

## **Chapter 5**

### **USE OF THE PATENT COOPERATION TREATY**

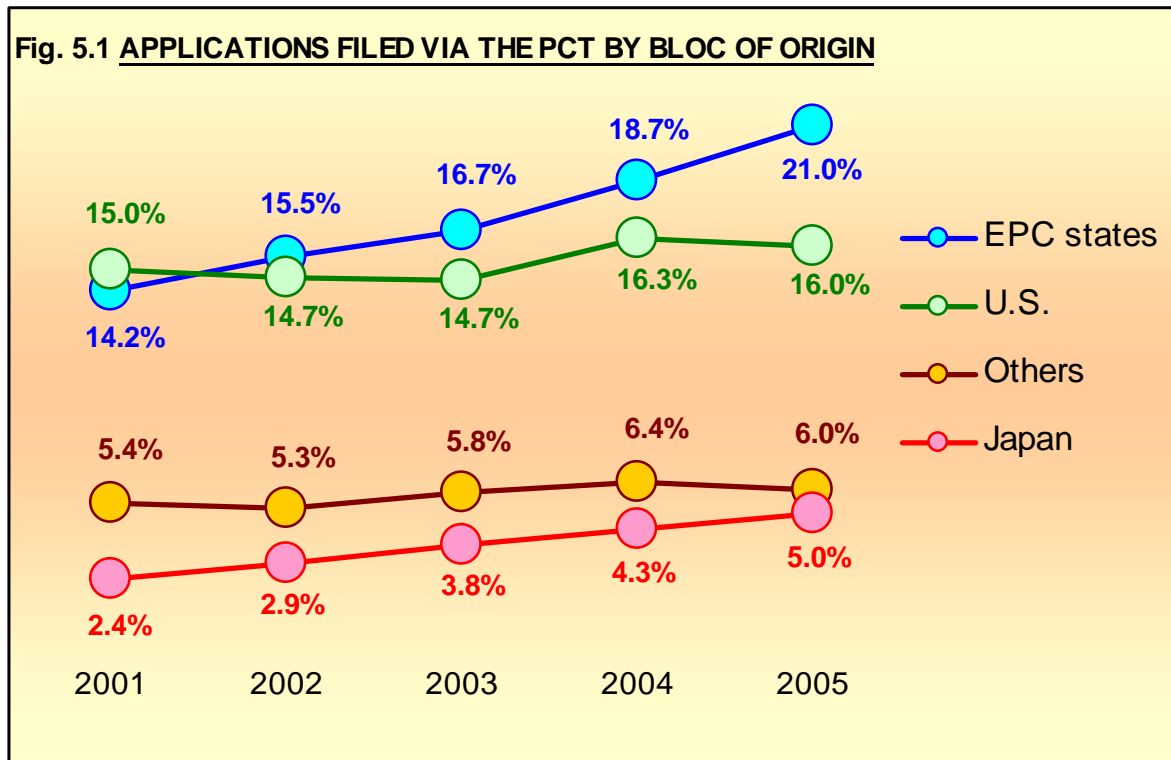
This chapter shows statistics that emphasize the relative importance of the various activities of the Trilateral Offices that relate to the PCT system. The graphs cover five-year periods that include the latest year for which reliable data are available.

Graphs are presented to display the shares of patent applications and grants using the PCT filing route by origin. Descriptions are then included of additional activities of the Trilateral Offices under the PCT as Receiving Offices (RO) for applicants in their respective territories, as the major International Search Authorities (ISA) and as International Preliminary Examining Authorities (IPEA). PCT searches are a significant additional workload item to what has already been described in Chapter 4.

## 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.

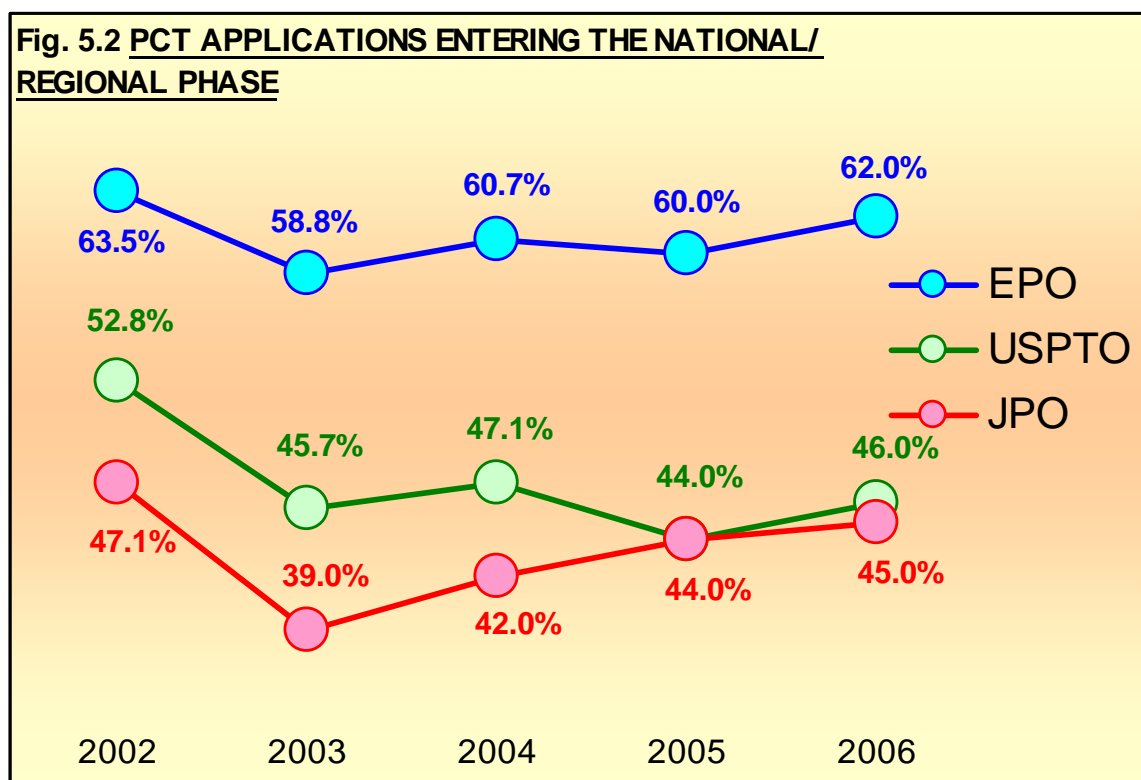


From 2004 to 2005, the share of PCT applications slightly increased in both the EPC contracting states and Japan. For those applications filed in the U.S. and in the “Others” bloc there was a slight decrease. Overall, the use of the PCT as a route for filing patent applications has continued to increase.

## 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 made for each country or regional organization. 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 application then enters 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 of the 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.

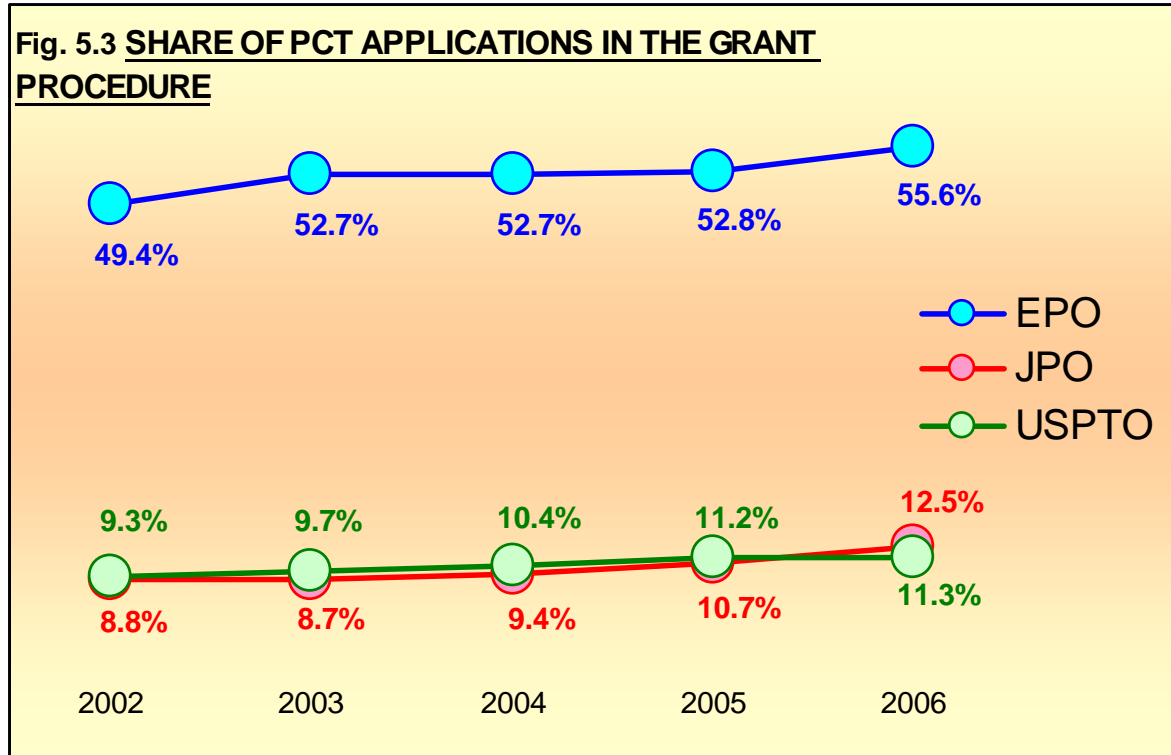
A higher proportion of PCT applications entered the regional phase at the EPO than entered the national phase either at the USPTO or the JPO. This is due to the supranational dimension of the EPO, which provides an opportunity to proceed further with a unique procedure for several countries.



In 2006, the rate increased by 2.0 percent at both the EPO and the USPTO to 62.0 percent and 46.0 percent respectively, and increased by 1.0 percent at the JPO to 45.0 percent.

## PCT APPLICATIONS AT THE TRILATERAL OFFICES

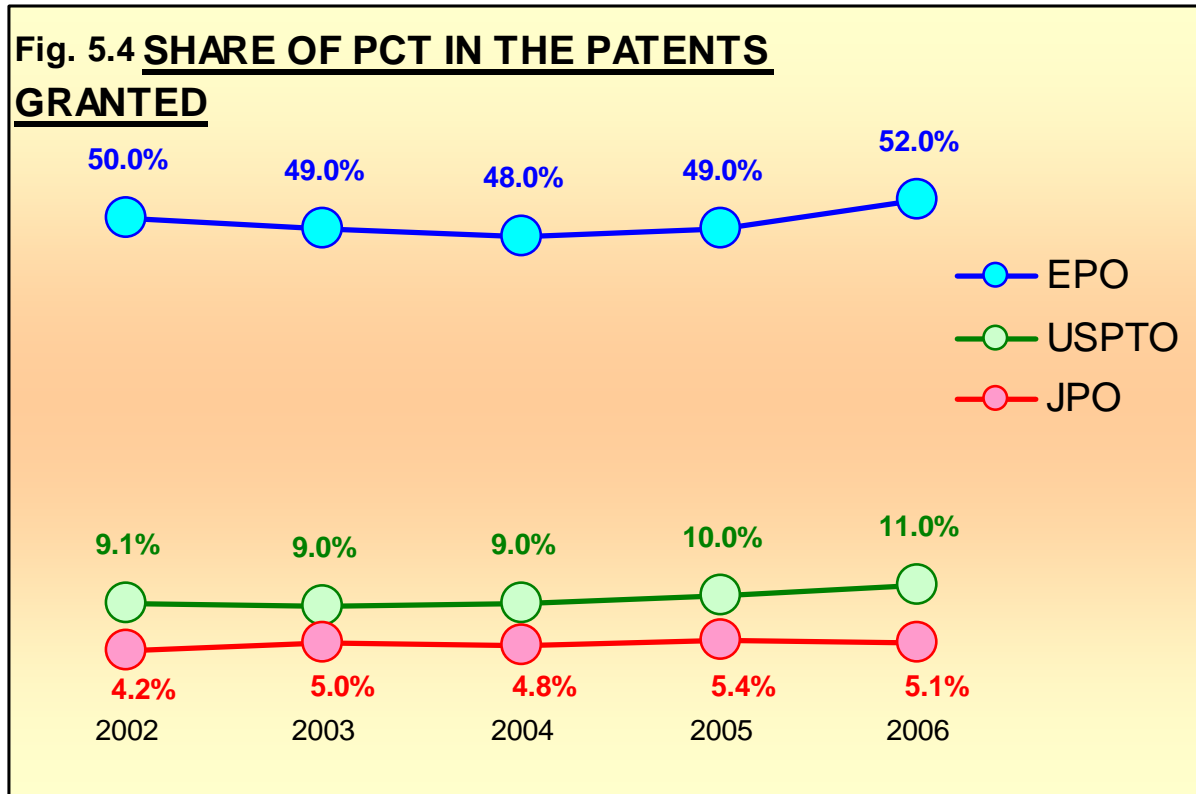
Fig. 5.3 shows the proportions of PCT applications within the overall applications that entered the grant procedure at each Trilateral Office as presented in Fig. 4.1 of Chapter 4.



The total number of PCT applications increased slightly in 2006 as compared to 2005 at all offices. The EPO has a high proportion of PCT applications, while the proportions at the JPO and the USPTO are lower. Both the USPTO and the JPO remained consistent with previous years. The EPO increased to 55.6 percent; the JPO increased to 12.5 percent; and the USPTO had only a slight increase.

## 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.

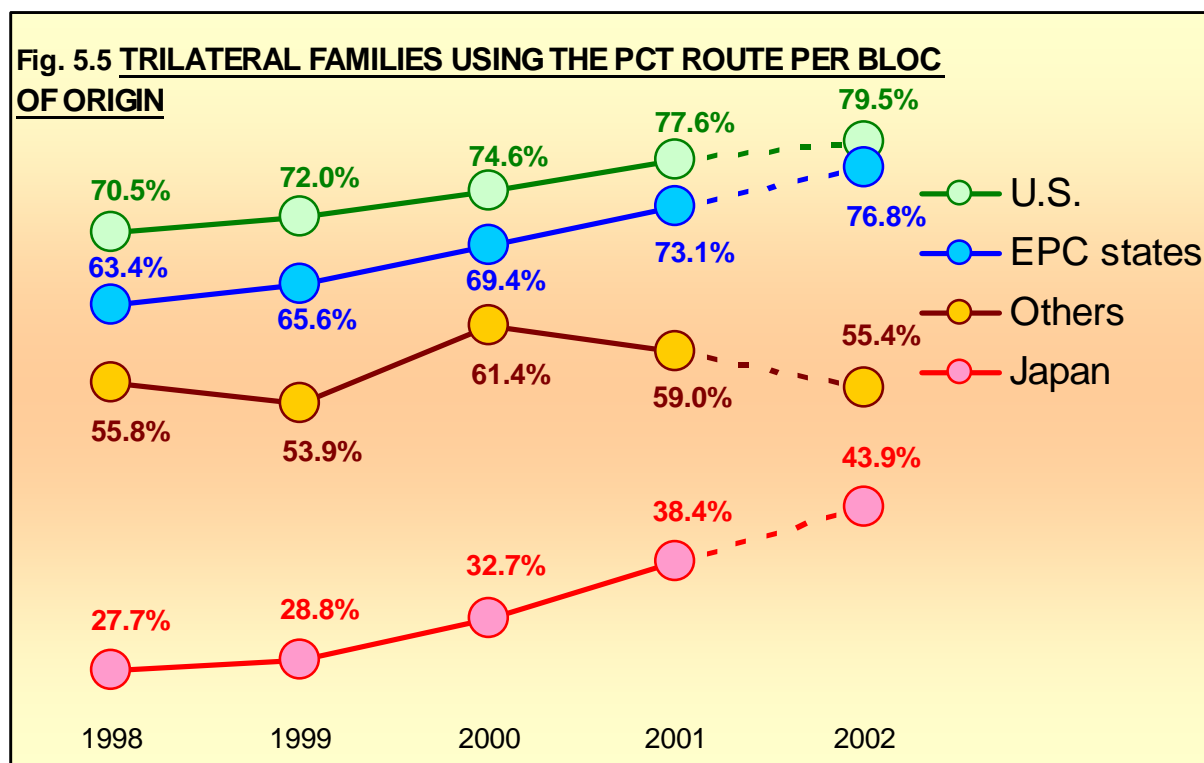


At all three of offices, the shares of PCT applications among all applications receiving a patent grant have remained stable since 2002. Shares are somewhat below those of applications (see Fig. 5.3), since granted patents relate to applications filed three to five years earlier when the proportions 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 statistical data that is annexed in the web based version of this report.

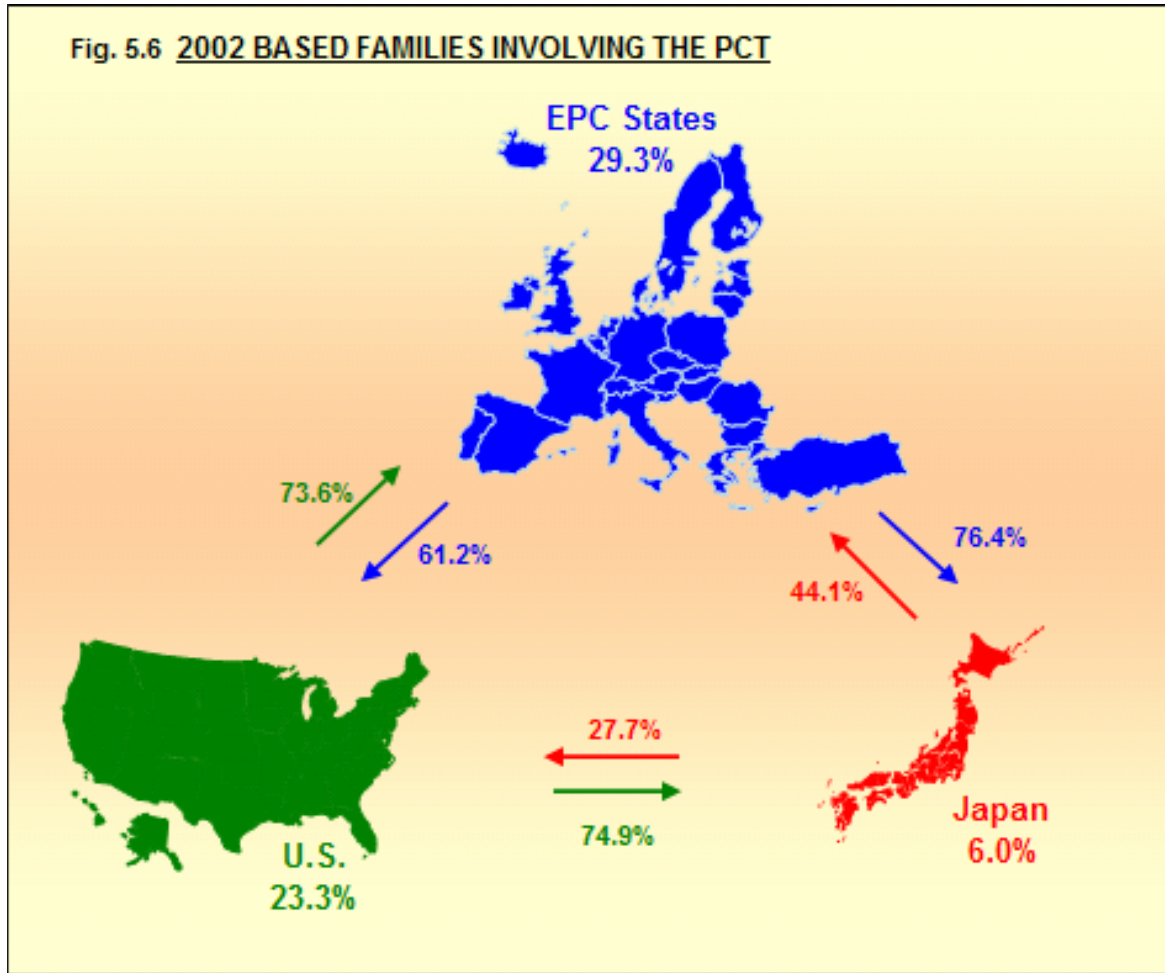
Fig. 5.5 shows the proportions of trilateral patent families (as given earlier in Fig. 3.12) that use the PCT system. As discussed earlier, the data for 2002 is provisional.



Usage of the PCT system was fairly widespread in trilateral patent families, though still at a somewhat lower level in Japan. The proportions have generally trended upwards for all the trilateral blocs, but have had a two year decline in non-trilateral countries of origin. In 2001, out of all trilateral patent families, 61.6 percent made some use of the PCT system. 77.6 percent of trilateral patent families originating from the U.S. and 73.1 percent of trilateral patent families originating from the EPC contracting states involved PCT applications. This compares to 38.4 percent from Japan and 59.0 percent from other countries.

Fig. 5.6 shows the percentages of PCT system usage in the flows of all patent families between trilateral blocs in 2002, and can be compared with Fig. 3.12.

The percentage given next to 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.



Applicants from U.S. and the EPC contracting states prefer to use the PCT system to a greater extent than Japanese applicants do. However, the participation rate of Japanese applicants is increasing, particularly when making filings abroad.

## THE TRILATERAL OFFICES AS PCT AUTHORITIES

Under the PCT, each Trilateral Office acts as RO, mainly for applicants from its own geographical zone, as ISA and IPEA. The following graphs show the trend over the years 2002 to 2006 of the activities of the Trilateral Offices as PCT authorities.

In 2006, two thirds of the PCT international filings were filed in one of the Trilateral Offices.

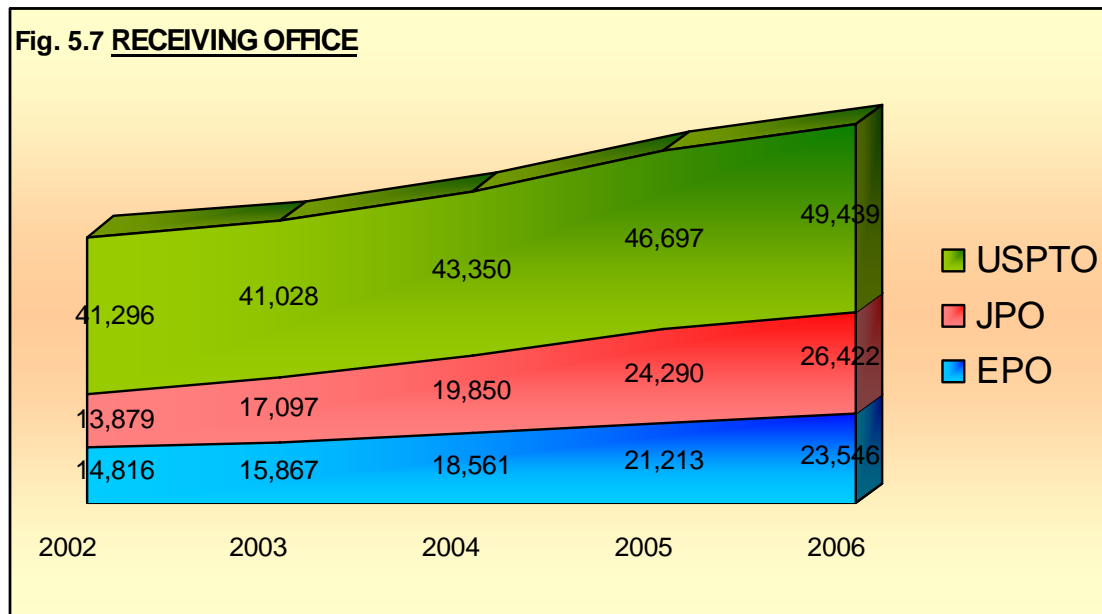


Fig. 5.7 shows that the USPTO received 49,439 international PCT applications in 2006. The EPO and the JPO received far fewer international applications, but experienced large increases to 23,546 and to 26,422 respectively.



Together, the Trilateral Offices received 85 percent of the PCT international search requests in 2006.

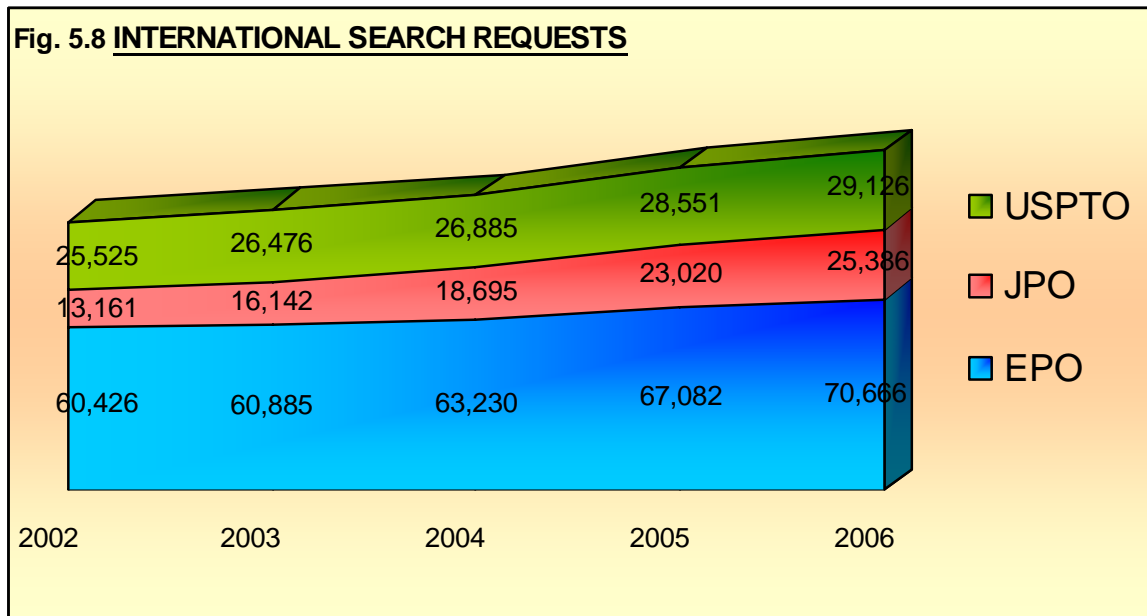


Fig. 5.8 shows that, in 2006, the EPO received 70,666 international search requests, followed by the USPTO with 29,126 and the JPO with 25,386. Although the JPO received fewer requests, it experienced the largest increase from 2002 to 2006.

Together the Trilateral Offices were in charge of 83 percent of the work as IPEA in 2006.

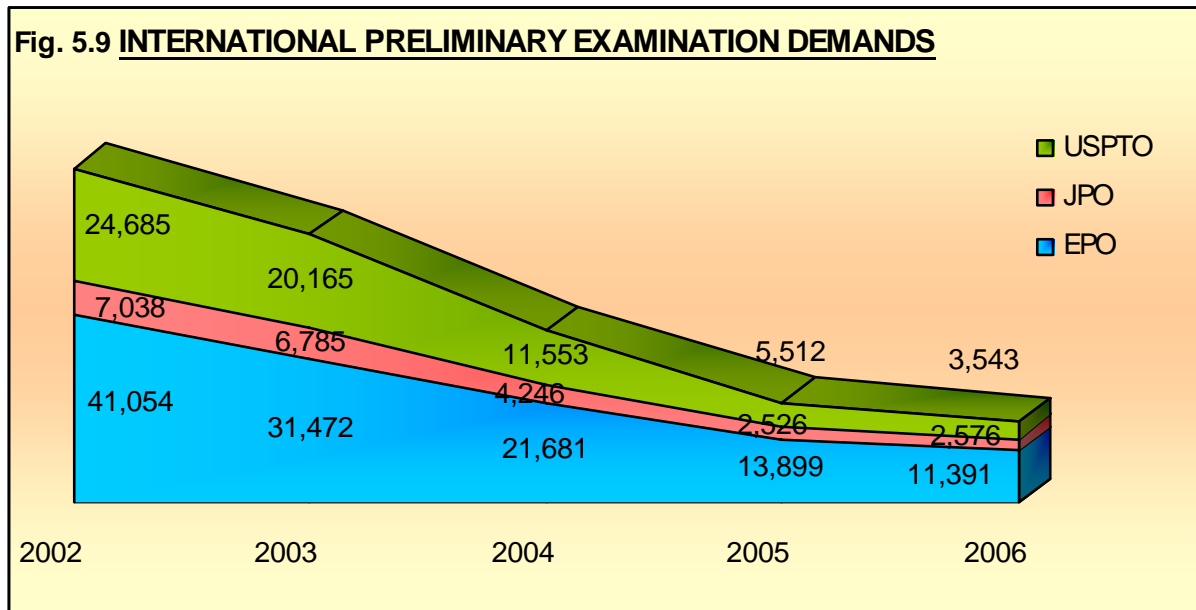


Fig. 5.9 shows that the number of demands for international preliminary examination declined since 2002 at all three Trilateral Offices. This is due to rule changes that took place in the PCT system regarding time limits to enter the national or regional phase, and also to the introduction of a written opinion on patentability with the international search report.

The EPO was IPEA for 11,391 international applications in 2006, which represents a decline of 213 percent compared to 2002. The USPTO was IPEA for 3,543 applications in 2006, which represents 384 percent less demands than in 2002. The JPO is less often chosen as IPEA and, since 2002, has experienced a 177 percent decline to 2,576 demands in 2006.