among other events, an International Conference on “Intellectual property as an economic asset” was held in Berlin in June 2005 in cooperation with the OECD and the German Economics and Labour Ministry.

Technical Cooperation

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

During 2005, substantial progress was made on the EPTOS¹⁰ tool box. This system will soon provide the National Offices with a complete set of automation tools to manage their business of Patents, Trademarks and other types of Industrial Property.

In 2005, various technical projects were conducted in cooperation with the European Commission, the WIPO, the OHIM¹¹ and national local authorities. Such activities were held in Ukraine, Croatia, Serbia and Montenegro. They aim at supporting the development of the local IP infra-structure and at fostering patent awareness in the countries.

In the context of the EC-ASEAN IP cooperation programme, the EPO contributed to the organization of seminars and workshops on geographical indication protection, IPR border control and IPC enforcement.

The annual joint committee meeting between the EPO and the Chinese Office (SIPO) agreed on the 2006 bilateral action plan, providing for the transition from a technical cooperation to a strategic partnership.

In cooperation with the WIPO and the French Office (INPI), a regional training centre for the African supranational Office OAPI was officially opened in Cameroon. The EPO agreed with the Egyptian Patent Office to set up a Patent Information Centre in Alexandria, and in cooperation with the WIPO to establish an IP training centre in Egypt.

¹⁰ Electronic Patent and Trademark Office System

¹¹ Office of Harmonization for the Internal Market

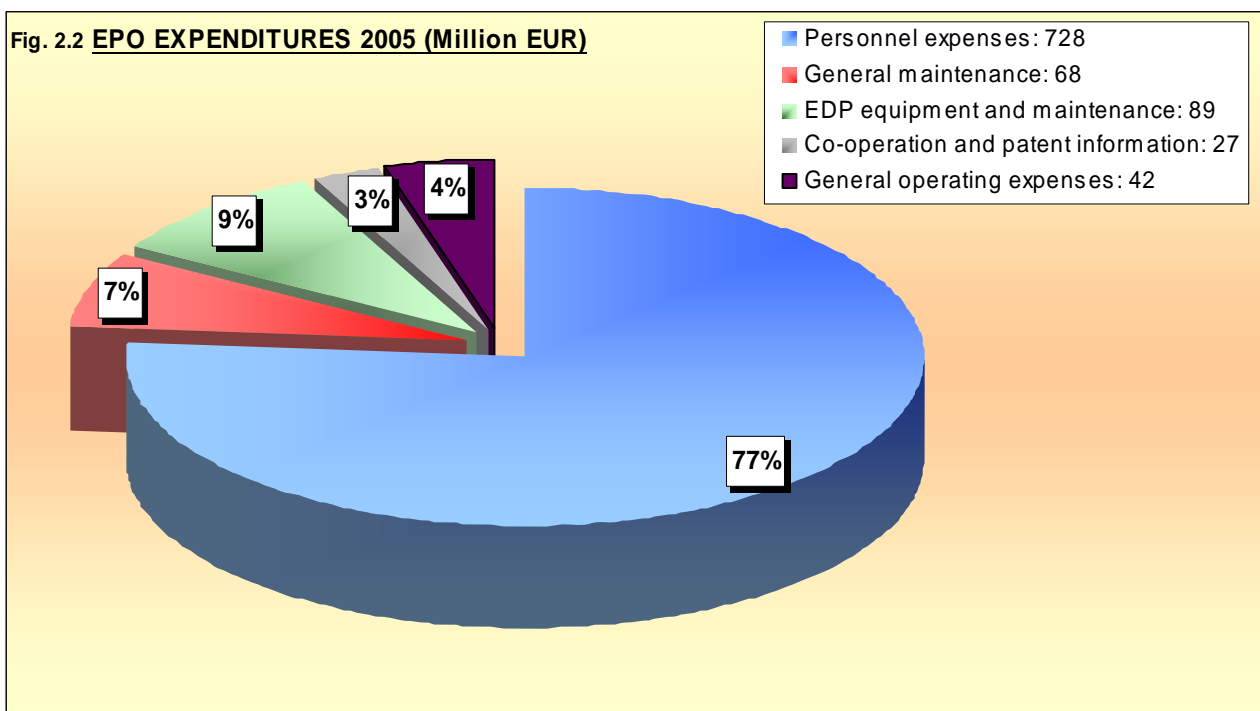
EPO's budget

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 in later years. 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 2005 (excluding investments) was EUR 953 million. This breaks down into EUR 728 million (77%) for personnel expenses, EUR 68 million (7%) for general maintenance (including depreciation), EUR 89 million (9%) for EDP equipment and maintenance (including depreciation), EUR 26 million (3%) for patent information and cooperation with the contracting states and EUR 42 million (4%) for general operating expenses.

Total income to the EPO in 2005 amounted to EUR 1 005 million.

Detailed description of the budget items can be found in Annex 1.



EPO Staff Composition

During 2005, the EPO increased its number of employees by 3.4% and 200 examiners have been recruited partly to compensate for departure. By the end of the year, the staff reached a total of 6 118, including 3 449 examiners in search, examination, opposition, and 138 members of Boards of Appeal.

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

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 under the system of industrial property rights, which includes patents, utility models, designs, and trademarks.

In order to ensure sustainable growth, it is essential for Japan to establish itself as an intellectual property-based nation where the achievements of intellectual creation activities become the source of national wealth. It is necessary to establish “the intellectual creation cycle” of creation, protection and exploitation of intellectual property in order to achieve an intellectual property-based nation. To this end, the JPO, which is responsible for the core of the intellectual property administration, shall continue specific measures to establish the human and system environments that will support the adequate protection and effective exploitation of intellectual property.

Examination and appeal examination

In patent examination, the number of requests for examination has exceeded the number of first office actions for seven years since 1999. Furthermore, due to factors such as the ever-increasing examination burden due to technology becoming increasingly complex and advanced, and the number of international search reports rapidly rising, we are in a more severe examination environment than ever before. In addition, since the period to file a request for examination was shortened in October 2001, the number of requests is beginning to increase at a high rate (an increase of about 21%, from 330 000 in 2004 to 400 000 in 2005.)

Under these circumstances, the JPO has been making efforts to promote expeditious and accurate examinations through several approaches mentioned later. As a result, in 2005, the period for the first office action was 26 months on average.

The total number of requests for appeal examination in 2005 was 23 054, decreasing by 954 under the previous year.

Achieving expeditious and accurate patent examination at the highest global standard

To strengthen the examination system, the JPO has scheduled to employ 500 fixed-term examiners for 5 years since FY 2004 in addition to increasing regular examiners. The JPO has employed 98 fixed-term employees every year from FY2004 to FY2006. Also, the JPO will further promote outsourcing of prior art search to registered search agencies in the private sector.

International efforts

With the objective to expedite patent examination on a global scale and improve convenience for users, the JPO and the USPTO will commence the Patent Prosecution Highway (PPH) pilot program from July 2006 based on the discussion at the trilateral conference in 2005. The JPO will also promote the PPH plan with the Republic of Korea Office (KIPO) based on the agreement reached at the meeting between commissioners of JPO and KIPO. Furthermore, as anti-counterfeiting measures, the JPO will request the governments of infringing countries to strengthen protection of intellectual property, and will provide regulatory authorities of such countries with support for capacity building. The JPO will implement these measures proactively through close coordination between the government and private sectors and with cooperation from European countries and the United States.

Strengthening protection of designs and brands

In order to strengthen the international competitiveness of Japanese companies, it is also absolutely

necessary to support activities to increase product values with attractive designs and brands. In the “Bill for Partial Revision to the Design Act and Related Acts” submitted to the current session of the Diet, it is proposed that the term of a design right should be extended from 15 years to 20 years, trademarks used by retailers should be protected as service marks, and an act of exporting counterfeits from Japan should be regarded as infringement. Also, the JPO will make active efforts to publicize and implement the regionally based collective mark system that was put into force in April 2006 for the protection of regional brands.

Supporting local companies and SMEs

As measures for local companies and SME¹²s, the JPO will support revitalizations of local regions from the perspective of protecting and utilizing intellectual property, and also help SMEs that fall behind large companies in establishing systems for the strategic use of intellectual property. More specifically, the JPO will support “Regional Intellectual Property Strategy Headquarters” established in each regional block, and support the implementation of various projects such as holding seminars in accordance with the “Regional Intellectual Property Strategy Program” formulated by each headquarters. The JPO will also provide SMEs with support for conducting prior art search.

Developing an environment to stimulate the Intellectual Property Cycle

The JPO will promote environmental development in order to stimulate the “Intellectual Creation Cycle,” which consists of creation, protection, and utilization of intellectual property, and achieve the goal of “making Japan an Intellectual Property-Based Nation.” Via the NCIP¹³, the JPO will carry out projects to enhance the essential infrastructures to achieve the goals of “information” and “human resources,” encouraging strategic protection and utilization of intellectual property in industry through an active exchange of opinions with business executives.

Table 2.2: PRODUCTION INFORMATION JPO

PRODUCTION FIGURES	2004	2005
Applications filed		
Domestic	368 416	367 960
Foreign	54 665	59 118
Total	423 081	427 078
Grants		
Domestic	112 527	111 088
Foreign	11 665	11 856
Total	124 192	122 944
Applications in appeal	24 008	23 054
(Acceptance)	(5 728)	(5 712)

Budget

The JPO FY2005¹⁴ budget totaled approximately 117 554 million yen. The breakdown of expenditures is as follows:

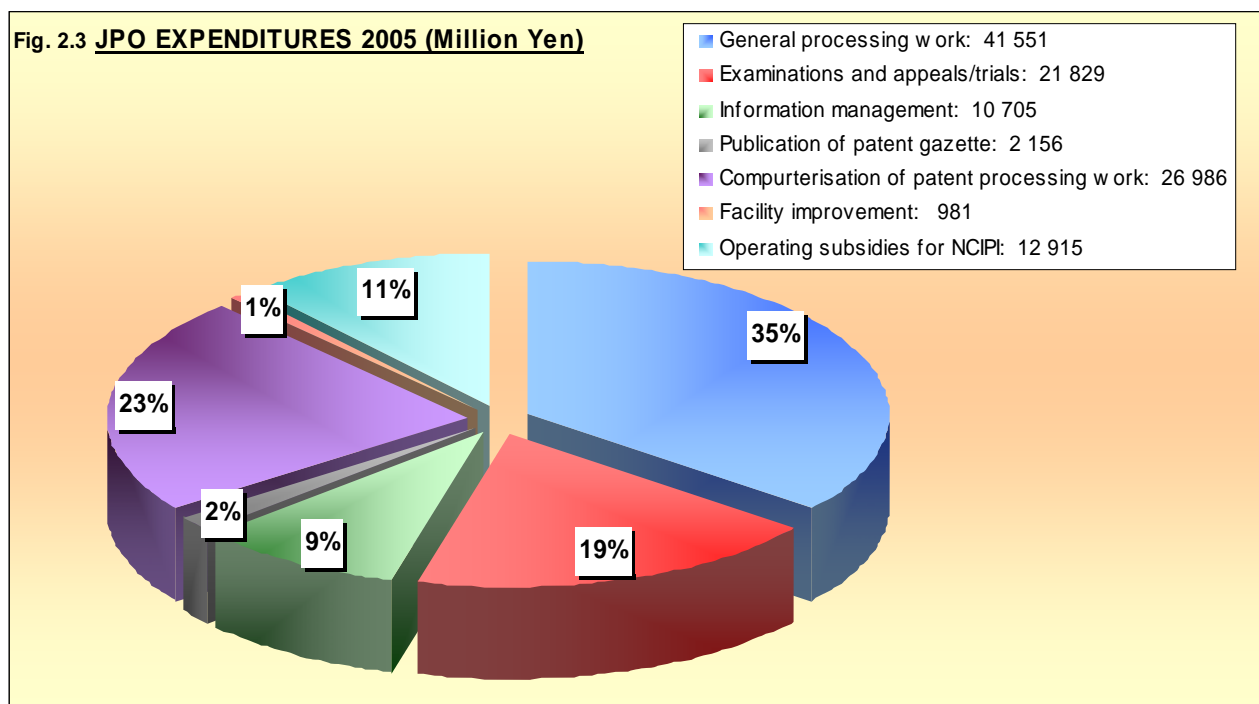
¹² Small and Medium size Enterprises

¹³ National Center for Industrial Property Information and Training

¹⁴ Period of JPO's FY2005 is from April 1, 2005 to March 31, 2006

- 41 551 million yen for general processing work (includes personnel expenses)
- (30 384 million yen for existing personnel)
- 21 829 million yen for examinations and appeals/trials, etc.
- 10 705 million yen for information management
- 2 156 million yen for publication of patent gazette, etc.
- 26 986 million yen for computerisation of patent processing work
- 981 million yen for facility improvement
- 12 915 million yen for operating for NCIPI (subsidy)
- 431 million yens for others.

Detailed description of the budget items can be found in Annex 1.



JPO Staff Composition

As of the end of FY2005, the JPO employed a total of 2 651 staff. This includes 98 new fixed-term examiners to further cut the time required for examination.

Examiners:	1 557
Patent / Utility model:	1 358
Design:	51
Trademark:	148
Appeal examiners:	389
General staff:	705

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

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

UNITED STATES PATENT AND TRADEMARK OFFICE

Mission Statement

The mission of the United States Patent and Trademark Office (USPTO) is to ensure that the intellectual property system contributes to a strong national and global economy, encourages investment in innovation, and fosters entrepreneurship. This mission is accomplished by the USPTO through its two distinct business lines, Patents and Trademarks, which embodies Intellectual Property inventions or creations and aims to:

- ❑ Promote the progress of science and the useful arts by securing, for limited times to inventors, the exclusive rights to their respective discoveries (Article 1, Section 8 of the United States Constitution).
- ❑ Provide businesses with enhanced protection of trademark rights and notices of the trademark rights claimed by others, as well as protect consumers against confusion and deception in the marketplace.
- ❑ Build the infrastructure for innovation and lead the way in creating a quality-focused, highly productive, responsive organization that supports a market-driven Intellectual Property system for the 21st Century.

Services and Operations

As an agency of the United States Department of Commerce, the primary services provided by the USPTO are examining patent and trademark applications and disseminating patent and trademark information. The USPTO encourages technological advancement by providing incentives to invent, invest in, and disclose new technology by issuing patents.

The USPTO provides valued products and services to its customers in exchange for fees that are appropriated to fund its operations. The powers and duties of the USPTO are vested in the Under Secretary of Commerce for Intellectual Property and Director of the USPTO, who consults with the Patent Public Advisory Committee and the Trademark Public Advisory Committee. The Commissioners of Patents and Trademarks act as the chief operating officers of the agency's two major business lines.

USPTO Strategic Plan

The USPTO has faced unprecedented challenges in recent years including increasingly complex technology and resource limitations. In response to customer demands for higher quality products and services and Congressional concerns about the agency's ability to continue to operate under a traditional business model, in fiscal year 2002 the USPTO implemented the 21st Century Strategic Plan. This plan also assists the USPTO in carrying out the Government Performance and Results Act (GPRA), which requires U.S. agencies to plan and measure the performance of their programs. The 21st Century Strategic Plan was updated in fiscal year 2003 and it covers the period through fiscal year 2008. The goal of the plan is to transform the USPTO into a responsive and flexible agency capable of competing in a global, market-driven economy.

With the passage of the Consolidated Appropriations Act, 2005 (P.L. 108-447) in December 2004, certain fee changes were enacted for two fiscal years with the USPTO receiving full access to its projected fee income for 2005. This allows the USPTO to move forward with many of the initiatives contained in the 21st Century Strategic Plan. The plan builds the foundation to facilitate improvements in patent and trademark quality and address increases in pendency due to the growing complexity of applications and increasing workloads. The USPTO will continue to explore all opportunities available to optimize patent and trademark quality and processing times, including working with its IP partners on worksharing initiatives, expanding and training examination staff with a focus on core examination functions, and working with customers and stakeholders on changes to processes which will aid in meeting the workload challenges it faces. Additionally, the USPTO continues to focus on increasing the number of applications and communications received and processed electronically, as well as other e-government initiatives. Strengthening worldwide protection and enforcement of intellectual property is also a priority of the USPTO, as many of its initiatives address this effort. Achievement of the USPTO's long-term goals is dependent upon permanent authorization of the revised fee schedule that was set forth in the Consolidated Appropriations Act, 2005.

Intellectual Property Protection

Throughout fiscal year 2005, strengthening intellectual property protection and enforcement was one of the main themes of USPTO efforts worldwide. Officials from the USPTO discussed ways of enhancing protection for copyrights, geographical indications, patents, trademarks, trade secrets and other forms of intellectual property in China, Brazil, Russia, Turkey, India, throughout Asia, the Middle East region, and the continent of Africa, as well as for the countries with which the United States is negotiating or has negotiated Free Trade Agreements (Thailand, Andean countries, Oman, United Arab Emirates, and the Southern Africa Customs Union).

Fiscal year 2005 marked the expansion of IP protection and enforcement programs, which included training assistance programs; special work assignments aimed at enhancing technical assistance; a public awareness campaign; and studies on key intellectual property issues. Attorney specialists from the Office of International Relations and the Office of Enforcement provided country specific review of intellectual property laws, and recommended strengthened enforcement provisions along with training of judges, prosecutors, customs officials, and intellectual property office technical staff. Broader multilateral training programs, such as the intellectual property Enforcement Academy and the Visiting Scholars Program were offered to representatives of a variety of countries throughout the year.

Piracy and counterfeiting continued as major concerns during 2005, and the USPTO has worked closely with the State Department, the Office of the United States Trade Representative, the Department of Commerce, and others on these vital issues. As part of the President's Strategy Targeting Organized Piracy! (STOP!) initiative, the USPTO worked with other U.S. government agencies on the shared goal of fighting piracy and counterfeiting. The USPTO staffed the STOP! hotline, 1-866-999-HALT, which lets callers receive information from our attorneys with regional expertise on intellectual property rights and enforcement. The STOP! gateway website, www.stopfakes.gov, features specialized information, including USPTO-designed "intellectual property toolkits" to help businesses protect their rights in other countries, such as China, Korea, and Mexico. The USPTO will continue to work with other countries to build a consensus and protect America's IP community.

Table 2.3: PRODUCTION INFORMATION USPTO

PRODUCTION FIGURES	2004		2005	
Applications Filed¹⁵	356 943		390 733	
First Actions¹⁶	288 530		302 659	
Grants				
U.S. Residents	84 271	51%	74 637	52%
Foreign	80 022	49%	69 169	48%
Japan	35 350	22%	30 341	21%
EPC states	26 246	16%	22 182	15%
Others	18 426	11%	16 646	12%
Total	164 293	100%	143 806	100%
PCT Chapter II	17 030		11 427	
Applications in appeal and interference proceedings				
Ex-parte Appeal Contested	2 387		2 973	
Ex-parte Appeal Disposed	3 355		2 888	
Inter-partes Appeal Contested	70		109	
Inter-partes Appeal Disposed	99		106	
Patent Cases in Litigation				
Cases filed	66		51	
Cases disposed	61		55	
Pending cases (end of calendar year)	42		42	

USPTO's budget

In calendar year 2005, USPTO expenditures reached \$1.5 billion. USPTO expenditures are divided into seven major categories: salaries and benefits, equipment, rent and utilities, printing, supplies and materials, contracts/services, and all other expenses.

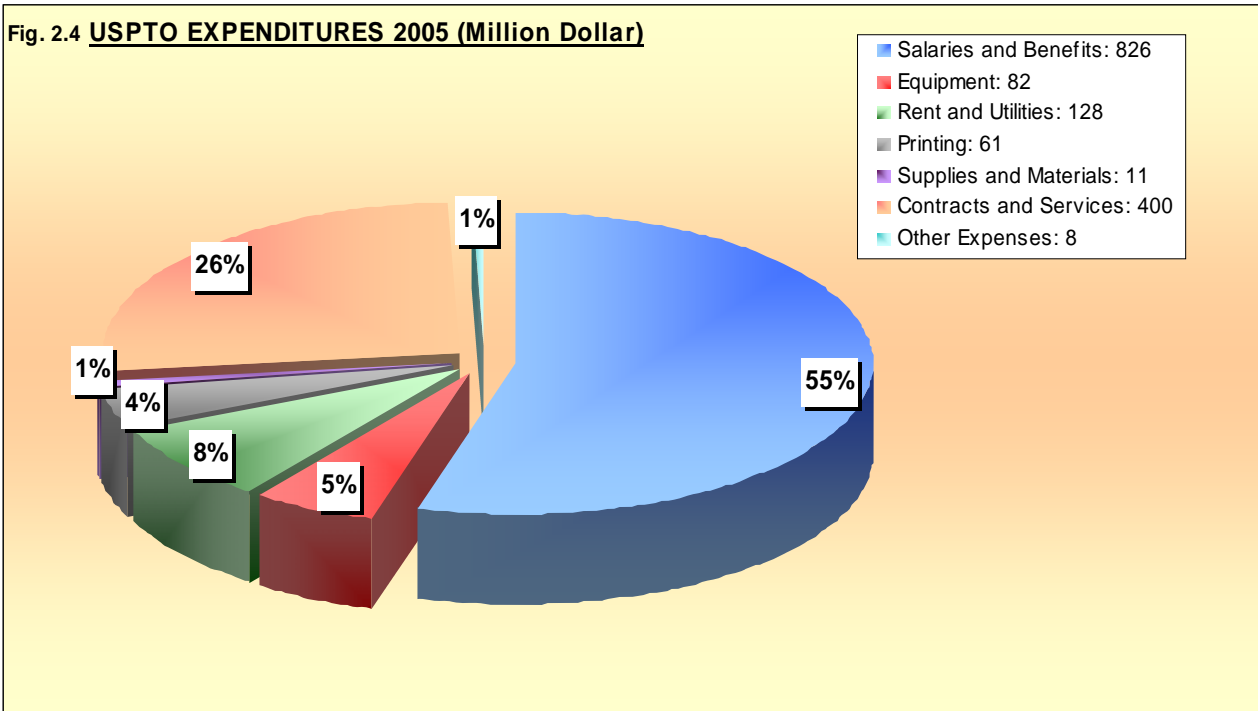
The majority of expenditures in 2005 were attributed to the USPTO's labor force. Salaries and benefits accounted for 54.5 percent of overall expenditures, or about \$826 million. Contracts and services were the second major expenditure, which represented about 26.4 percent of expenditures. Rent and utilities were the third largest at 8.4 percent. A breakdown of all the major spending categories is shown in Fig. 2.4.

Detailed description of the budget items can be found in Annex 1.

¹⁵ For utility patents only

¹⁶ Utility, plant, and reissue patents

Fig. 2.4 **USPTO EXPENDITURES 2005 (Million Dollar)**



USPTO Staff Composition

In fiscal year¹⁷ 2005, the total staff at the USPTO was 7 363. The Patent staff total was 5 699. This total was comprised of 4 177 Utility, Plant and Reissue (UPR) examiners, 81 Design examiners, and 1 441 managerial, administrative and technical support staff. As reported in past Trilateral Statistical Reports, the Board of Patent Appeals and Interferences is no longer part of the Patent organization. It is now part of the Office of General Counsel (OGC), which has approximately 230 employees and consists of five organizations that are concerned with legal review of agency decisions, defense of agency decisions in court and administrative tribunals, internal agency legal advice, and regulation of persons practicing before the USPTO. The number of employees on the Board of Patent Appeals and Interferences decreased in 2005, and the total at the end of the year was 103.

More Information

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

<http://www.uspto.gov>

¹⁷ Period of USPTO's FY2005 is from October 1, 2004 to September 30, 2005

Chapter 3

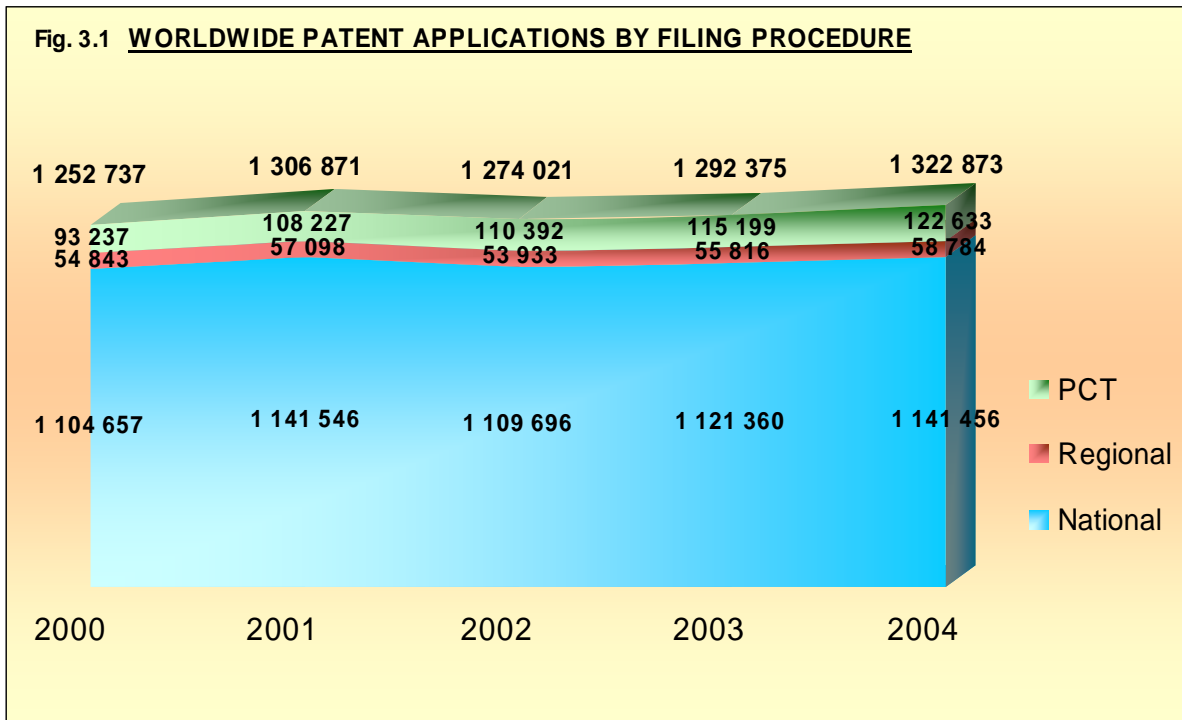
WORLDWIDE PATENTING ACTIVITY

Although the Trilateral Offices represent a significant proportion of total patents worldwide, the global picture is not complete without including the other offices from around the world. This chapter examines worldwide patent activities in terms of patent applications and grants. The statistics mostly cover a five-year period from 2000 to 2004. More current and detailed data from the Trilateral Offices are presented in Chapter 4. Comparable statistics on the usage of the PCT system appear in Chapter 5.

Applications reported hereafter are counted by the calendar year of filing and grants by the calendar year of granting.

PATENT APPLICATIONS FILED

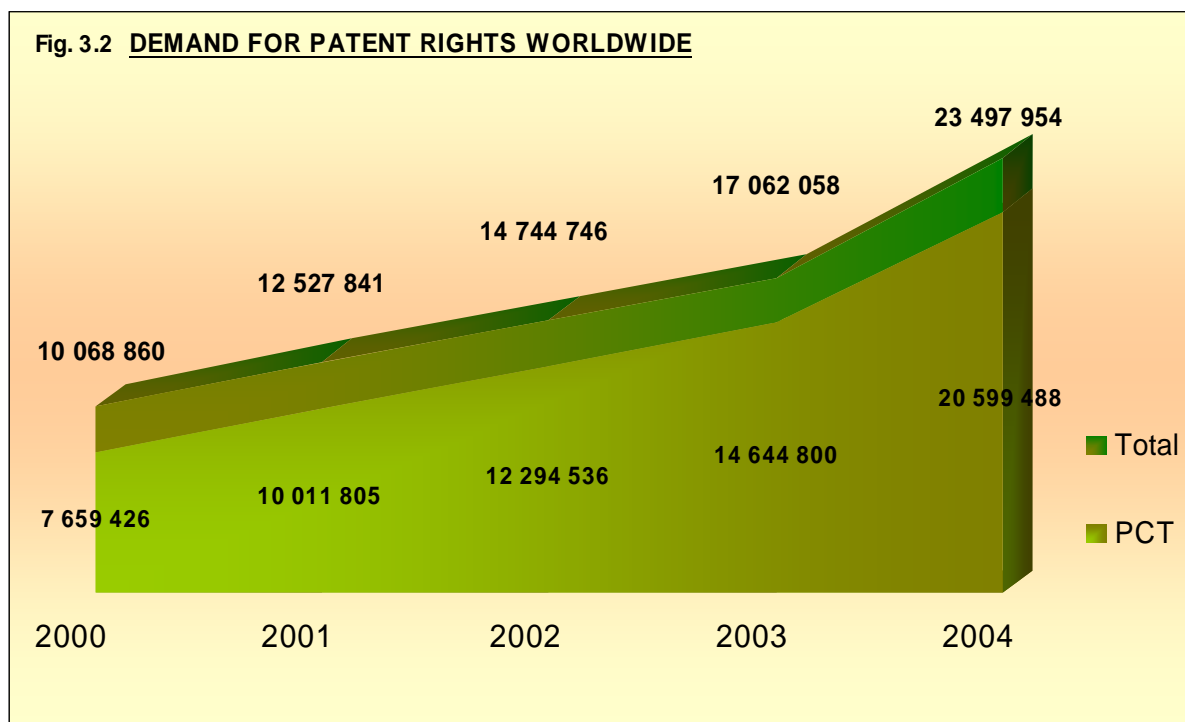
The data in Fig. 3.1 below show the numbers of applications filed all over the world.



About 1.3 million applications were filed in 2004. This represented the number of actions taken in 2004 to protect inventions around the world. This is slightly higher than during the previous years. Although most of these applications were filed according to national procedures (86% in 2004), the growth in filings is also led by the ever-increasing use of supranational systems and in particular the PCT system.

Considering that not all the offices report filing statistics on a regular basis, one should be careful in interpreting this data. It can at least be concluded that they show a continuing tendency to use the patent systems in the world and that this does not seem to decline over time.

Fig. 3.2 below shows the development of the worldwide demand for patent rights including cumulated supranational designations. This gives an indication of the number of individual patent applications that would be required if there were no supranational patent systems to obtain the same geographical coverage for inventions.



This figure contains the numbers of designations at filing in regional and international applications, as well as national filings. In January, 2004, the PCT rules were revised to introduce a "deemed all designation system", or automatic designation of all participating countries from one international application. It should be reemphasised that Fig. 3.2 represents multiple applications for sovereign rights within the distinct application events. This factor probably explains the large increase in the number of PCT designations in 2004 compared to 2003. It can also be mentioned that, even before 2004, the fee scheme for filing international applications led to many or all participating countries usually being designated.

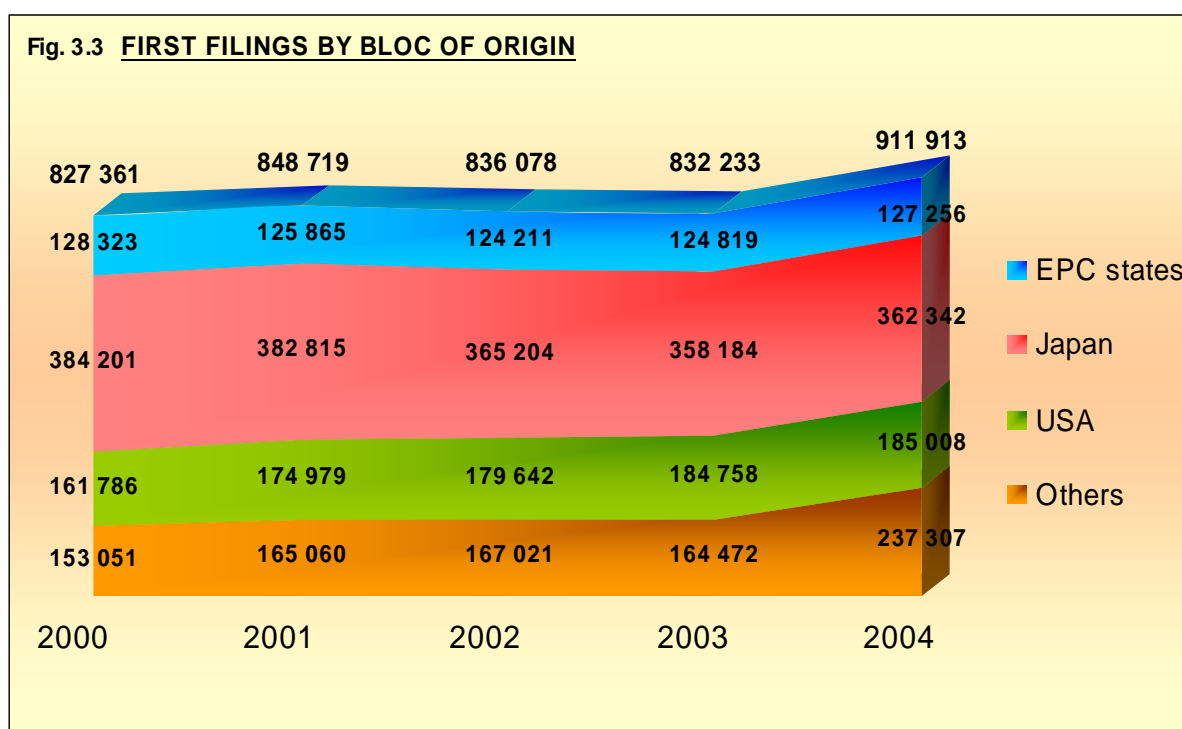
Demands for patent rights have been increasing at an average compound rate of 24% per year since 2000 (19% per year for 2000 to 2003, 38% from 2003 to 2004). In 2004 the total demand reached nearly 23 498 000, of which 88% was made from multiple designations via the PCT route.

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 2004, 17.8 designations were made for each application. In 2000 the comparable figure was only 8.0 designations for each application, and in 2003 it was 13.2 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 Fig. 3.3.



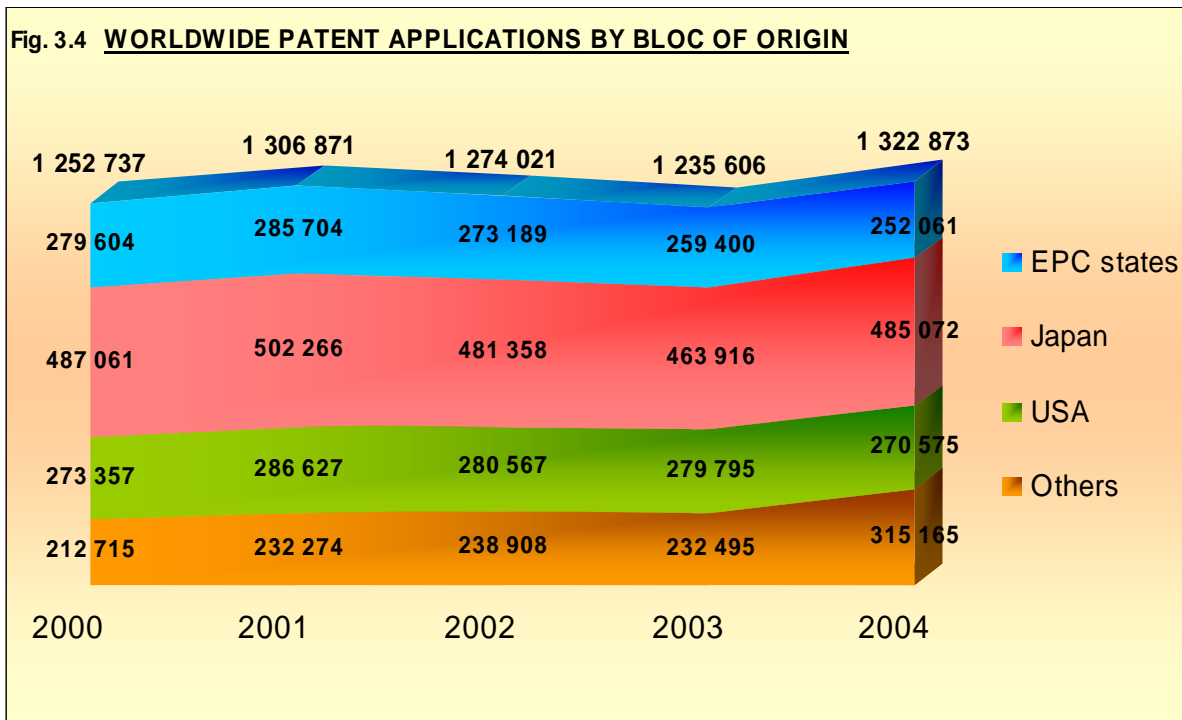
The number of first filings increased by 9.6% to 912 000 from 2003 to 2004. This compares to an effective lack of growth from 2000 to 2003. There were increases recorded in all blocs except for USA.

Japan recorded 362 342 first filings (about 40% of the whole) as the highest number in 2004, but shows a tendency to decrease compared with 384 201 (about 46% of the whole) in 2000. The EPC contracting states recorded 127 256 in 2004. USA recorded 185 008 in 2004 (only 0.1% increase over 2003), but did previously show a tendency to increase from 2000 to 2003.

The total number of first filings in 2003 was 832 233. From these first filings, one year later, in 2004, 410 960 subsequent filings were filed. Thus on average one invention, for which one first filing was made, led to 0.49 subsequent filings. The use of the international and regional patent systems allows for the filing of fewer applications for a broader geographical coverage of the protected inventions. So it does not follow that a first filing is extended on average to less than 1 other country, but that at that stage the centralized procedures allow a reduction of the number of subsequent applications while nevertheless expanding the provisional protection to a large number of countries. The selection of the countries where protection is to be obtained can then be reviewed at any time in the subsequent granting procedures.

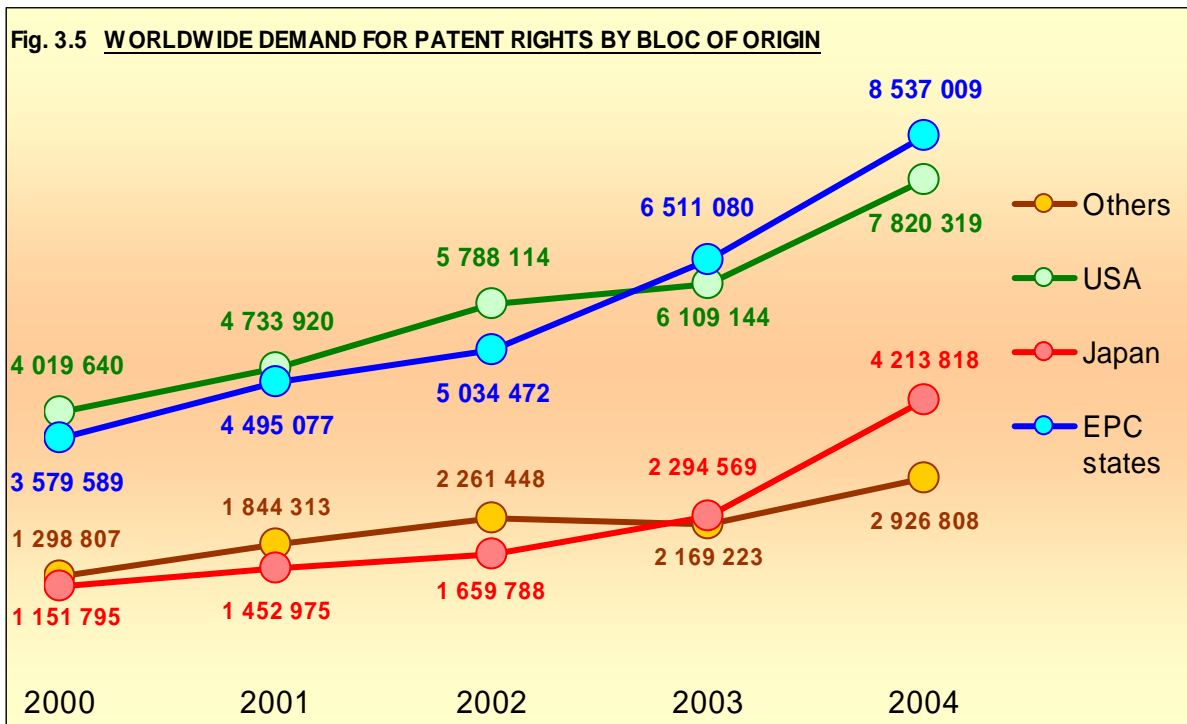
ORIGIN OF THE APPLICATIONS

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



Japan remained the bloc from which the largest share of applications were originating. Whilst the number of applications filed by residents of Europe and the USA tended to decline, the number of applications by residents of the rest of the world increased substantially in 2004. This might reflect different ways of using the patent systems among the different regions. Compared to Fig. 3.1, applications for which the country of origin could not be determined were not taken into account in Fig. 3.4.

Fig. 3.5 shows the origin of the demand for patent rights including cumulated designations. Although the demand from residents in the USA and EPC contracting states was increasing (28% and 31% respectively) in 2004, the demand from residents in Japan was increasing at an especially high rate (84%).

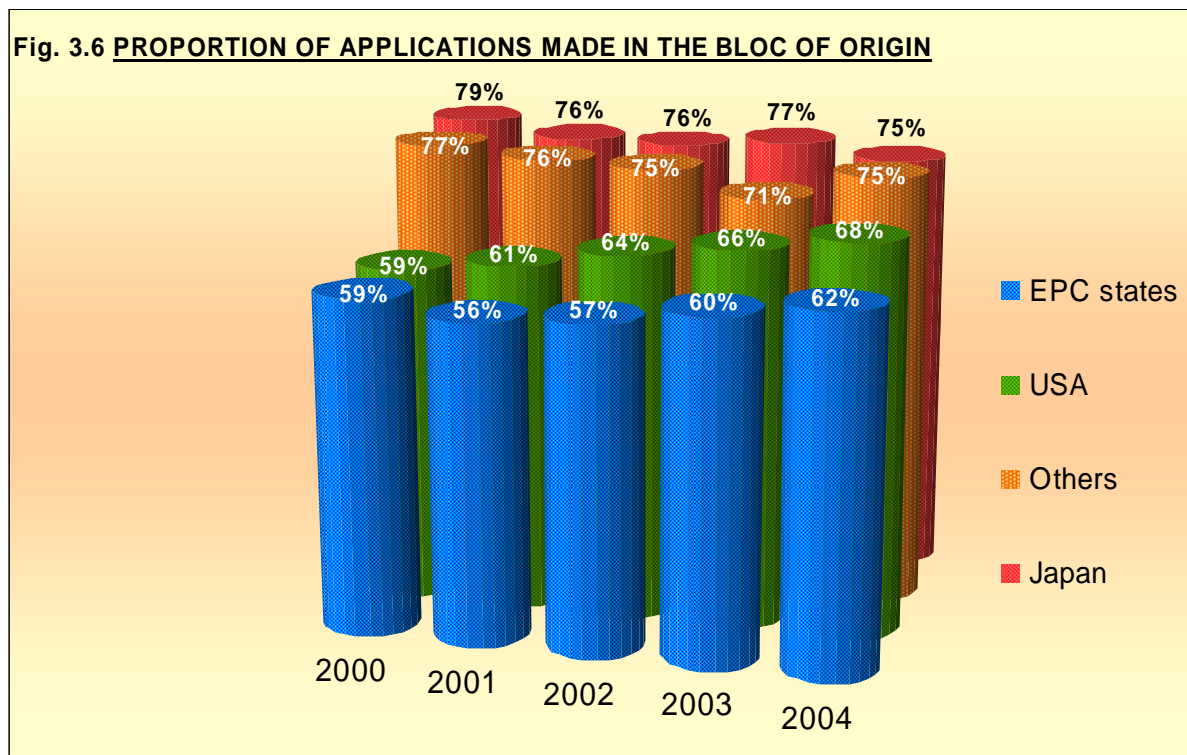


Reasons for the large increase in demand for patent rights since 2004 are discussed under Fig. 3.2. Fig 3.5 shows that these increases have been taken up fairly strongly by Japan and USA based applicants, while the relative increase for EPC based applicants is not so great because they were already previously using the PCT system to a great extent.

TARGETS OF THE APPLICATIONS

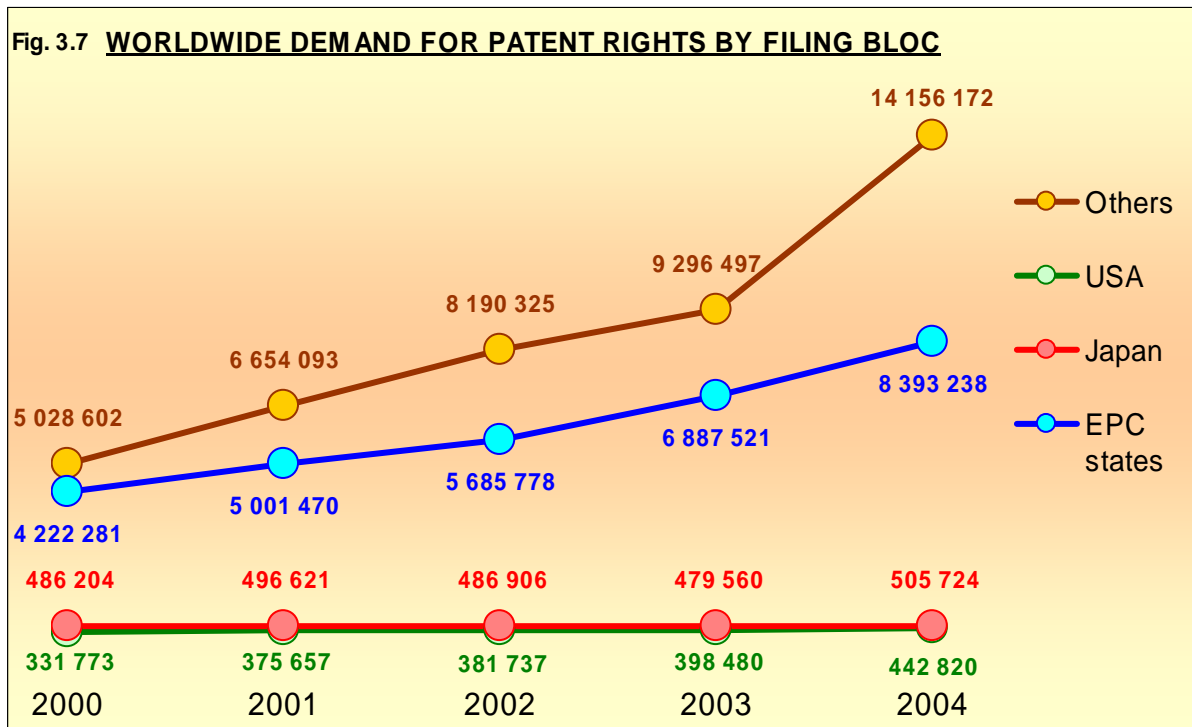
Fig. 3.6 shows, for applications filed throughout the world by the residents of each bloc, the proportions of those applications that were made in bloc of origin. In most cases, the first filing is made in the country of residence and subsequent applications are made to protect the invention abroad.

The proportion of applications made in the bloc of origin is highest in Japan and "Others" (both 75%), followed in order by USA (increasing to 68%) and EPC contracting states (increasing to 62%). EPC contracting states have shown a tendency to increase since 2001 and USA also shows an upward trend. Japan seems to have no clear trend, while "Others" showed a dip in 2003.



On the whole, the proportions are increasing. This is because the increasing use of regional and international procedures leads to rather less use of national procedures to apply abroad. Therefore patent users filed somewhat fewer applications abroad, even though they may continue to apply more and more to protect their inventions by a first filing. As a consequence, out of the total number of applications filed, the share of applications filed abroad diminished, leading to an apparent increase of the proportion of filings made in the bloc of origin.

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

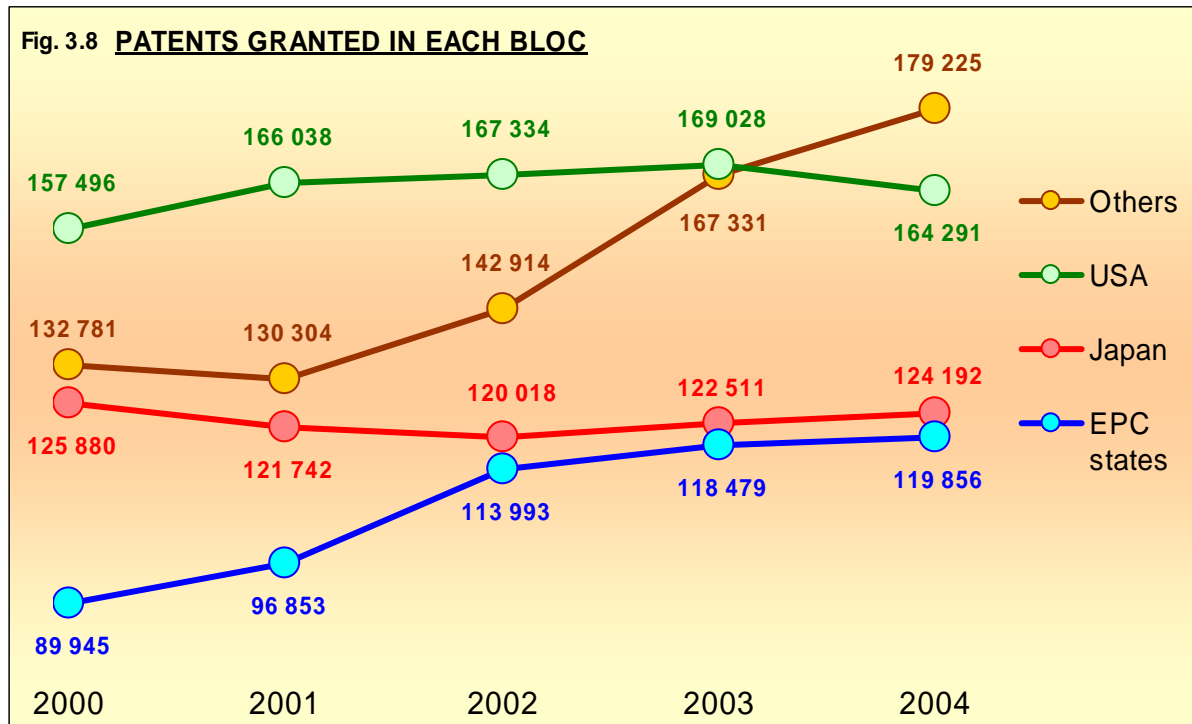


Following the behaviour described under Fig. 3.5, it can be seen here that the rule change in the PCT system has led to a large increase in demand for patent rights in "Others".

Demand in "Others" is the highest followed by the EPC contracting states. The demand increased in all blocs over the period 2000-2004. Within the Trilateral blocs, the relative change was the highest in the EPC contracting states (99% increase overall, 18% compound increase per year for 2000 to 2003, 22% increase from 2003 to 2004), followed by the USPTO (33% increase overall), and Japan (4% increase overall).

GRANTS

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

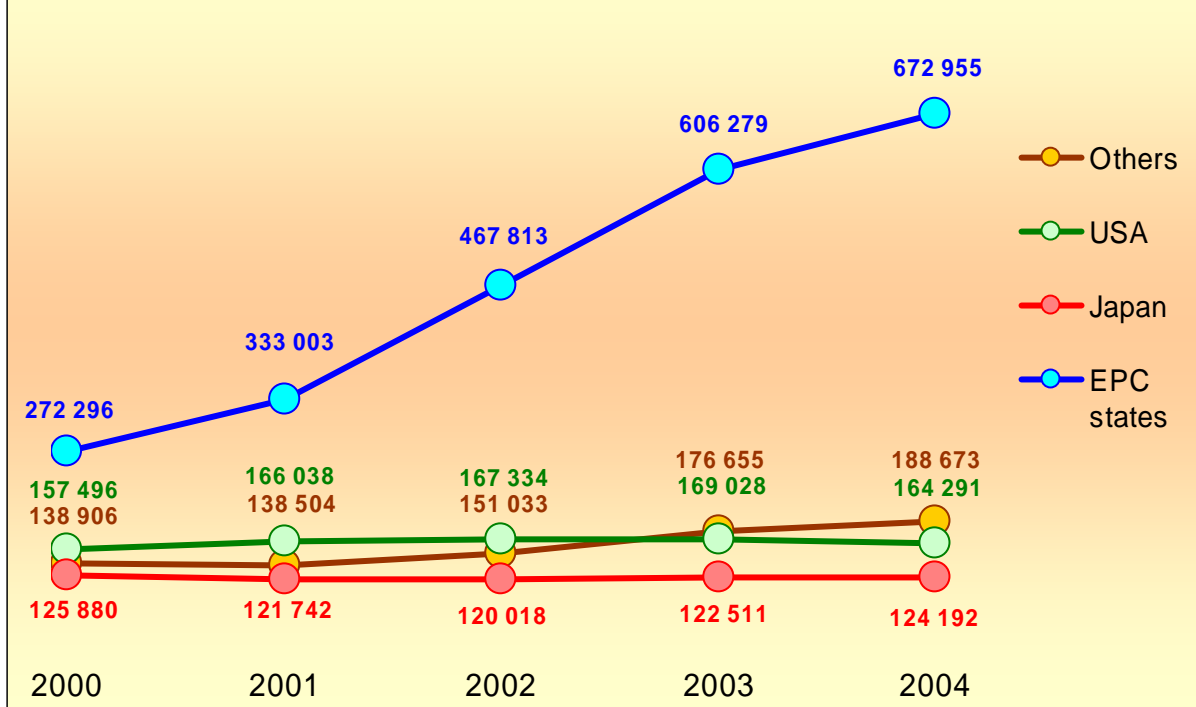


Though there is an overall increase of the number of patents granted throughout the world, the changes are not simultaneous and of the same amplitude in the various regions. After a marked decline during the late 1990's, the number of granted patents increased slightly in Japan since 2002. In the USA, the number declined in 2004 and it is below the 2001 level, while in the EPC grants have continued to increase, though at a lower pace than in 2001 and 2002.

In the other countries, the rise is partly due to more reported figures as well as to a genuine marked increase in the numbers of granted patents in some countries, especially China (+33%), Republic of Korea (+11%), Canada (+13%), Singapore (+38%) and Hong Kong (+38%).

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

Fig. 3.9 PATENT RIGHTS GRANTED IN EACH BLOC



The number of patent rights worldwide has a tendency to increase since 2000. In 2004, the number recorded was about 1 150 000, or a 10 % increase from 2003 to 2004. In Japan and the USA, the changes are relatively small after 2000.

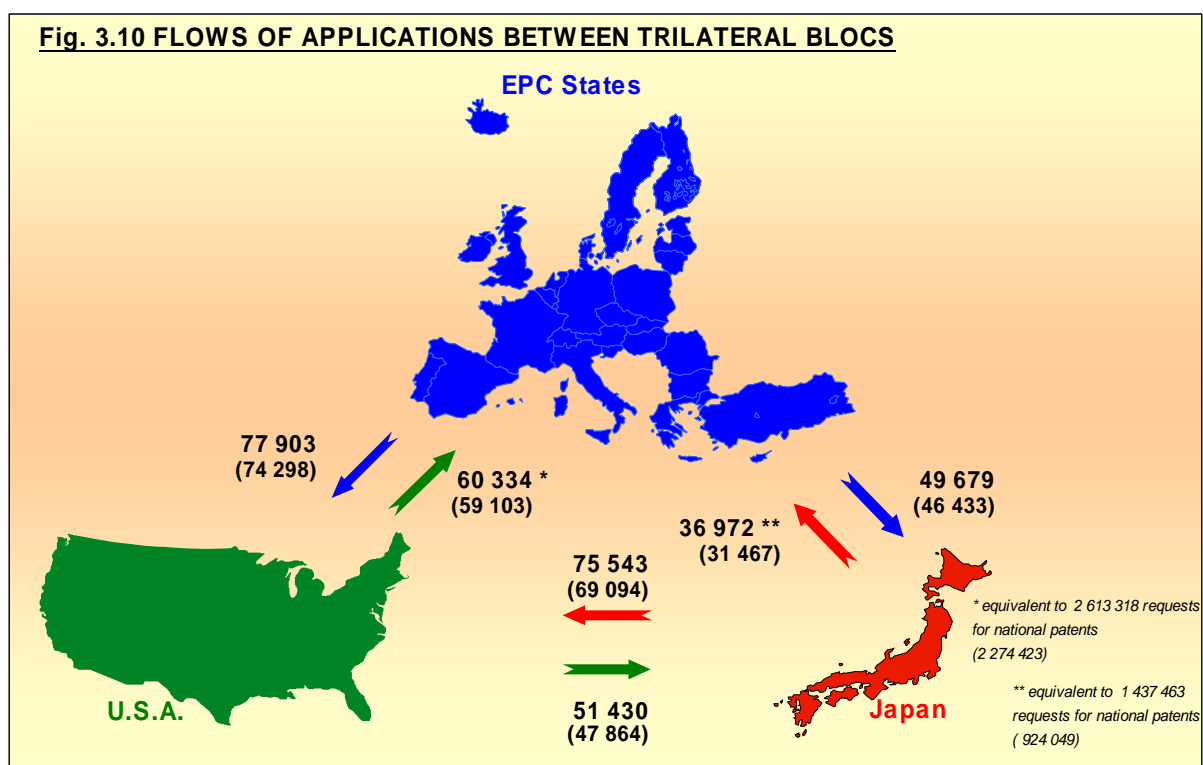
In the EPC states, a growing number of patents were granted via the regional procedure, after entry to the EPO either directly or via the PCT system. This explains the large numbers of patent rights granted there (for EPC there was a growth of 11% from 2003 to 2004, while Fig. 3.8 shows that this was from an increase of only 4.3% in actual grant actions).

INTERBLOC ACTIVITY

FLOWS OF APPLICATIONS

The flows of patent applications and requests for patent rights between the three major filing blocs are described next. Fig. 3.10 shows details of the specific flows of applications between the trilateral blocs in 2004. The 2003 figures are given in brackets.

As in 2004, Japanese applicants file many 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 file many more applications in the USA than they do in Japan.



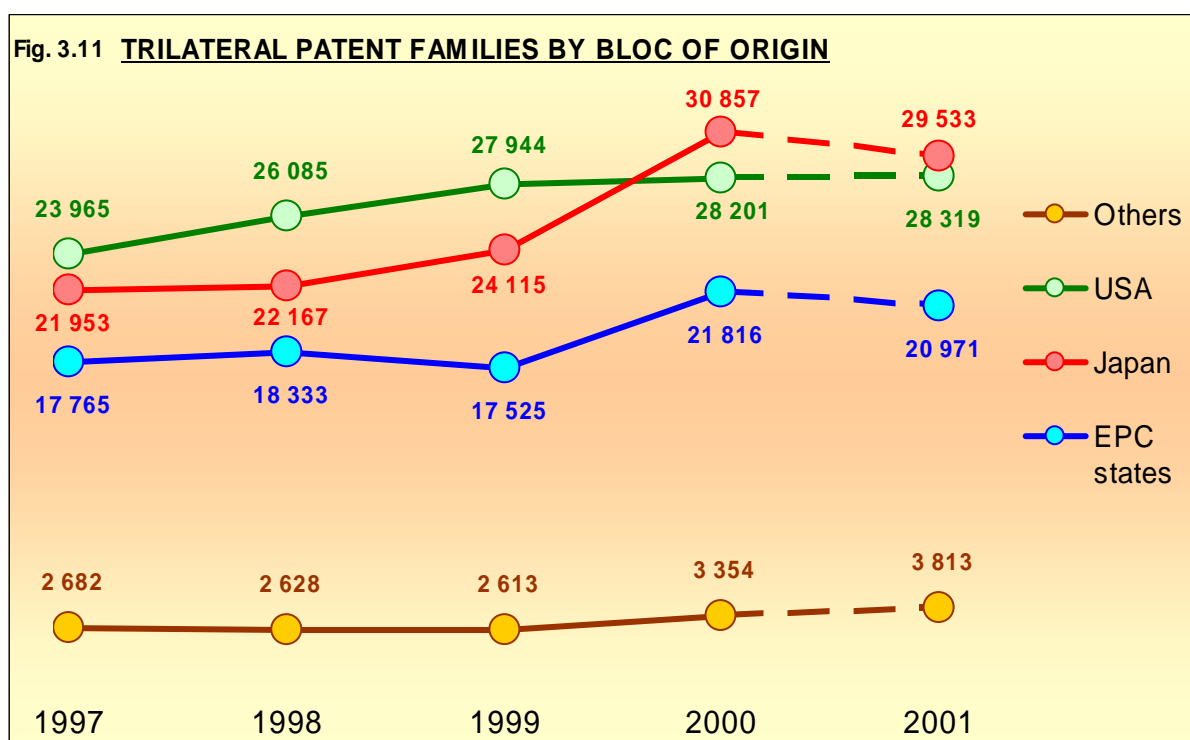
The notes (*) and (**) in the graph allow a comparison of the flows of applications to EPC contracting states with the equivalent flows expressed in terms of rights including cumulative designations¹⁸. Applicants from the USA filed 60 334 applications in the EPC contracting states, equivalent to 2 613 318 national patent applications (43.3 per application; 38.5 in 2003). Japanese applicants filed 36 972 applications in the EPC contracting states, equivalent to 1 437 463 national patent applications (38.9 per application; 29.4 in 2003). If there had been no supranational systems, applicants from the USA and Japan would not have filed so many applications in Europe. The supranational procedures allow them to seek patent protection in more European countries by filing far fewer applications.

¹⁸ See the remarks after Fig. 3.2 for explanations on the figures for requests for national patents in footnotes * and ** of Fig. 3.10.

PATENT FAMILIES

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

The development over time of trilateral patent families is shown in Fig. 3.11. Due to the delay in publication (from the moment of filing), 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 fairly accurate up to the year 2001, but the figures for trilateral patent families may not be accurate after the year 2000 because for them there needs to be time to gather the evidence of activity in all three blocs.

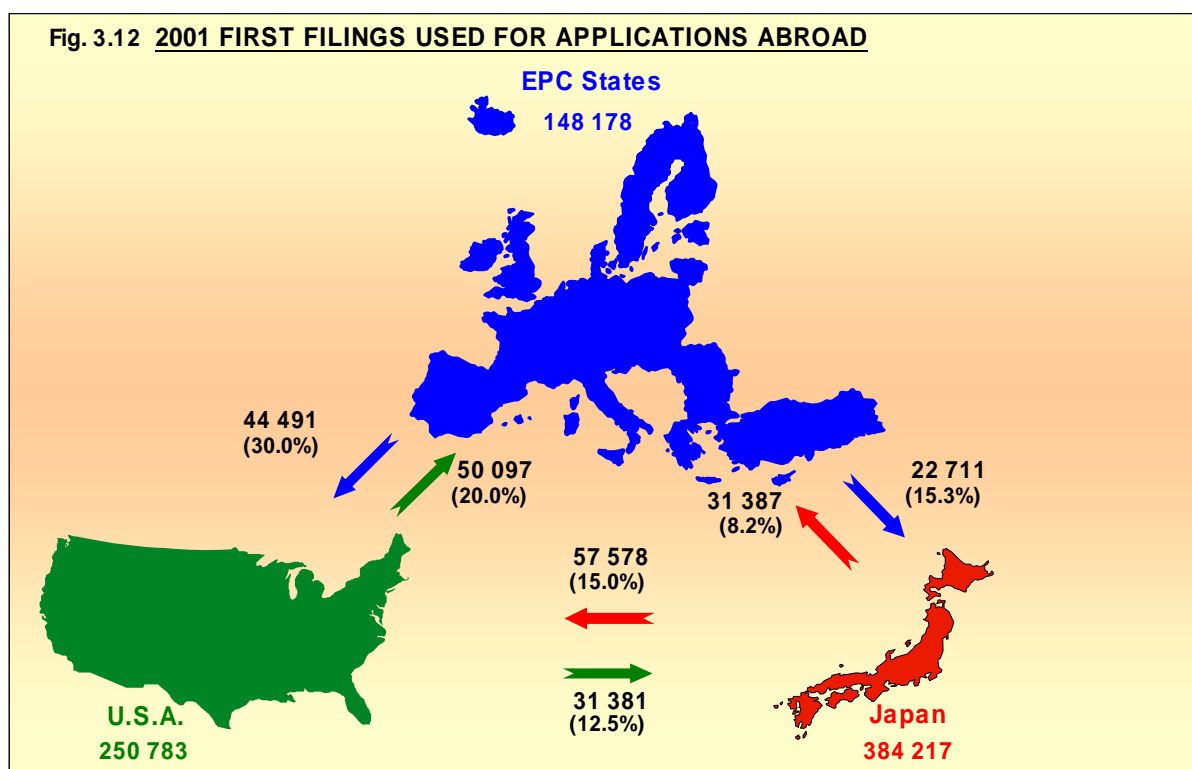


The trilateral patent families' data turned upwards for Japan and EPC states in 2000, while the data for USA was fairly stable over the period to 2000. The total number of trilateral patent families in 2000 was 84 228, of which 25.9% originated from EPC contracting states, 36.6% from Japan, 33.5% from the USA and 4.0% from other states. The corresponding figures for 1999 were a total of 72 197 trilateral patent families, of which 24.3% originated from EPC contracting states, 33.4% from Japan, 38.7% from the USA and 3.6% from other states.

Out of all priority forming filings in the trilateral area in 2000, 10.8% formed trilateral patent families. The proportions differed considerably according to the bloc of origin of the priority forming filings. For EPC contracting states, 14.2% of priority forming filings formed trilateral patent families (was 14.3% in 1999); for USA 11.3% (was 13.1%); for Japan 7.7% (was 8.1%), and for other countries 1.6% (was 1.5%).

A striking feature of Fig. 3.11 is that the numbers of trilateral patent families for EPC contracting states and Japan increased by around 25% in one step between 1999 and 2000. This is probably to be explained by the fact that USPTO started publishing applications for priority filings in 2000 and so the numbers of trilateral families coming from abroad will be more accurately reflected from 2000 onwards. Prior to 2000, there was a censoring effect against the other blocs since a patent application that terminated before grant in USPTO could not be counted as part of a trilateral patent family.

The flows of patent families between trilateral blocs are shown in Fig. 3.12. The number given for each bloc is the total number of distinct references to priority filings in 2001. 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 2001.



From information tabulated in the web-based annex of this report, out of all first filings in the trilateral area in 2001, only 20.3% 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 (31.2% for EPC contracting states, 15.5% for Japan, and 21.2% for USA). However the absolute number of such filings for Japan (59 432) was larger than the filings from the other blocs (EPC contracting states 46 231, USA 53 159) due to the large number of first filings in Japan. When the trilateral blocs receiving subsequent applications from the trilateral area are considered, a larger proportion of filings were received by USA than by the other blocs (12.8% by EPC contracting states, 13.6% by Japan, and 19.2% by USA). From all the priority forming first filings throughout the world in 2001, 17.5% formed patent families including at least one trilateral bloc.

Chapter 4

PATENT ACTIVITY AT TRILATERAL OFFICES

This chapter presents trends in patent application filings and grants at Trilateral Offices. These statistics are generally more up-to-date than those presented in Chapter 3, since information appears here for 2005. Regarding Europe, statistics are for EPO only and trends in the patent offices of the EPC contracting states are not covered. Whereas the EPO is indicated from the viewpoint of an office, EPC contracting states are indicated as a region from which patent applications are originating.

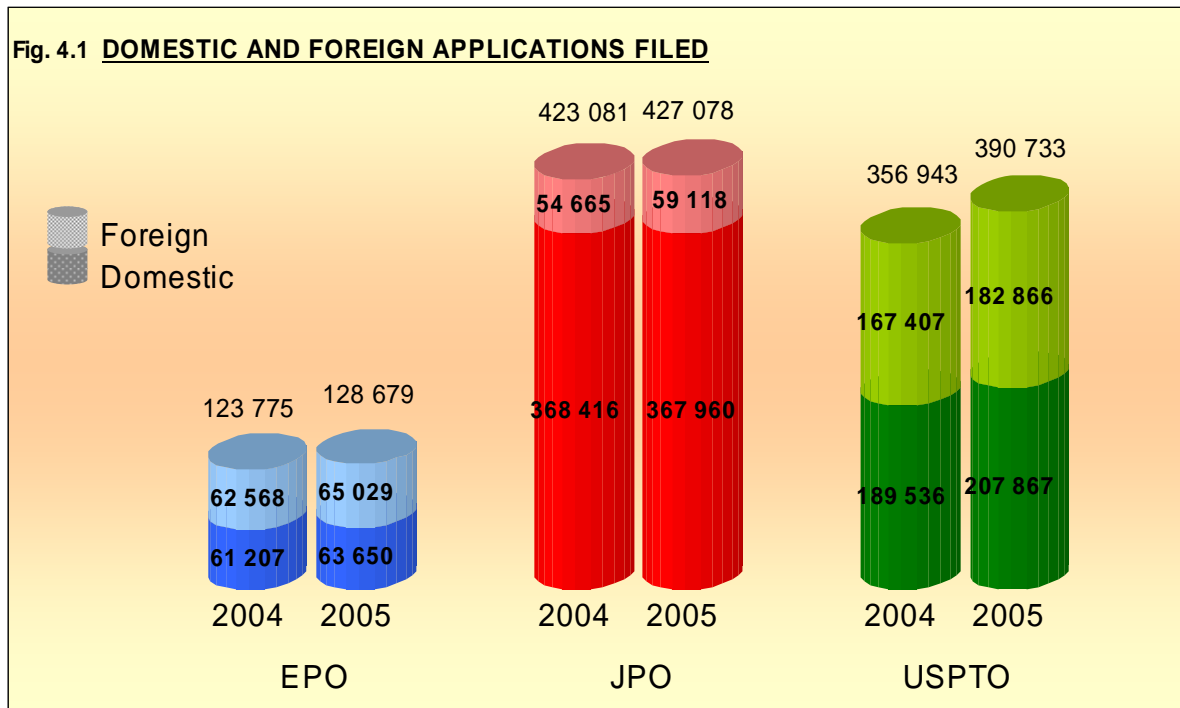
Demand at Trilateral Offices is demonstrated by statistics on patent applications filed. In this chapter, statistics will be presented for the total of direct national/regional applications filed and PCT applications entering the national/regional phase.

In the statistics on granted patents, direct, regional and international applications granted are taken into account. Since in this context the statistics are meant to give 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 (issuances or publications).

APPLICATIONS WITH THE TRILATERAL OFFICES

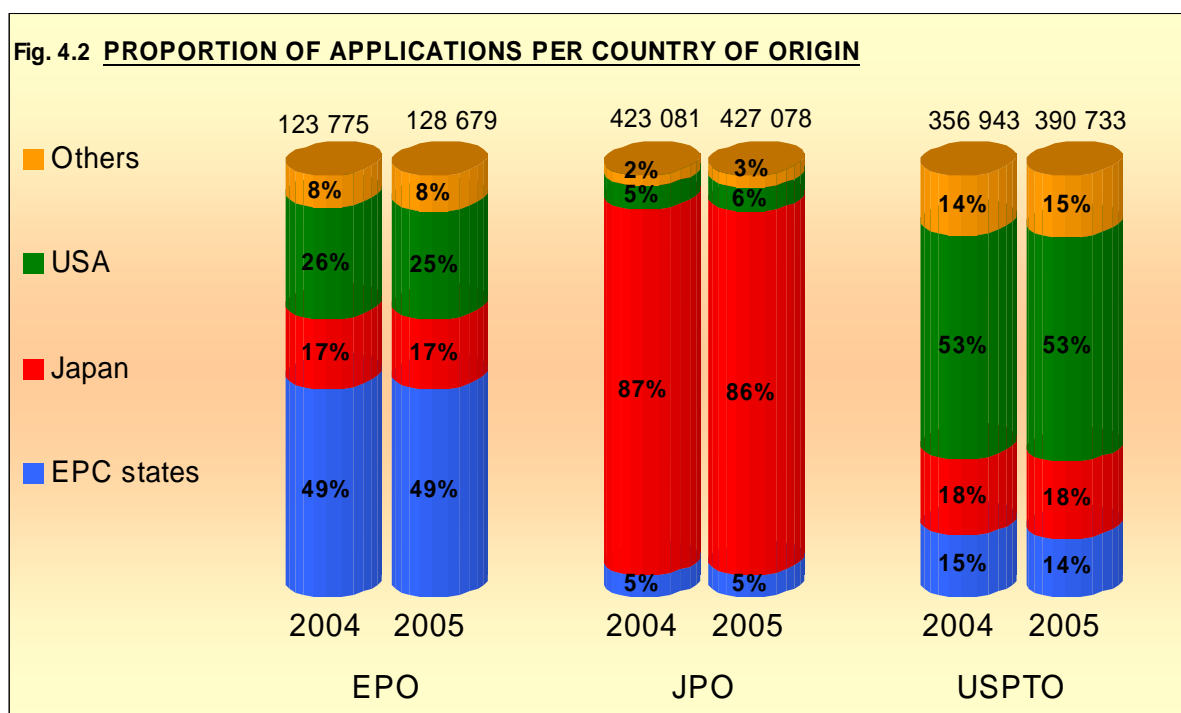
PATENT APPLICATIONS FILED

The numbers of domestic (residents of the country) and foreign (non-residents) patent applications filed with each one of the Trilateral Offices for the years 2004 and 2005 are shown in Fig 4.1.



There were a total of 427 078 patent applications filed with the JPO in 2005, which is an increase of 3 997 filings or 0.9% above 2004. The number of patent application filings at the EPO increased by 4 904 (4.0%). USPTO patent application filings also increased over 2004 levels by 33 790 (9.5%).

Fig. 4.2 shows the respective shares of patent application filings by origin relative to total filings at each office for 2004 and 2005.



Compared to 2004, the shares of patent application filings by bloc of origin at each office were little changed in 2005. As in the past, patent application filings of domestic origin continued to represent the most significant share of filings at each office. In 2005, the shares of domestic filings at the EPO, JPO and USPTO were 49%, 86% and 53%, respectively. The numbers of domestic filings at the JPO and the USPTO are approximately equivalent to the numbers of first filings. Domestic EPO filings are defined as the total of EPO filings by residents of EPC contracting states. Only a low proportion of these are first filings made to 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 direct first filings at the EPO from residents of EPC contracting states were 15 299 in 2004 and 16 859 in 2005, respectively 25.0% and 26.5% of all direct filings at the EPO by residents of the EPC contracting states.

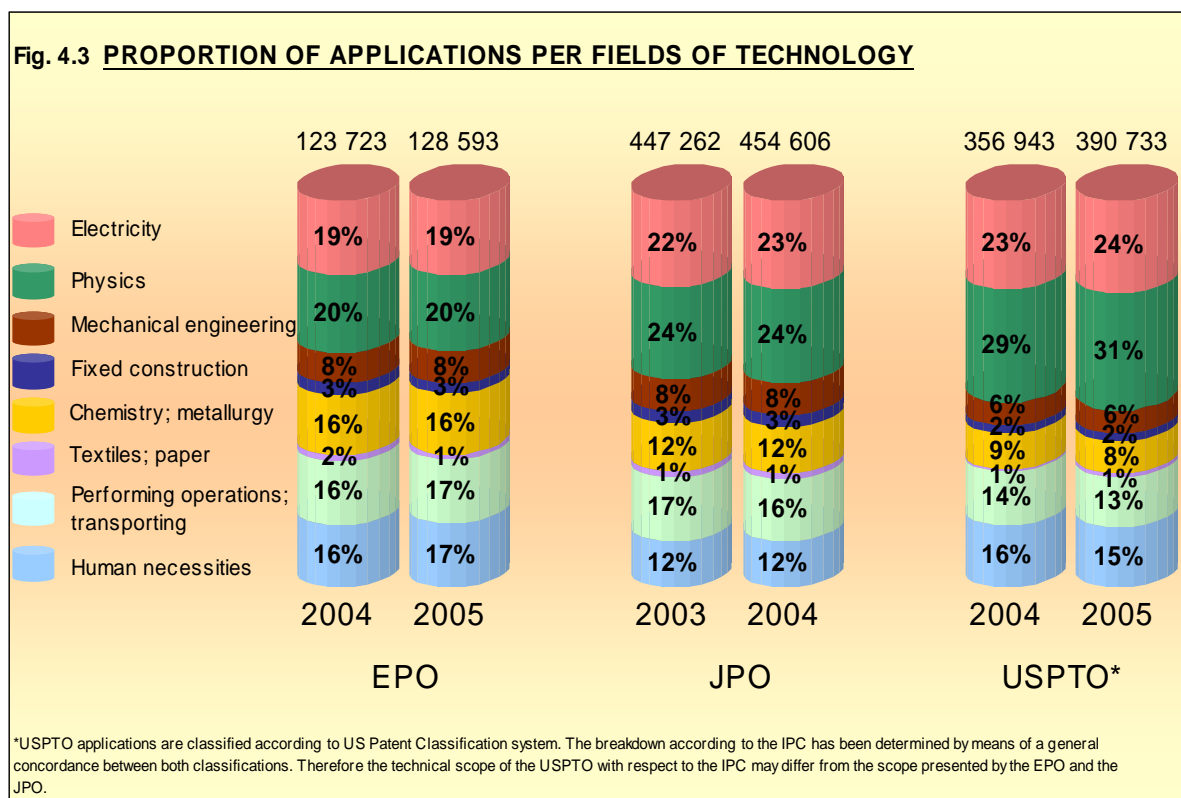
Due to the differences in behavior of the applicants from different countries, comparison of the numbers of applications at the Trilateral Offices should only be made with caution. For example, the numbers of claims given in applications are significantly different among the three offices. On average, in 2005, an application filed at the EPO contained 18.0 claims (17.6 in 2004), one filed at the JPO contained 8.0 claims (7.9 in 2004), while one application at the USPTO had 20.6 claims (23.5 in 2004).

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. Fig. 4.3 shows data for the EPO and the USPTO for the filing years 2004 and 2005, while for the JPO the breakdown is given for the filing years 2003 and 2004. The JPO data for 2004 are the most recent available figures because the IPC assignment is completed just before the publication of the Unexamined Patent Application Gazette (after the expiration of 18 months from the first filing).

Fig. 4.3 indicates the share of applications by technological field at each Office. The following eight fields of technology are represented:

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



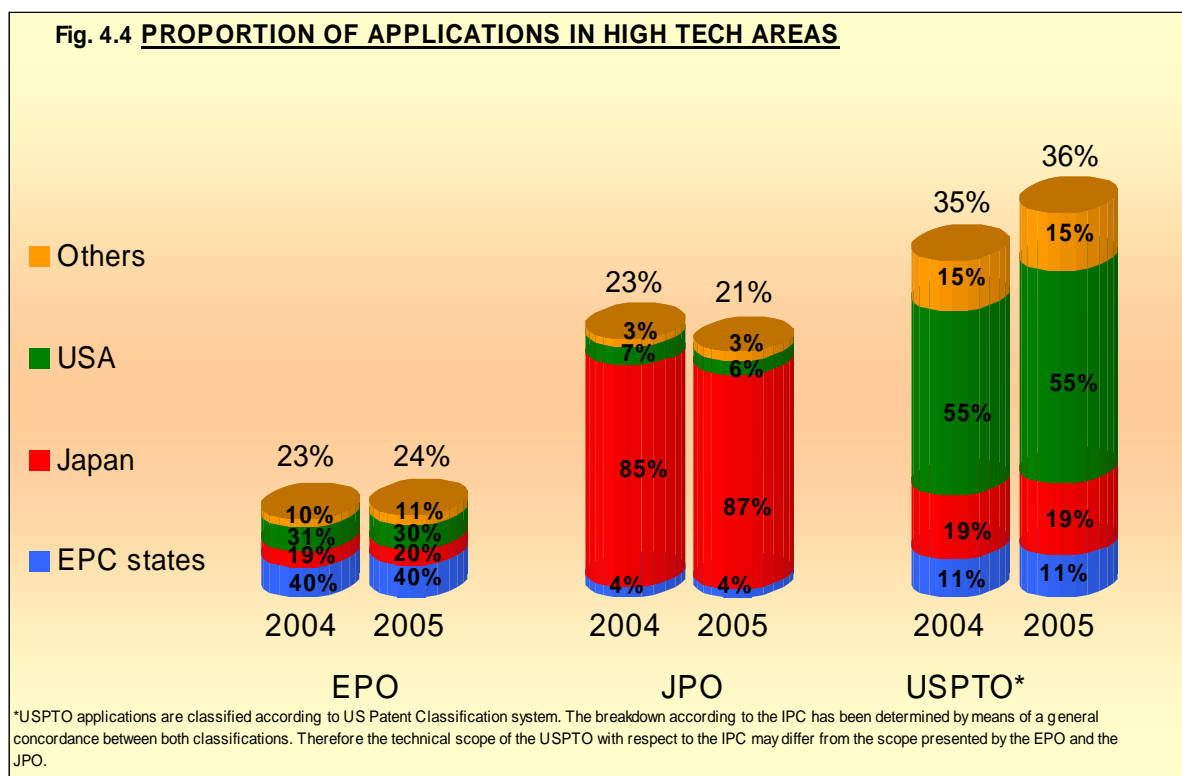
On a year-to-year basis, there is little change in the share these fields occupy at the Trilateral Offices. More than 50% of the USPTO applications are concerned with the fields of *Physics* and *Electricity*. These two fields accounted for 47% of applications at the JPO but for only 39% at the EPO. The field of *Physics* contributes to a smaller share of filings at the EPO than at the other Trilateral Offices, the field of *Chemistry, metallurgy* contributes a larger portion than at the JPO and the USPTO. *Human necessities* occupies a smaller share at the JPO than the other two offices.

Comparing 2005 to 2004, at the USPTO the share from *Electricity* and *Physics* taken together increased by 3% while the share for *Chemistry, metallurgy, Performing operations, transporting* and *Human necessities* taken together fell by 3%. At the JPO, from 2003 to 2004 there was an increase of about 1% in *Physics*. The proportion of applications per fields of technology at the EPO was little changed between 2003 and 2004.

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

- Computer and automated business equipment,
- Micro-organism and genetic engineering,
- Aviation,
- Communications technology,
- Semi-conductors, and
- Lasers.

Usually an increasing proportion of applications filed with the Trilateral Offices are from high technology areas. In Fig. 4.4, this proportion is given for each office in 2004 and 2005, together with their origin.



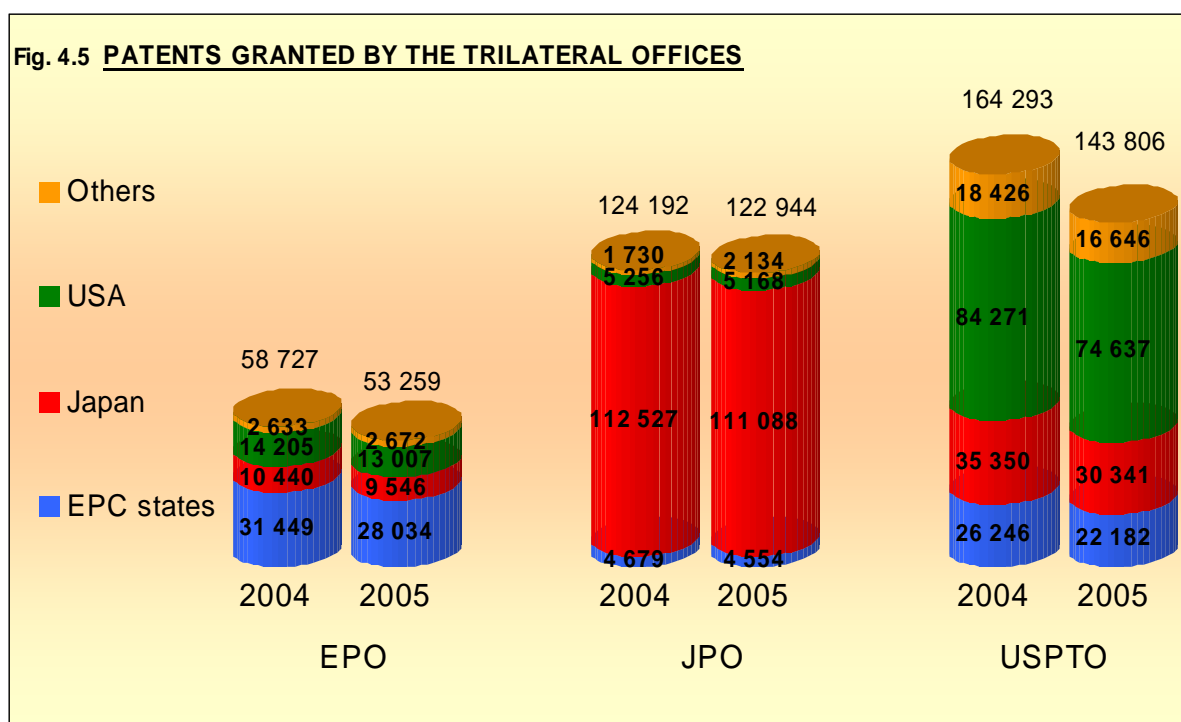
The USPTO has the highest share of patent applications in the high technology fields, with 36% of all applications occurring in this area. Of this number, 55% are from domestic applicants. At the JPO, the share of high technology applications reduced to 21% in 2005, and 87% of such applications are from domestic applicants. At the EPO, the share of high technology applications remained nearly stable at 24%, with 40% coming from applicants resident in EPC contracting states.

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 each Trilateral Offices and especially at the EPO (as shown in

Fig. 4.2). The share of the USA applicants and the Japanese applicants in high technology are higher at the EPO than those for all applications filed.

PATENTS GRANTED BY TRILATERAL OFFICES

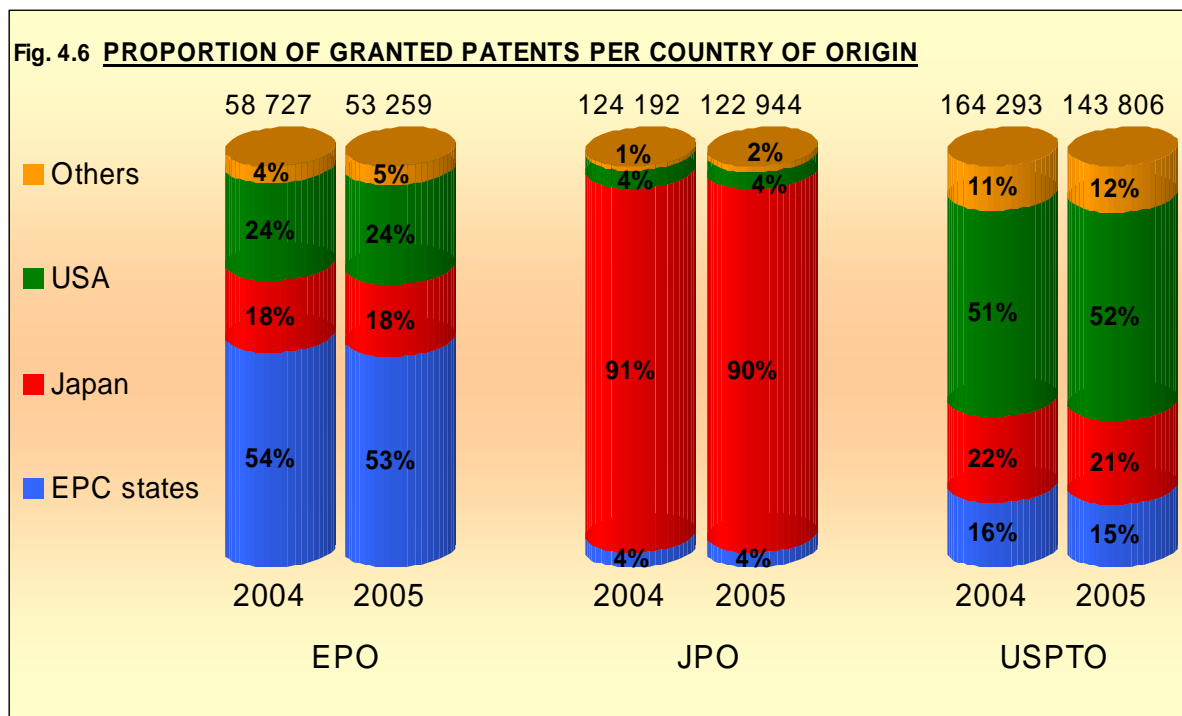
Fig. 4.5 shows the numbers of patents granted by the Trilateral Offices. The overall figure decreased by 1% from 2003 to 2004 and by a further 8% from 2004 to 2005. Together the Trilateral Offices granted 320 009 patents in 2005, 27 203 fewer than in 2004.



The number of patents granted by the JPO decreased in 2005 by 1.0% after a 1.4% increase in 2004. The EPO experienced a decrease again in 2005 to 53 259 published granted patents, 9.3% down, after a 2.1% decrease in 2004. With 143 806 registrations in 2005, the USPTO granted the highest number of patents among the Trilateral Offices. Nevertheless this was 12.5% less than in 2004.

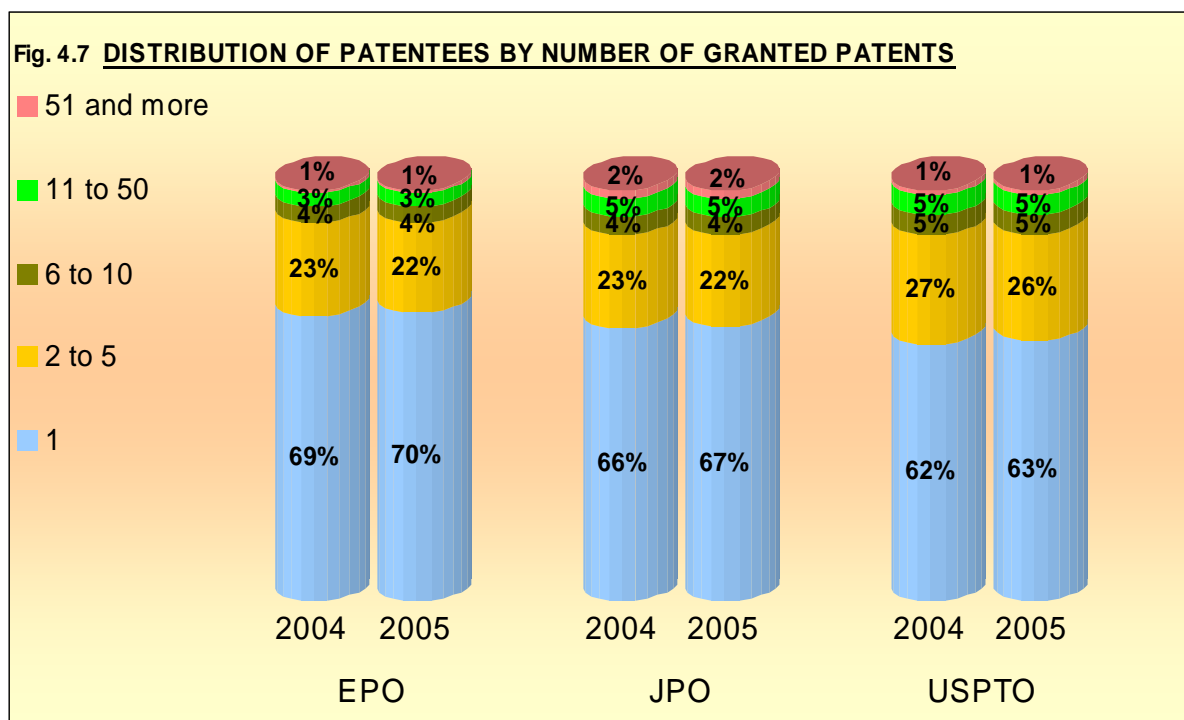
The differences between the Trilateral Offices regarding the absolute numbers of patents granted can only be partially explained by the differences in the number of corresponding applications. These numbers are also affected by different grant rates and different durations to process applications by the Trilateral Offices reflecting differences in the trilateral patent granting procedures (see section below on “Trilateral Patent Procedures”).

Fig. 4.6 presents the percentage shares of total patents granted by origin. The shares from the different filing blocs are not far away from those observed for the filings in each office as presented in Fig. 4.2. However, comparison of the figures shows that the shares by domestic origin within the numbers of patent grants at EPO and JPO are slightly higher than the comparable shares within the numbers of applications filed, while for USPTO this share is slightly lower.



In 2005, the maximum number of patents granted to a single applicant was 736 at the EPO, 3 765 at the JPO, and 2 941 at the USPTO. All these numbers are lower than those in 2004, reflecting perhaps the lower numbers of patents granted overall by the Trilateral Offices in 2005.

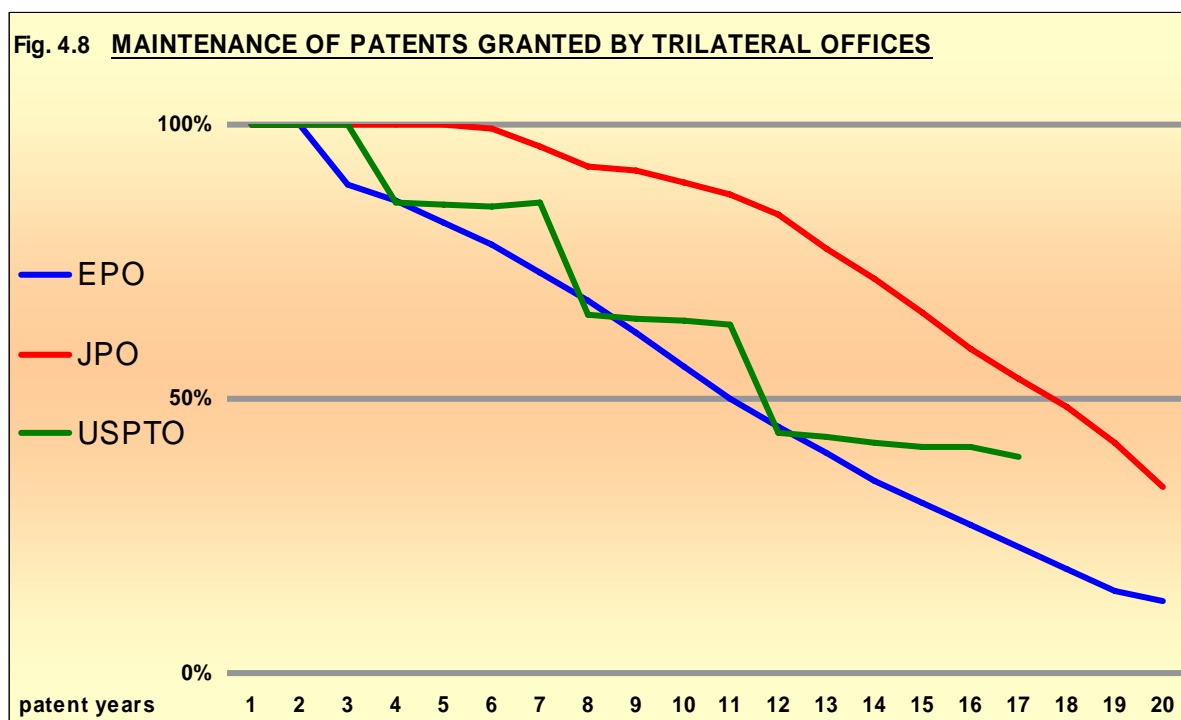
The breakdown of patentees by numbers of patents granted is shown in Fig. 4.7.



In the three Offices, most of the patentees received not more than 5 patents. The proportion of patentees receiving one patent grant in 2005 is higher at the EPO (70%) than at the JPO (67%) or the USPTO (63%). The proportion of patentees receiving 2 to 5 patents is larger at the USPTO than in the other 2 Offices. The proportion of patentees receiving six or more patents is lower at the EPO than at the JPO and the USPTO.

The distribution of patentees with six or more patents remained essentially the same between 2004 and 2005 at the JPO and at the USPTO.

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, annual fees or maintenance fees in the countries to which the protection pertains. Maintenance systems differ from country to country. Fig. 4.8 shows the proportions of patents granted by each Trilateral Office that are maintained for differing lengths of time.



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

For a European patent, renewal fees are payable to the EPO from the third patent year onwards to maintain the application. After the patent has been granted, annual renewal fees have to be paid to the national office of each designated contracting state in which the patent is to be maintained. The patent is then not necessarily maintained for the same period in all the designated contracting states. Therefore the proportions shown in Fig.4.8 for the EPO represent an average ratio of maintenance in the EPC contracting states.

For a Japanese patent, the first three years' annual fees after patent registration are paid as a lump-sum and, for subsequent annual year's 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.

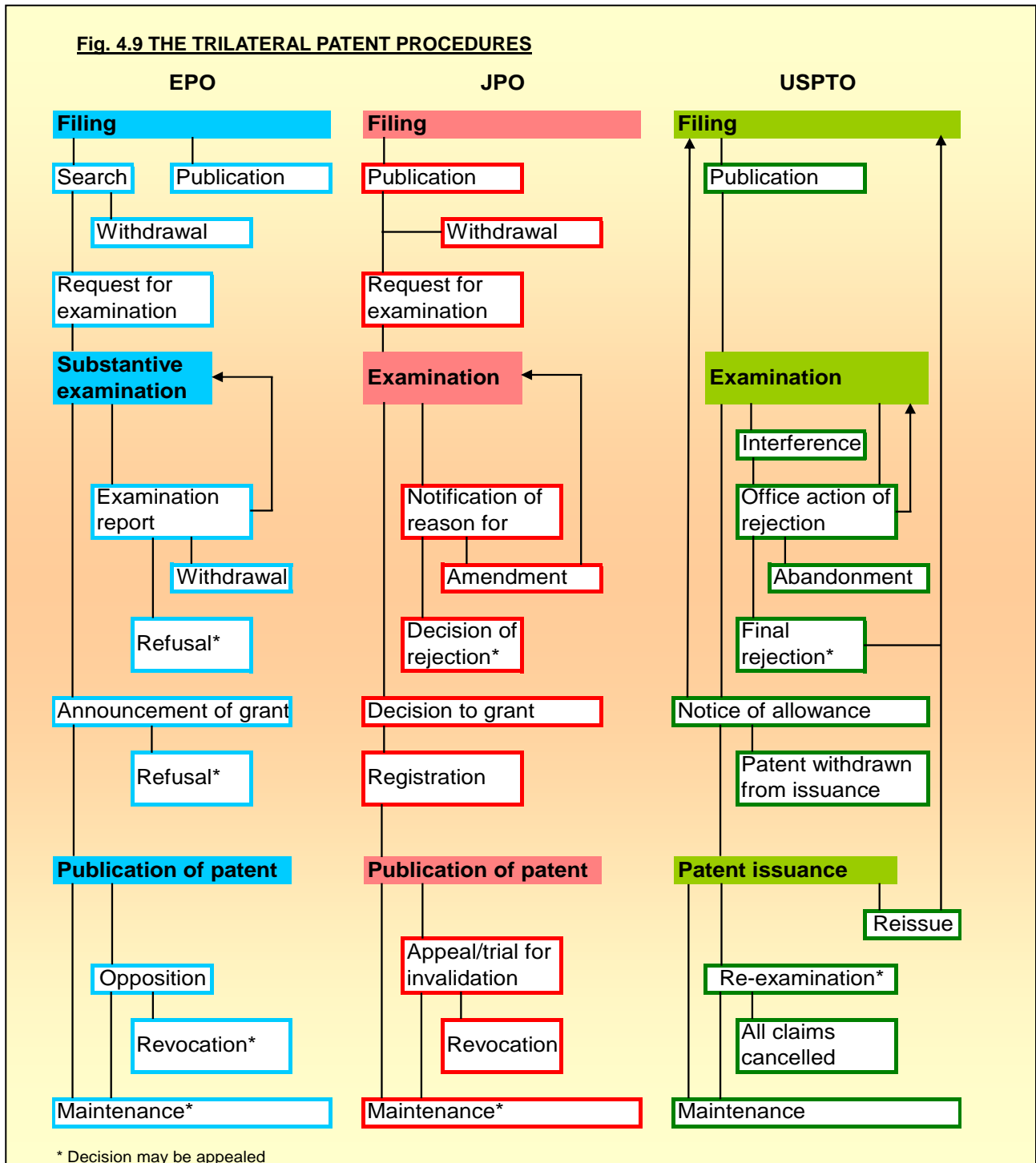
In the three procedures, if a renewal fee, an annual fee or maintenance fee is not paid in due time, the protection right expires. Fig. 4.8 compares the rate of granted patent registrations existing and maintained each patent year. These figures are calculated from the year of application for the EPO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

In Japan, over 50% of the patents granted are maintained for at least 17 years compared to at least 11 years for the European patents and at least 11 years for the USA patents.

TRILATERAL PATENT PROCEDURES

THE PROCEDURES

The grant procedures are not totally identical in the Trilateral Offices. The major phases are outlined in Fig. 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. Firstly, a search is done in order to establish the state of the art with respect to the invention. The applicant receives a search report accompanied by an initial opinion on patentability. 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 yet a request for substantive examination. For the latter, a separate request has to be filed no later than six months after publication of the search report. Filing of a national application with the JPO does not imply a request for examination; this may be filed up to three years after the date of filing. Filing of a national application with the USPTO is taken to imply a request for examination.

Publication

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

Grant, refusal / rejection, withdrawal

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

JPO eliminated the patent opposition system on 1st January 2005.

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 the opposition procedure at the EPO. 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 lifetime of a granted patent.

Appeal

An appeal can be filed by any of the parties concerned against a decision taken by the Trilateral Offices. In practice, applicants can appeal decisions to reject the application or revoke the patent, while opponents can appeal decisions to maintain the patent. The procedure is in principle similar for the three offices. The examining department first studies the argument 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 the 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 description 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 the final decision.

STATISTICS ON PROCEDURES

The 2004 and 2005 values of the basic characteristics of trilateral procedures are shown in Table 4. The definitions and further explanations on the statistics including changes in the compilation of these statistics are given in the Annex 2.

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

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 the lowest because applicants have substantially more time (three years) in which to evaluate whether to maintain the application or not.

The grant rate in the EPO procedure, as defined in terms of decisions, decreased to 53.3% in 2005. The number of decisions to grant taken in 2005 was lower than in 2004. In the JPO, the grant rate decreased to 49.1% in 2005. In the USPTO, the allowance rate decreased to 58.9% in 2005.

The opposition rate at the EPO increased slightly in 2005 to 5.5%, and 78.5% of the opposed patents were maintained, although in some cases in amended form.

In the EPO, about 36.5% of decisions in examination to reject the application were subject to an appeal in 2005. In the USPTO, about 2.3% of final rejections were appealed.

In the EPO, 48.3% of the decisions taken during the opposition procedures were appealed in 2005.

The total number of appeals in the JPO against decisions in examination, including decisions on applications against which oppositions had been filed, decreased to 23 054 in 2005 (24 008 in 2004).

Table 4 STATISTICS ON PROCEDURES

Progress in the procedure (rates in percentage)		Year	EPO	JPO	USPTO
Examination		2004	88.3	55.4	100.0
		2005	91.0	61.4	100.0
Grant ¹⁹		2004	55.2	49.5	64.5
		2005	53.3	49.1	58.9
Opposition		2004	5.3	-	-
		2005	5.5	-	-
Maintenance after opposition		2004	64.5	n.a.	-
		2005	78.5	n.a.	-
Appeal	On examination	2004	40.4	-	2.5
		2005	36.5	-	2.3
	On opposition	2004	49.7	-	-
		2005	48.3	-	-
	On examination and opposition ²⁰	2004	-	24 008	-
		2005	-	23 054	-
Pendency in the procedures					
Search	Number of pending applications	2004	104 413	-	-
		2005	112 415	-	-
	Pendency time in search (months)	2004	17.4	-	-
		2005	19.6	-	-
Examination	Number of applications awaiting request for examination	2004	20 171	2 105 255	-
		2005	18 561	1 954 334	-
	Number of pending applications	2004	263 475	605 949	526 606
		2005	284 414	755 138	603 773
	Pendency time to first office action (months)	2004	-	26.0	20.7
		2005	-	26.0	21.8
	Pendency time in examination (months)	2004	41.4	31.6	26.8
		2005	40.6	31.8	30.6
Opposition	Number of pending applications	2004	2 403	n.a.	-
		2005	3 300	n.a.	-
	Pendency time in opposition (months)	2004	11.8	n.a.	-
		2005	17.6	n.a.	-

In the above table, "n.a." means "not available" and "-" indicates a "not applicable" item.

¹⁹ The USPTO reports an allowance rate.

²⁰ For JPO, only numbers rather than percentages are available

Pendencies

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 each Trilateral Office. This is not a particularly good indicator for the backlog in handling applications within the offices since a substantial 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 by 7.7% to about 112 400 in 2005, and pendency time in search increased to about 19.6 months.

The number of pending applications awaiting a request for examination by the applicant decreased at the EPO with around 18 560 cases.

In the JPO, the number of pending applications (about 1 954 000) is substantively higher than those in the EPO due to the period during which requests for examination can be filed. It decreased by 7.2% in 2005.

The number of pending applications in examination increased at the EPO by 7.9% to about 284 400 in 2005, although the pendency time in examination decreased by 1.9% to about 40.6 months in 2005. In the JPO, the number of pending applications increased by 24.6% to almost 755 000, and pendency was stable at about 31.8 months. In the USPTO, the number of pending applications increased by 15% to almost 604 000, while the average time for either abandoning or issuing an application increased by 14.2% to 30.6 months.

The pendency time to first office action increased slightly at the USPTO to 21.8 months.

Pendency time in opposition increased at the EPO by 49.2% to nearly 17.6 months in 2005.

Chapter 5

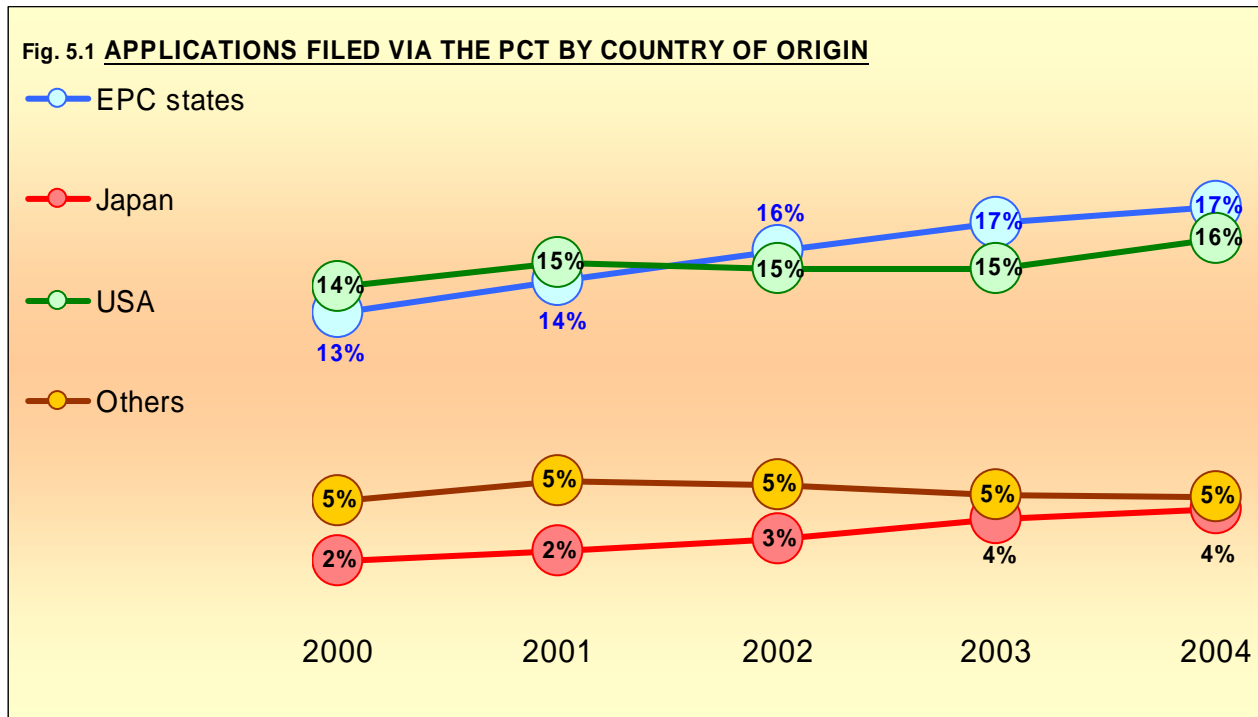
USE OF THE PATENT COOPERATION TREATY

This chapter shows statistics that indicate the impact of the intensified use of the PCT system regarding the activities of the Trilateral Offices. Graphs are presented to display the shares of patent applications and grants using the PCT filing route by origin. The Trilateral Offices act under the Patent Cooperation Treaty (PCT) as receiving offices, mainly for applicants resident in their respective territories, and as the major international searching and examining authorities. Graphs appear to indicate the various activities of the Trilateral Offices that relate to the PCT system. The graphs cover five-year periods that include the latest year for which reliable data are available.

THE PCT AS A FILING ROUTE

APPLICATIONS FILED

For each bloc of origin, Fig 5.1 shows the proportions of all patent applications filed (as provided in Fig. 3.1 of Chapter 3) that are PCT international applications. Applications are counted in the year of filing.

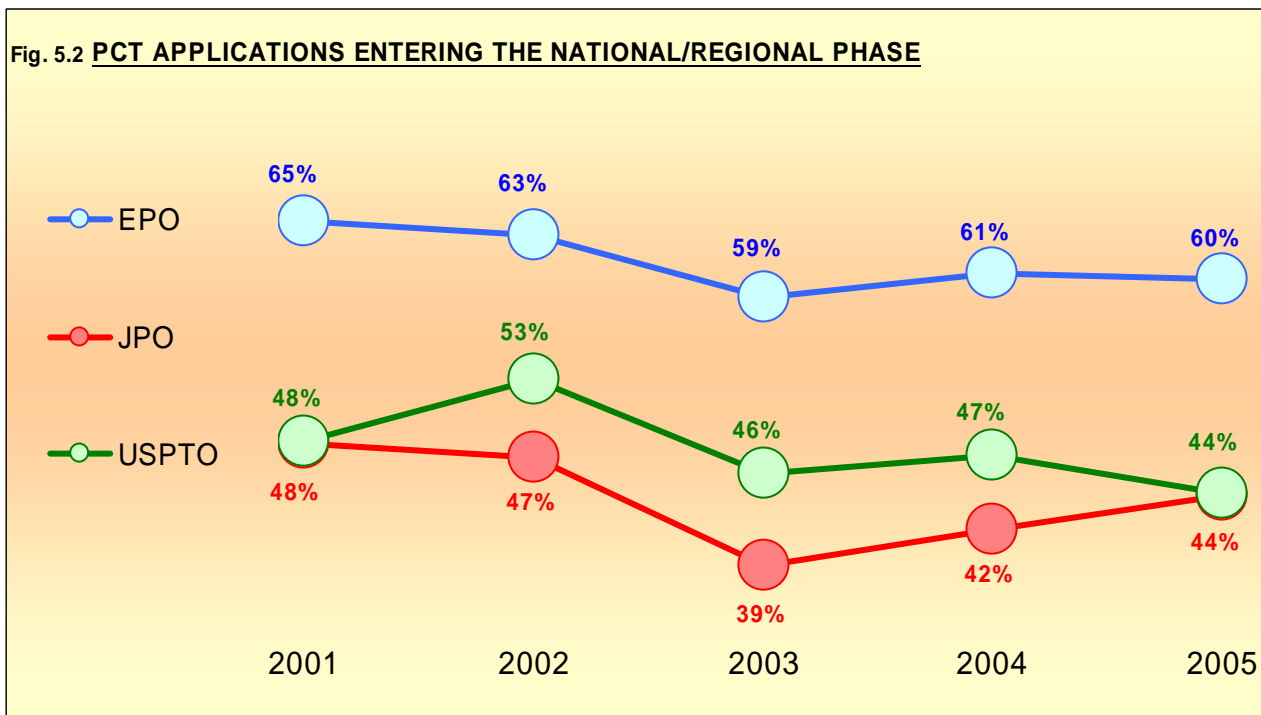


From 2003 to 2004, the share of PCT applications increased to some extent for all the major filing blocs. Overall, the use of the PCT as a route for filing patent applications has continued to increase since 2000.

PCT APPLICATIONS ENTERING THE NATIONAL/REGIONAL PHASE

After the international phase of the PCT procedure, applicants decide whether they wish to continue further with their applications. A decision has to be taken for each and every country and regional organization designated in the international application. If the decision is made to proceed further, the applicant has to fulfill the various national or regional requirements of the selected PCT contracting states or organizations. The applications then enter the national or regional phase. In most of the EPC contracting states, the applicants have a choice of proceeding either in individual countries or at the EPO. However, some EPC contracting states cannot be designated individually under the PCT. Also, some PCT applications have entered the national phase procedures in distinct countries and not the regional phase at the EPO. The proportions of all PCT applications that have entered the national or regional phase at each Trilateral Office are presented in Fig 5.2. Applications are counted in the year they are expected to enter the national or regional phase.

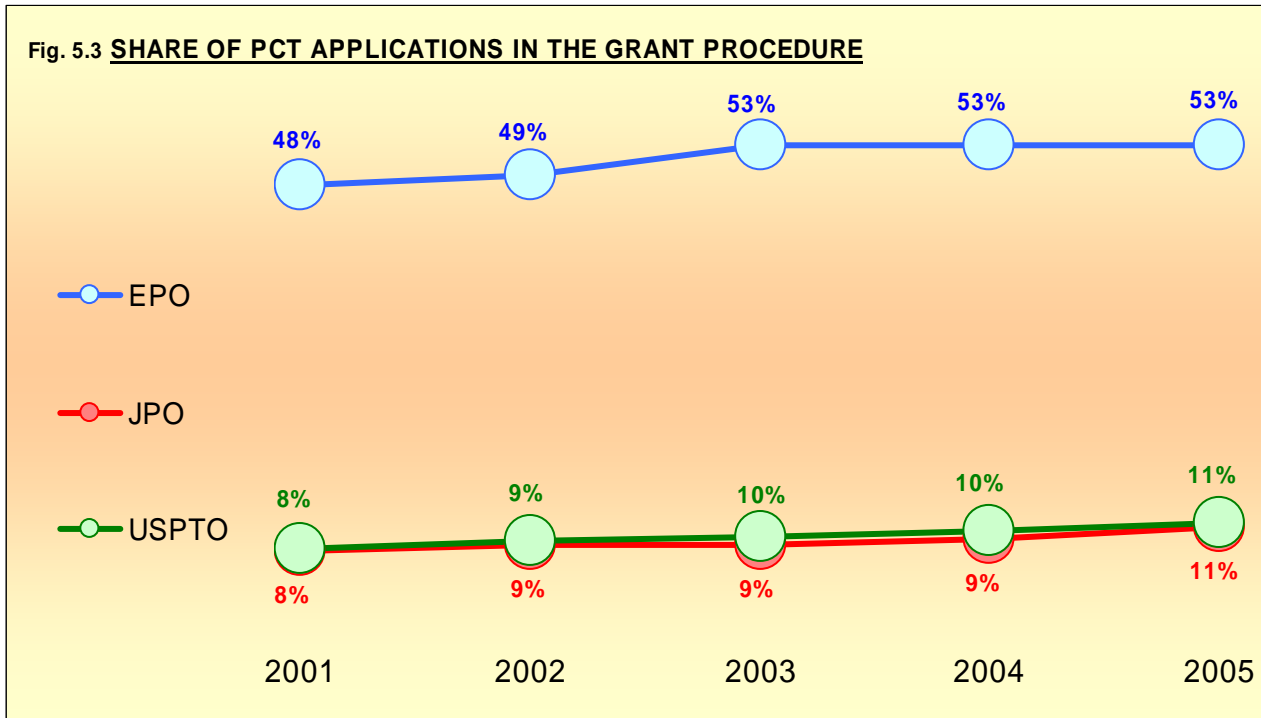
A higher proportion of PCT applications entered the regional phase at the EPO than entered the national phase either at the USPTO or the JPO. This is due to the supranational dimension of the EPO, which provides an opportunity to proceed further with a unique procedure for multiple designations.



The proportions of applications that continued in the national or regional phase tended to decline before 2003, and then to increase from 2003 to 2004. In 2005, the rate increased by 2% at the JPO to 44%, and decreased by 1% at the EPO to 60% and by 3% at the USPTO to 44%.

PCT APPLICATIONS AT THE TRILATERAL OFFICES

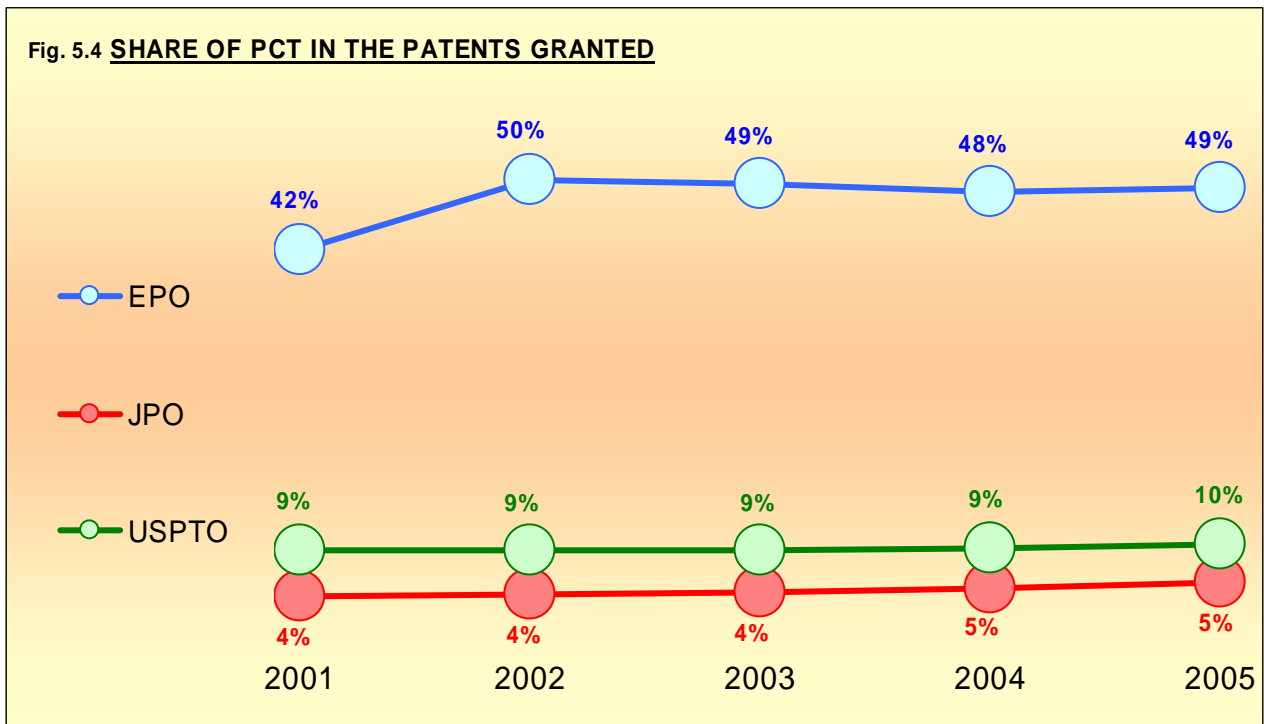
Fig 5.3 shows the proportions of PCT applications within the overall applications at each Trilateral Office as presented in Chapter 4. As in Fig. 4.1 of Chapter 4, PCT applications entering the national or regional phase are taken into account.



The proportions of PCT applications increased slightly in 2005 as compared to 2004 at all offices. For reasons given earlier, the EPO has a high proportion of PCT applications, while the proportions at the JPO and the USPTO are lower. However, both the JPO and the USPTO proportions increased about 2% and 1% respectively in 2005, while the proportion at the EPO remained nearly unchanged when compared to 2004.

PCT GRANTS BY THE TRILATERAL OFFICES

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

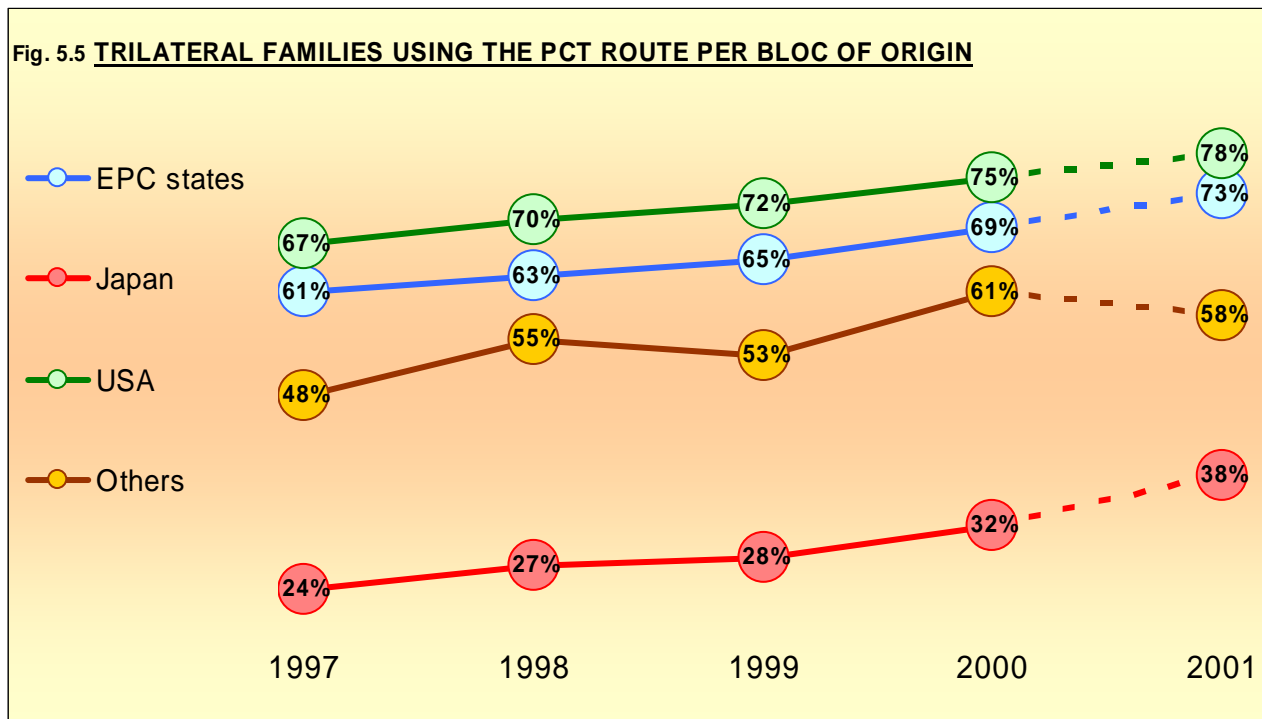


At all three offices, the share of PCT applications among all applications receiving a patent grant have remained stable since 2002. Shares are somewhat below those of applications (see Fig. 5.3), since granted patents relate to applications filed 3 to 5 years earlier when the proportions of PCT applications were lower.

PATENT FAMILIES INVOLVING PCT APPLICATIONS

The PCT system provides a good way 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, the 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.

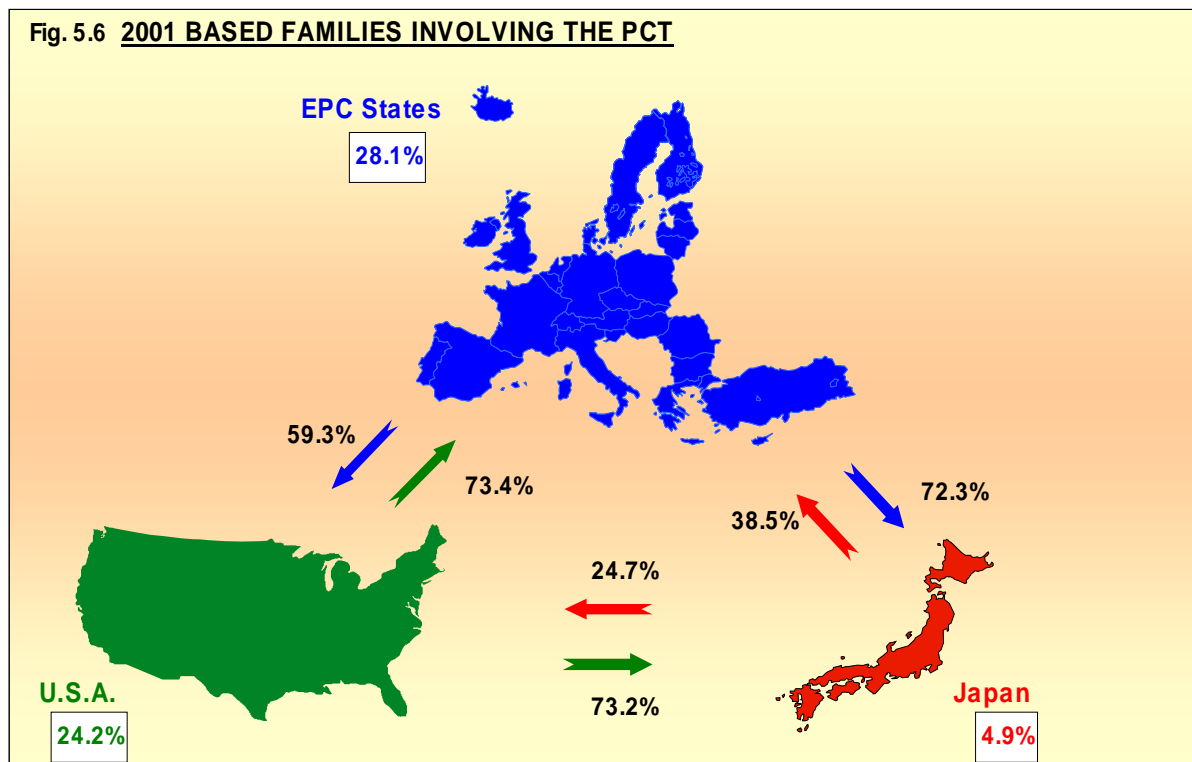
Fig 5.5 shows the proportions of trilateral patent families (as given earlier in Fig 3.11) that use the PCT system. As discussed earlier, the data for 2001 are provisional.



Usage of the PCT system was fairly widespread in trilateral patent families originating in all blocs except Japan. The proportions have generally trended upwards for all the trilateral blocs. In 2000, out of all trilateral patent families, 57% made some use of the PCT system. Approximately 75% of trilateral patent families originating from the USA and 69% of trilateral patent families originating from EPC contracting states involved PCT applications. This compares to 32% from Japan and 61% from other countries.

Fig 5.6 shows the percentages of PCT system usage in the flows of all patent families between trilateral blocs in 2001, and can be compared with Fig 3.12.

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

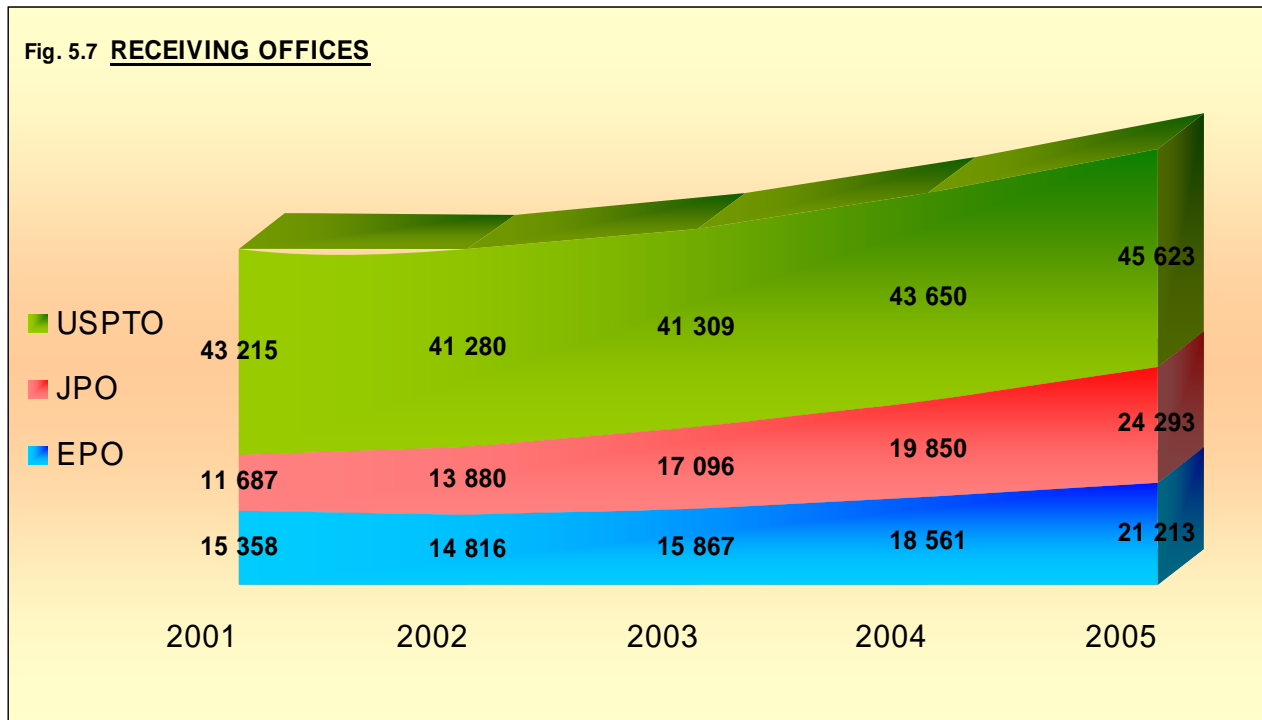


From information tabulated in the web-based annex of this report, out of all first filings in the trilateral area in 2001, 15.5% formed patent families that made some use of the PCT system. From those first filings in the trilateral area that resulted in filings in other trilateral blocs, 50.6% made some use of the PCT system. However, when considered by bloc of the priority applications, the proportions varied widely (59.6% from EPC contracting states, 25.3% from Japan, and 71.0% from USA). When the trilateral blocs receiving subsequent applications from the trilateral area are considered, the degree of variation in the proportions making use of the PCT system was slightly less (59.9% in EPC contracting states, 72.8% in Japan, and 39.8% 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 the EPC contracting states prefer to use the PCT system. In contrast, Japanese applicants tend to use the system to a somewhat lesser degree, both in percentage and absolute terms, although their participation is increasing.

THE TRILATERAL OFFICES AS PCT AUTHORITIES

Under the Patent Cooperation Treaty, each Trilateral Office acts as Receiving Office (RO), mainly for applicants from their own geographical zones, as International Searching Authority (ISA) and International Preliminary Examining Authority (IPEA). The following graphs show the trend over the years 2001 to 2005 of the activities of the Trilateral Offices as PCT authorities.



The USPTO received 45 623 international PCT applications in 2005, a 4.5% increase over 2004. The EPO and the JPO received far fewer international applications, but experienced large increases with 14.3% to 21 213 and 22.4% to 24 293 respectively.

Fig. 5.8 shows that, in 2005, the EPO received 66 256 international search requests, followed by the USPTO with 27 633 and the JPO with 23 021. Although the JPO received fewer requests, it experienced the largest increase from 2001 to 2005, with a rise of about 108% from the 2001 value.

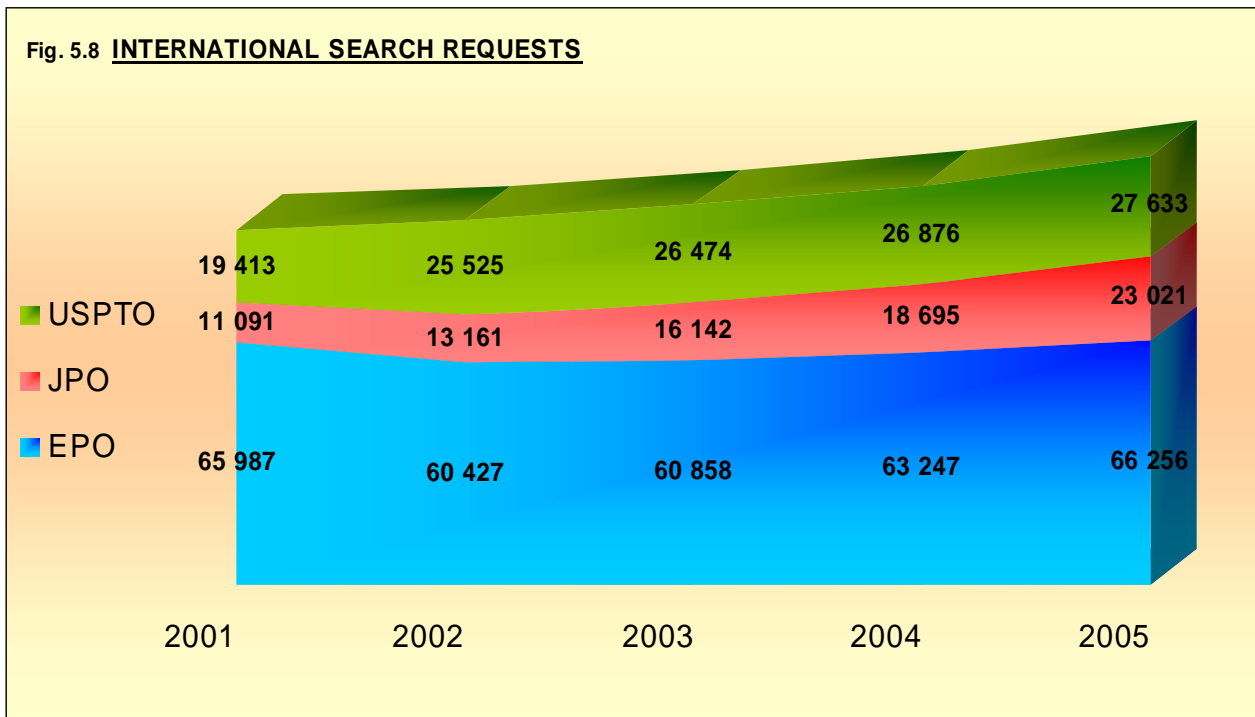
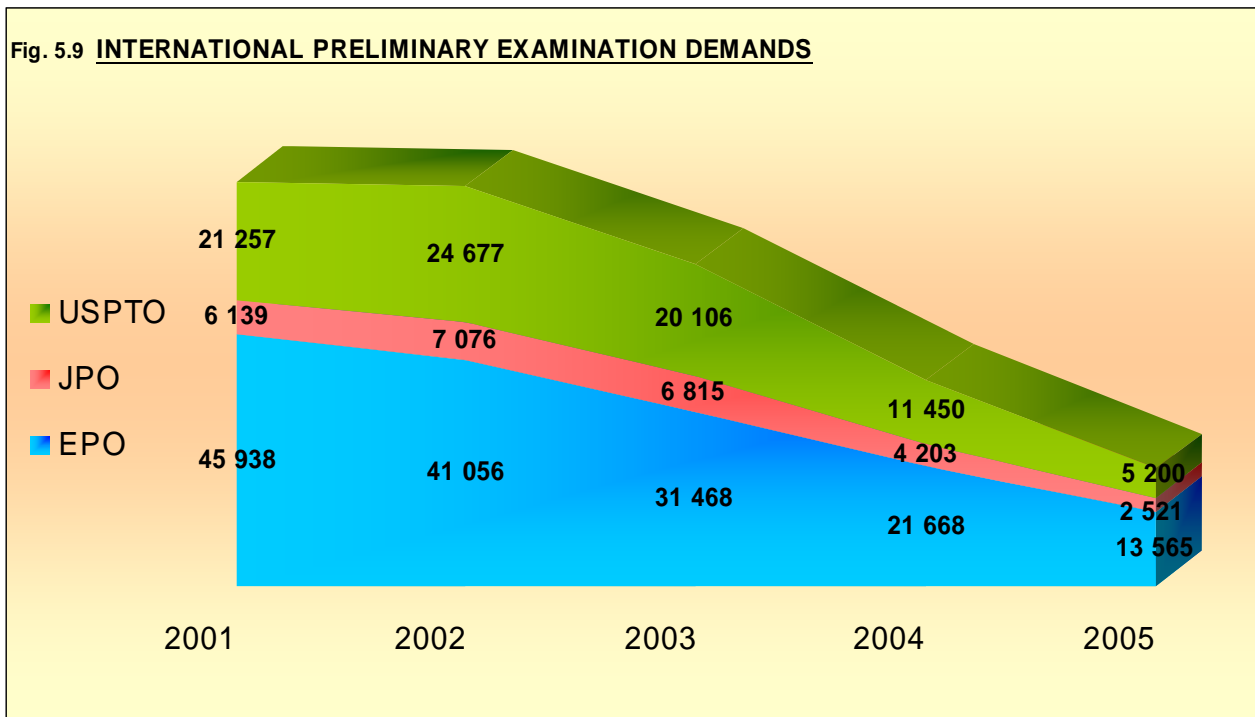


Fig 5.9 shows that the number of demands for international preliminary examination declined since 2001 at the EPO and since 2002 at the JPO and the USPTO. This is likely to be due to rule changes that took place in the PCT system.



The EPO was IPEA for 13 565 international applications in 2005, which represents a decline of 70.5% compared to 2001. The USPTO was IPEA for 5 200 applications in 2005, which represents 75.5% less demands than in 2001. The JPO is less often chosen as IPEA and, since 2001, has experienced a 58.9% decline to 2 521 demands in 2005.

Chapter 6

OTHER WORK

This chapter contains statistics on other work done by the Trilateral Offices, such as search or granting of rights that are not common to all three offices. The data presented below are supplementary 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, designs and trademarks in the JPO, and design patents and trademarks in the USPTO. The searches on behalf of national offices as well as searches for third parties are special items of work done at the EPO.

The numbers of requests received for all of these types of other work are shown in the table below for 2004 and 2005.

Table 6: STATISTICS ON OTHER WORK

Activities	YEAR	EPO	JPO	USPTO
Searched for National Offices/Third Parties	2004	21 964	-	-
	2005	19 355	-	-
Design Applications	2004	-	40 756	23 975
	2005	-	39 254	25 553
Utility Model Applications	2004	-	7 986	-
	2005	-	11 387	-
Plant Patent Applications	2004	-	-	1 221
	2005	-	-	1 222
Re-issue Patent Applications	2004	-	-	934
	2005	-	-	908
Trademark Applications	2004	-	128 843	304 461
	2005	-	135 776	334 741

Annex 1

DEFINITIONS FOR OFFICES EXPENDITURES

EPO expenditures

Personnel:

Salaries and allowances of permanent staff as well as of all categories of temporary staff; employer's contributions to sickness, death, invalidity, long-term care and pension schemes; recruitment, transfer and leaving costs; medical care; staff welfare; training; European School and crèches.

Property and equipment:

Operating costs related to the maintenance of buildings, technical installations, equipment, furniture and vehicles, such as rent, cleaning, repairs and depreciation; electricity, gas, water.

EDP equipment and maintenance:

Operating costs related to the maintenance of EDP hardware and software including depreciation; purchases below capitalization threshold (750 EUR); licenses; programming costs of self-developed systems as far as they do not qualify for capitalization.

Co-operation and patent information:

Published patent documentation on all media; public information; public relations and representation; meetings; costs of supervisory bodies; co-operation with contracting states including outsourced work and financial support to national patent offices; assistance to third countries.

General operating expenses:

Travel; non-EDP purchases below capitalization threshold; supplies; security and messenger services; consultants; external audit; other contract work; postage and telecommunications; documentation costs such as books, technical journals and external database interrogation; insurance; taxes and public levies; third-party funded projects; other miscellaneous small-scale expenditure.

JPO Expenditures

Expenses for JPO's business

Expenses for business processing

General processing work

- Existing personnel (including increase and transfer)
- General administration
- Various councils
- Encouragement of guidance including patent management
- External rental office
- Internationalization of industrial property administration
- Project for supporting medium and small company's applications
- Data communication system for accounting work in government
- Live telecast system for parliament examination

Examination and appeals/trials, etc.

- Infrastructure improvement for examination and appeals/trials
- Disposition of examination and appeals/trials
- Execution of Patent Cooperation Treaty
- Patented micro organisms deposition organization

Information management

- Management of information for use in examination and appeals/trials

Publication of Patent Gazette, etc.

Computerisation of patent processing work

Facility improvement

NCIPI operation

Others

USPTO expenditures

Salaries and Benefits:

Compensation directly related to duties performed for the Government by Federal civilian employees, military personnel, and non-Federal personnel. Also included are benefits for currently employed Federal civilian, military and certain non-Federal personnel.

Equipment:

- Personal property of a durable nature, that is, property that normally may be expected to have a period of service of a year or more after being put into use without material impairment of its physical condition or functional capacity.
- The initial installation of equipment when performed under contract.

Rent & Utilities:

Payments for the use of land, structures, or equipment owned by others and charges for communication and utility services.

Printing:

Printing and reproduction obtained from the private sector or from other Federal entities. Include:

- Typesetting and lithography.
- Duplicating.
- Standard forms when specially printed or assembled to order and printed envelopes and letterheads.
- Publication of notices, advertising, radio and television time.
- Photo composition, photography, blueprinting, photostating, and microfilming.
- The related composition and binding operations performed by the Government Printing Office, other agencies, or other units of the same agency on a reimbursable basis, and commercial printers or photographers.

Supplies & Materials:

Commodities that are:

- Ordinarily consumed or expended within one year after they are put into use.
- Converted in the process of construction or manufacture.
- Used to form a minor part of equipment or fixed property.
- Other property of little monetary value that does not meet any of the three criteria listed above, at the option of the agency.

Contracts and Services:

Services acquired by contract from non-Federal sources (that is, the private sector, foreign governments, State and local governments, tribes), as well as, from other units within the Federal Government. This object class consists of three types of services:

- Management and professional support services.
- Studies, analyses, and evaluations.
- Engineering and technical services.

Other

All other expenses not covered by the above.

Annex 2

DEFINITIONS FOR STATISTICS ON PROCEDURES

EXAMINATION RATE

This rate shows the proportion of those applications, for which the period to file a request for examination expired in the reporting year, that resulted in a request for examination up to and including the reporting year.

For the EPO, where the request for examination has to be filed no later than 6 months after publication of the search, the rate for 2005 relates to applications mainly filed in the years 2004 and 2005.

Since the JPO has allowed a three-year period to file a request for examination since October 1, 2001, but a seven-year period before that, the rate for the JPO in 2005 still relates to applications filed since 1998.

GRANT RATE

For the EPO, 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).

For the JPO, the grant rate is defined as the number of decisions to grant a patent divided by the number of disposals in the reporting year (decisions to grant or to refuse and withdrawals or abandonment after first office action).

For the USPTO, an allowance rate is reported, which is based on applications allowed to be granted divided by the number of disposals. This rate includes plant patents and reissue patents in addition to utility patents. However, since utility patents comprise over 90% of patent applications, and over 90% of issued patents, this rate is almost identical to a 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.

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

MAINTENANCE RATE AFTER OPPOSITION

The rate for the EPO is the number of decisions (in the opposition procedure) to maintain, possibly in amended form, a patent during the reporting year, divided by the total number of decisions in the opposition procedure during the reporting year.

Data are not available for the JPO and this rate does not apply to the USPTO.

APPEAL RATE

For the EPO, appeal rates are given for examination and opposition, being the numbers of decisions in the examination and opposition procedures 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-partes* 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 NUMBER OF 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).

PENDING EXAMINATIONS

For the EPO, pending applications in examination are applications filed for which the search was completed and the request for examination was filed, yet they have not been disposed of (granted, refused or abandoned) by the end of the reporting year.

For the JPO, pending applications in examinations are applications for which the requests for examination were filed and which have been waiting for a first action and have not been subject to a final action such as withdrawal or abandonment by the end of the reporting year.

For the EPO, pendency time in examination (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 JPO, pendency time in examination (months) is the total amount of months for disposing applications as final actions (decisions to grant or to refuse, withdrawals or abandonments) in the reporting year, divided by the average monthly number of final actions during the reporting year.

For the USPTO, average total pendency time (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 TO FIRST OFFICE ACTION

For the EPO since July 2005, the first office action consists of the dispatch of the search report together with the examining division first communication. There is no longer a distinct first action in the examination phase of the procedure. Therefore the pendency to first office action is no longer evaluated.

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

For the USPTO, pendency time to first office action (months) 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 OPPOSITION

This only applies to the EPO.

Number of 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 time in opposition (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.

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This report contains statistical information from the three major patent offices in the world. It gives a full description of worldwide patenting activities, as well as detailing and comparing the business processes taking place at each office. The report is also available online at www.trilateral.net.

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