Chapter 5

THE FOUR OFFICES AND THE PATENT COOPERATION TREATY

This chapter presents statistics on the extent of the various activities of the Four Offices that relate to the PCT system. The graphs cover five-year periods that include the latest year for which reliable data are available.

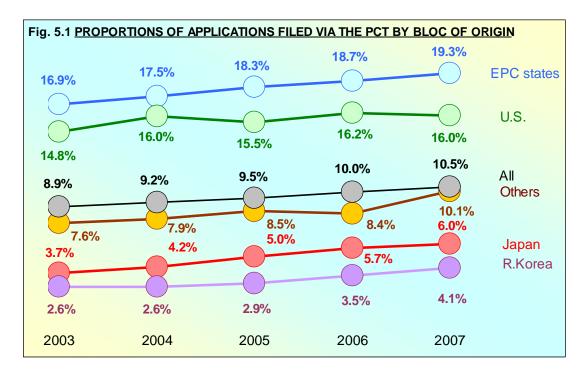
Graphs are presented to display the shares of patent applications and grants using the PCT filing route by origin. Descriptions are then given of additional activities of the Four Offices under the PCT as ROs for applicants in their respective territories, as the major ISAs and as IPEAs. PCT searches are a significant additional workload item at the Four Offices to those already described in Chapter 4.

In previous editions of TSRs, Others included R. Korea. Therefore, there has been some adjustment in counts for the "Others" compared with those in the earlier reports.

THE PCT AS FILING ROUTE

PATENT FILINGS

Fig. 5.1 shows the proportions of all patent applications filed that are PCT international applications, and also shows the breakdown by each bloc of origin. Applications are counted in the year of filing.



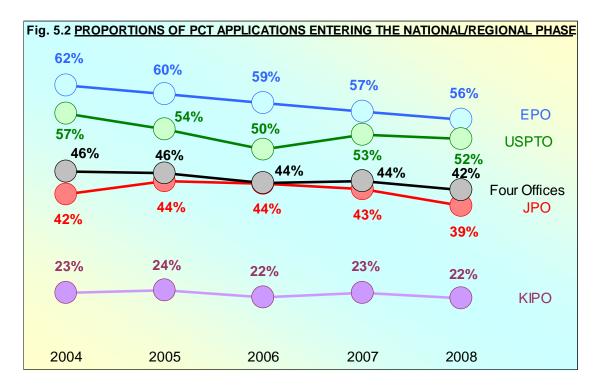
The choice of the PCT as a filing route has generally continued to increase, although at different levels for the different bloc of origin.

The line for All is a weighted combination of the various lines for each bloc of origin, and can be reconstructed from the information provided in Fig. 3.1 of Chapter 3.

NATIONAL/REGIONAL ENTRY RATE

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 organisation. If the decision is made to proceed further, the applicant has to fulfil the various requirements of the selected PCT contracting states or organisations. The application then enters the national or regional phase.

The proportions of all PCT applications that have entered the national or regional phase at each of the Four Offices are presented in Fig. 5.2. Applications are counted in the year of the delay to enter the national or regional phase has expired.

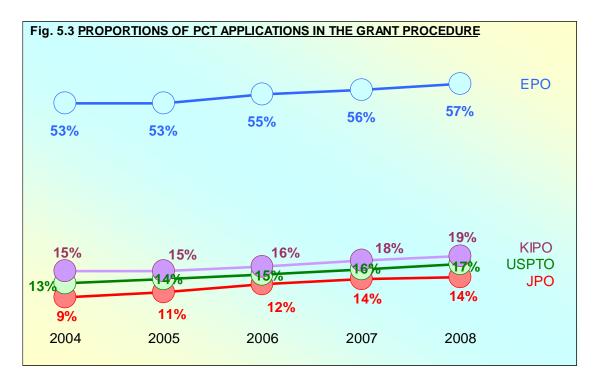


There is a general declining trend observed at all offices. This should be interpreted in the context of the strong increase of the number of PCT international applications filed during the period and shortly before. A higher proportion of PCT applications entered the regional phase at the EPO than entered the national phase at JPO, KIPO or USPTO. This is due to the supranational dimension of EPO, which provides an opportunity to proceed further with a unique procedure for several countries.

It should be noted that proportions of PCT applications entering national phase at EPC contracting state national offices are not reported here. The line for Four Offices is almost a simple weighted average of the individual Office lines because most international phase PCT filings designate all Four Offices at the outset.

SHARE OF PCT APPLICATIONS

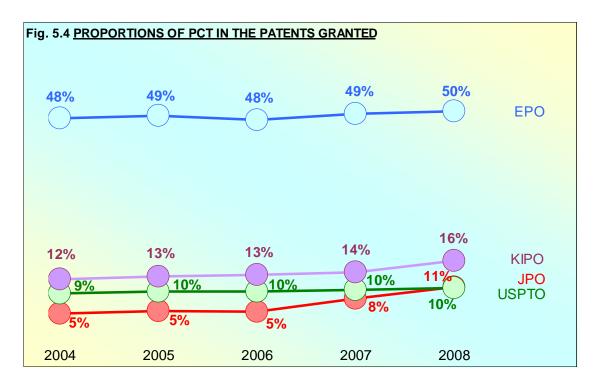
Fig. 5.3 shows the proportions of PCT applications within the overall applications that entered the grant procedure at each Office (as presented earlier in Fig. 4.1).



Despite the declines reported in Fig 5.2, the total shares of PCT applications nevertheless increased in 2008 as compared to 2007 at the all offices except JPO, which remained stable. The EPO has a higher proportion of PCT applications than at the other offices.

PCT GRANTS

Fig. 5.4 shows the proportions of patents granted by each of the Four Offices that were based on PCT applications.



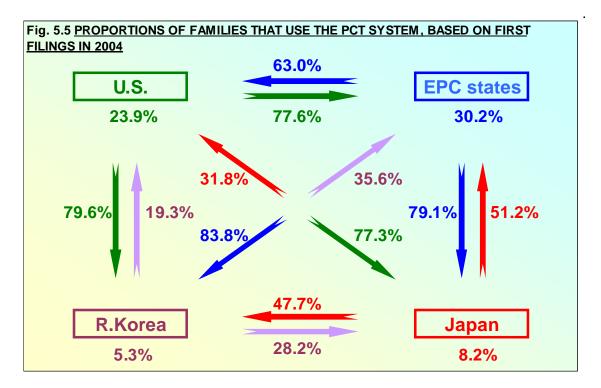
Shares of PCT patents granted are somewhat below those of applications (see Fig. 5.3), since granted patents generally relate to applications that had been filed three to five years earlier when the proportions of PCT applications were lower (as shown in Fig. 5.1).

PATENT FAMILIES AND PCT

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 family flows can be found in the statistical data file that is attached to the web based version of this report.

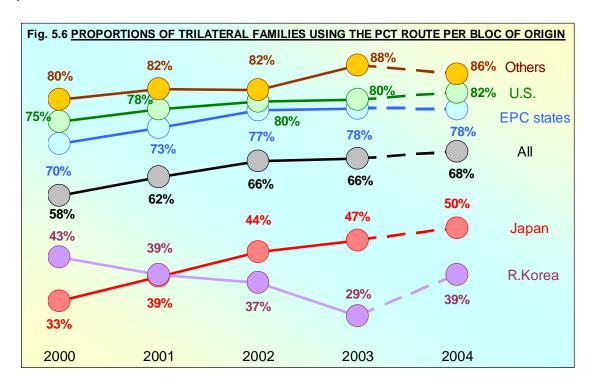
Fig. 5.5 shows the percentages of PCT system usage in the flows of all patent families between blocs, based on first filings in 2004, and can be compared with Fig. 3.13.

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.



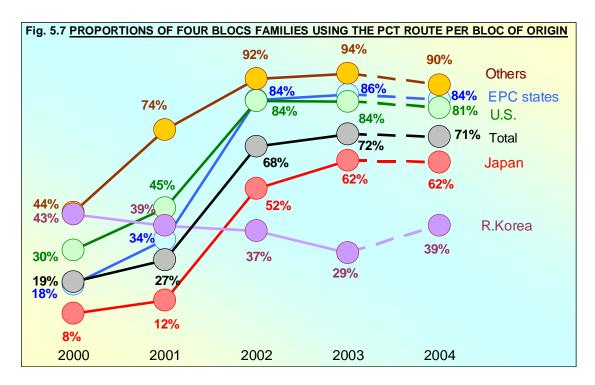
In general, the usage of the PCT route is far higher when making applications abroad rather than at home. Applicants from U.S. and EPC states prefer to use the PCT system to a greater extent than applicants from Japan and R. Korea.

Fig. 5.6 shows the proportions of Trilateral patent families (as given earlier in Fig. 3.14) that make some use of the PCT system. As discussed earlier, the data for 2004 are provisional.



Usage of the PCT system was fairly widespread in Trilateral patent families, although still at a somewhat lower level in Japan and R. Korea. In 2003, out of all Trilateral patent families, 66 percent made some use of the PCT system.

Fig. 5.7 shows the proportions of Four blocs patent families (as given earlier in Fig. 3.15) that made some use of the PCT system.



Except for R. Korea and U.S. in the most recent years, the usage of the PCT system has generally grown in the Four blocs families over the period, from less than that in Trilateral patent families to more than that in Trilateral Patent families since 2002. This may be correlated to the strong growth in absolute numbers of Four blocs patent families that was shown in Fig. 3.15 of Chapter 3. Fig. 5.7 confirms that the PCT system is indeed a useful way to obtain an increased international distribution of subsequent filings.

PCT AUTHORITIES

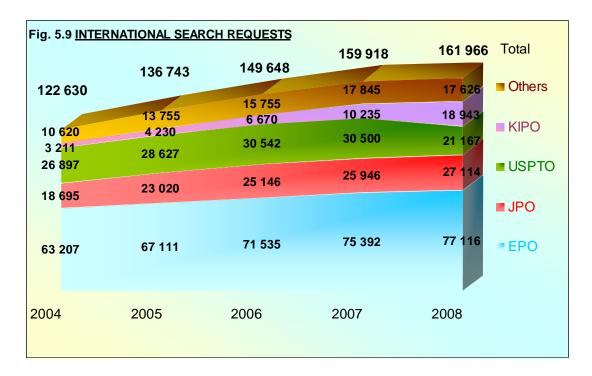
Under the PCT, each of the Four Offices acts as RO, mainly for applicants from its own geographical zone, and as ISA and IPEA for also non residents as well as for residents. The following graphs show the trend over the years 2004 to 2008 of the activities of the Four Offices as PCT authorities.

Fig. 5.8 RECEIVING OFFICES Total 163 058 159 930 149 663 136 752 122 633 Others 45 286 45 677 42 086 39 277 KIPO 7 9 1 1 **37 007** 7 060 5 918 4 690 3 5<mark>65</mark> **■** USPTO 51 959 54 587 51 855 47 241 43 663 **■** JPO 28 027 26 935 26 421 24 290 19 850 ■ EPO 29 484 26 062 18 548 21 254 23 383 2006 2004 2005 2007 2008

Fig. 5.8 shows the breakdown of PCT international filings by ROs over time.

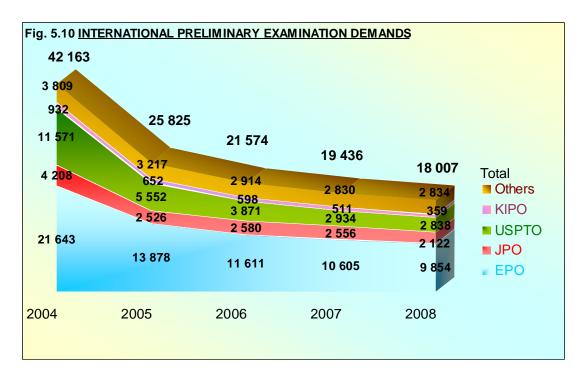
EPO and the JPO received fewer international applications than USPTO. KIPO received far fewer applications. In 2008, USPTO was the only one of the Four Offices to experience a decrease (5 percent).

Fig. 5.9 shows the breakdown of the numbers of international search requests over time.



The Four Offices together received 89 percent of the PCT international search requests in 2008. A growing proportion of applicants select KIPO to perform the PCT international search. The reason for this may be that KIPO has been appointed fairly recently as ISA. It is experiencing strong increases, apparently at the expense of USPTO, where the share declined accordingly.

Fig. 5.10 shows the breakdown of the numbers of international preliminary examination requests over time.



Together the Four Offices were in charge of 84 percent of the work as IPEA in 2008 compared to 91 percent in 2004. The number of demands for international preliminary examination declined after a rule change that took place in 2004 in the PCT system regarding time limits to enter the national or regional phase, and the introduction of a written opinion on patentability with the international search report. This made the international preliminary examination less attractive for most applicants.

EPO still performed more than half of the examinations in 2008, and USPTO experienced the strongest proportional decrease over the period.