

## Chapter 5

# THE FOUR OFFICES AND THE PATENT COOPERATION TREATY

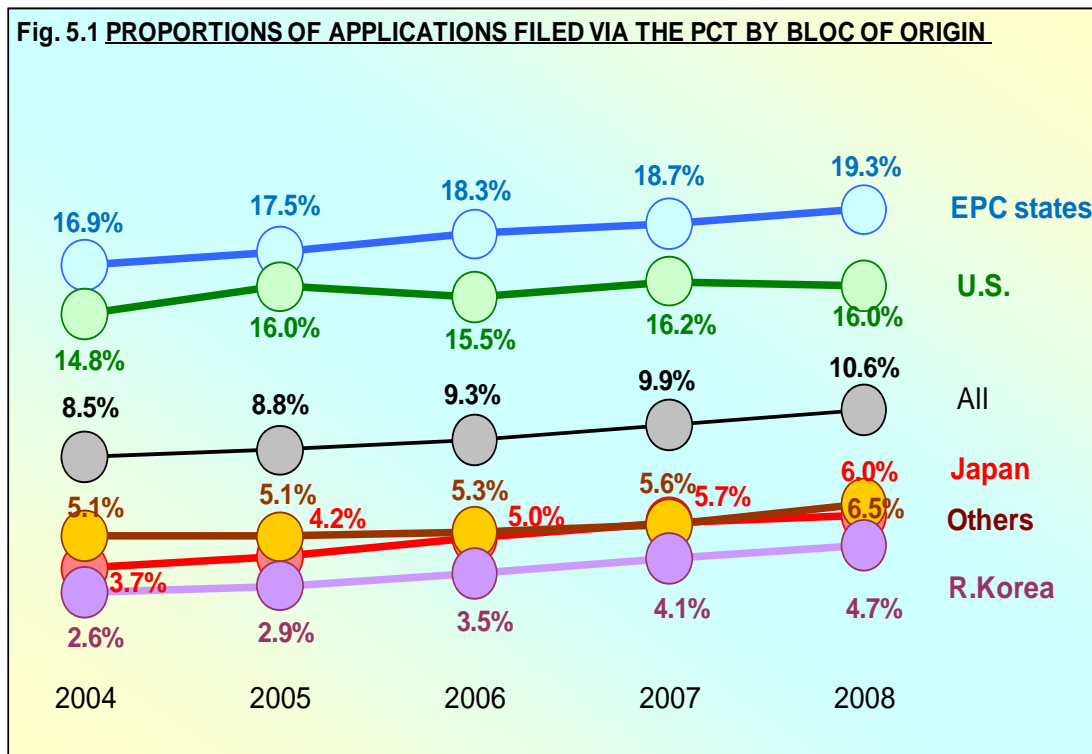
This chapter presents statistics on the extent of the various activities of the Four Offices that relate to the PCT system. The graphs cover five-year periods that include the latest year for which reliable data are available.

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 receiving office (RO) for applicants in their respective territories, as the major international searching authorities (ISA) and as international preliminary examination authorities (IPEA). PCT searches are a significant additional workload item at the Four Offices to those already described in Chapter 4.

## THE PCT AS FILING ROUTE

### PATENT FILINGS

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



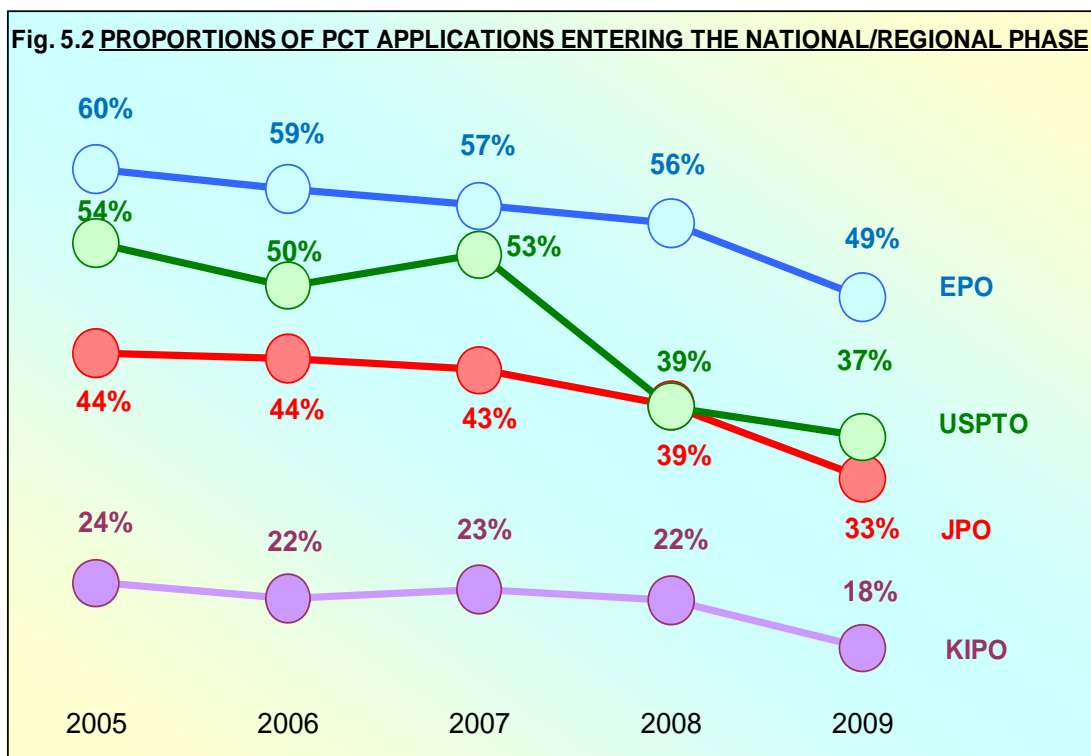
On average 10 percent of the applications filed were filed via the PCT route.

U.S. and EPC applicants used the PCT system more than applicants did in the other blocs – and also kept increasing their usage of PCT further in 2008, although at a lower relative rate of increase than applicants from Japan and R. Korea.

## NATIONAL/REGIONAL PHASE ENTRY RATE

After the international phase of the PCT procedure, applicants decide whether they wish to continue further with their applications in the national or regional phase for each country of interest. 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 PCT applications having entered the national or regional phase at each of the Four Offices in all the international phase PCT applications are presented in Fig. 5.2. Applications are counted in the year that they qualify for entry because the delay to enter the national or regional phase has expired<sup>1</sup>.



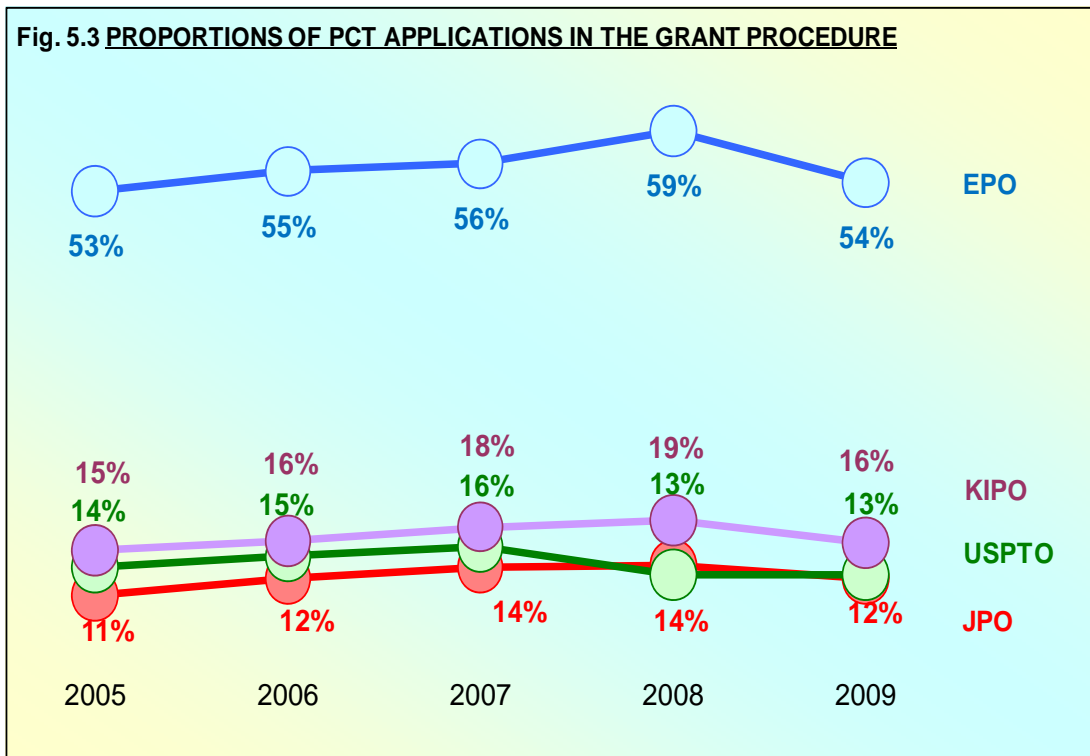
There is a general declining trend observed at all Offices. This should be interpreted in the context of the strong increase of the number of PCT international applications filed during the period and shortly before.

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 multinational dimension of EPO, which provides an opportunity to proceed further with a unique procedure for several countries.

<sup>1</sup> It should be noted that proportions of PCT applications entering national phase at EPC contracting state national Offices are not reported here.

## SHARE OF PCT APPLICATIONS

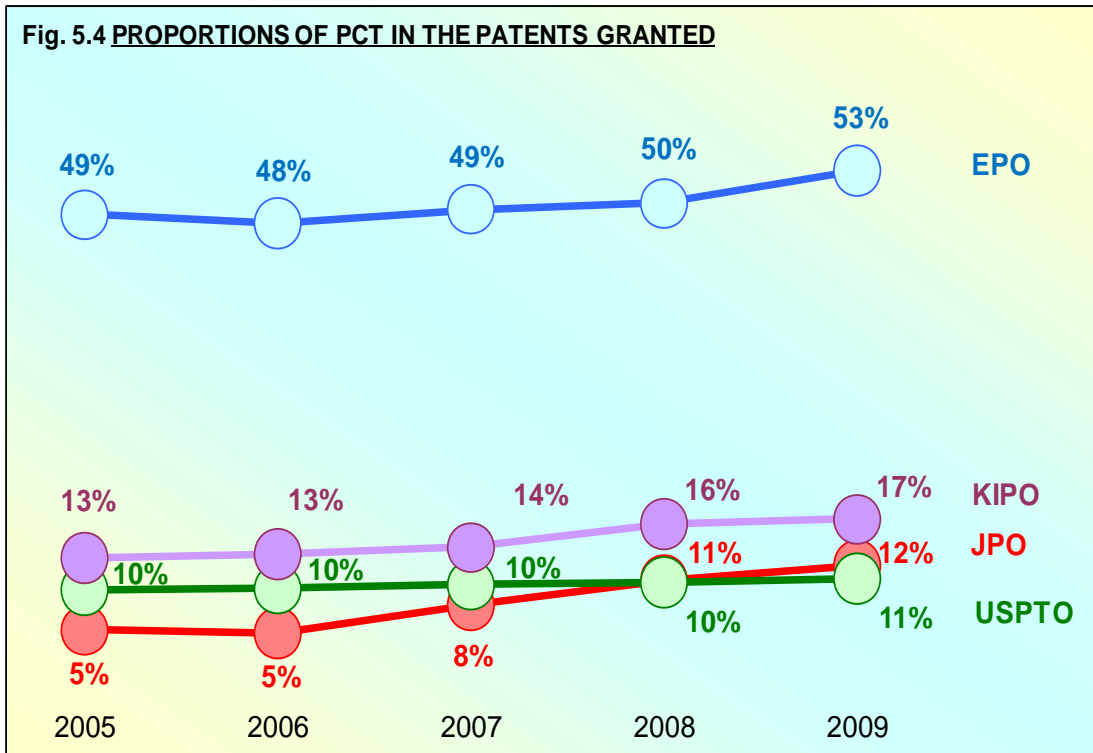
Fig. 5.3 shows the proportions of PCT applications relative to applications that entered the grant procedure at each Office (as presented earlier in Fig. 4.1).



Although declines were reported in Fig. 5.2, the proportions of PCT applications decreased from 2008 to 2009 only for KIPO. As has already been mentioned above, 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.

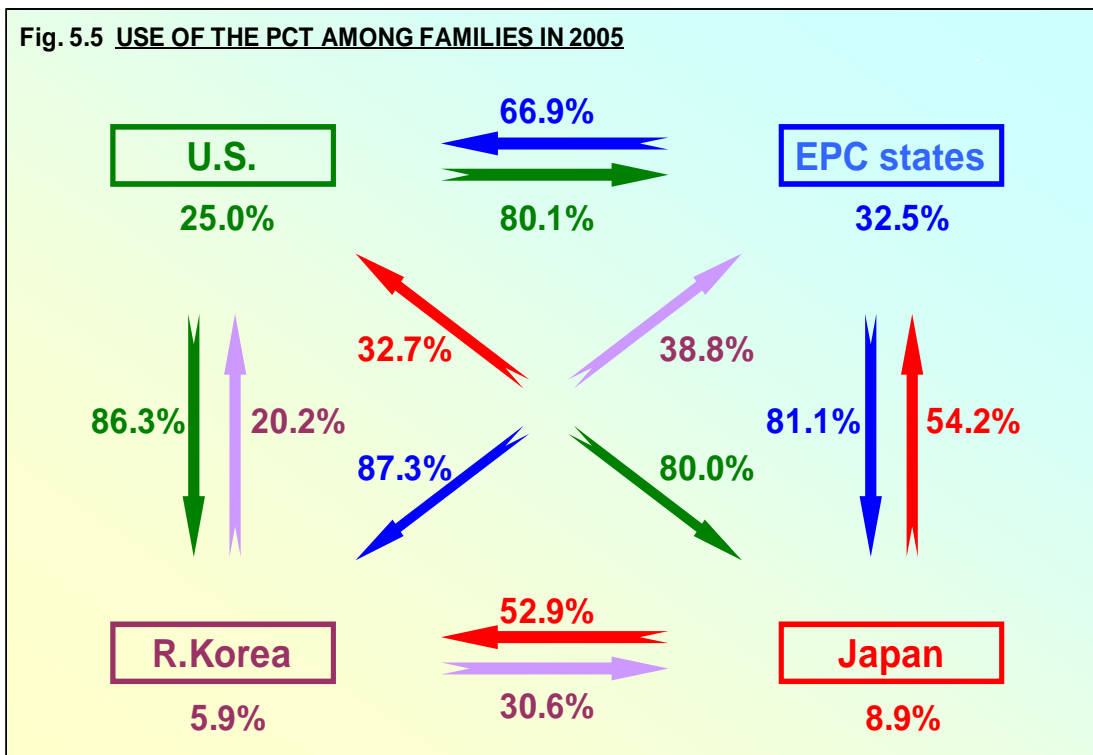


Shares of PCT patents granted are usually somewhat below those of applications (see Fig. 5.3), since granted patents generally relate to applications that had been filed three to five years earlier when the proportions of PCT applications were lower (as shown in Fig. 5.1).

## PATENT FAMILIES AND PCT

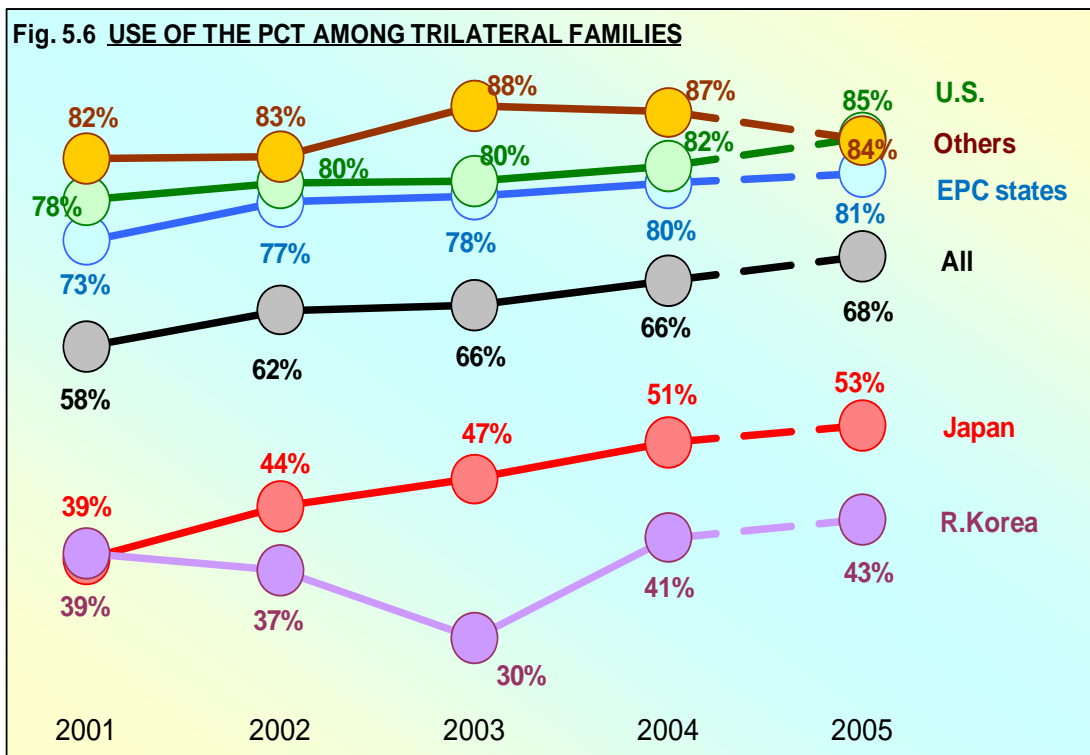
The PCT system provides a good way to make subsequent patent applications in a large number of countries. Therefore it can be expected that many patent families flowing between blocs will use the PCT route. In this section, the use of the PCT system implies that at least one PCT application has been made within the family of filings for the same invention. Historical tables for the years 1995 to 2005 can be found in the statistical data file that is attached to the web based version of this report.

Fig. 5.5 shows two percentages relating to use of the PCT system. The first, next to the name of each bloc, is the proportion of the overall number of distinct referenced priorities for the bloc that generated families using the PCT. The second, next to the arrows indicating flows between-blocs, shows the share of total patent-family flows that used the PCT system. This figure is based on first filings in 2005, and can be compared with Fig. 3.13.



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.

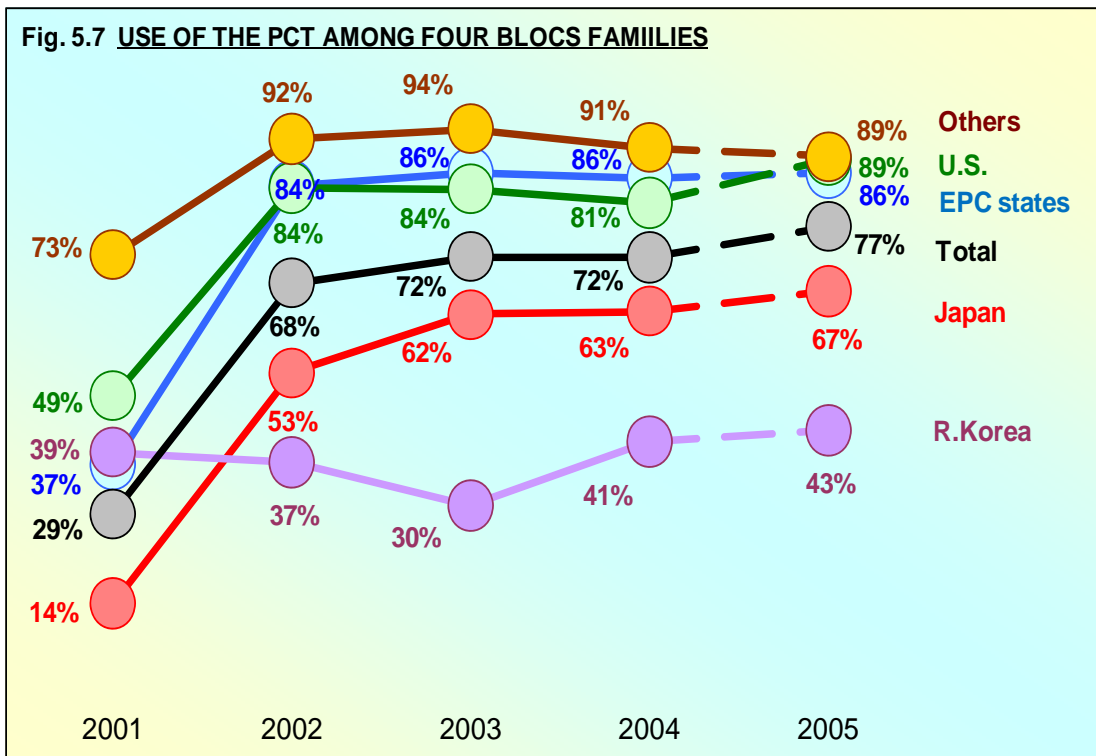
Fig. 5.6 shows the proportions of Trilateral Patent families (as given earlier in Fig. 3.14) that make some use of the PCT system. As discussed earlier, the data for 2005 are provisional.



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 2004, 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 3.15) that made some use of the PCT system.

Fig.



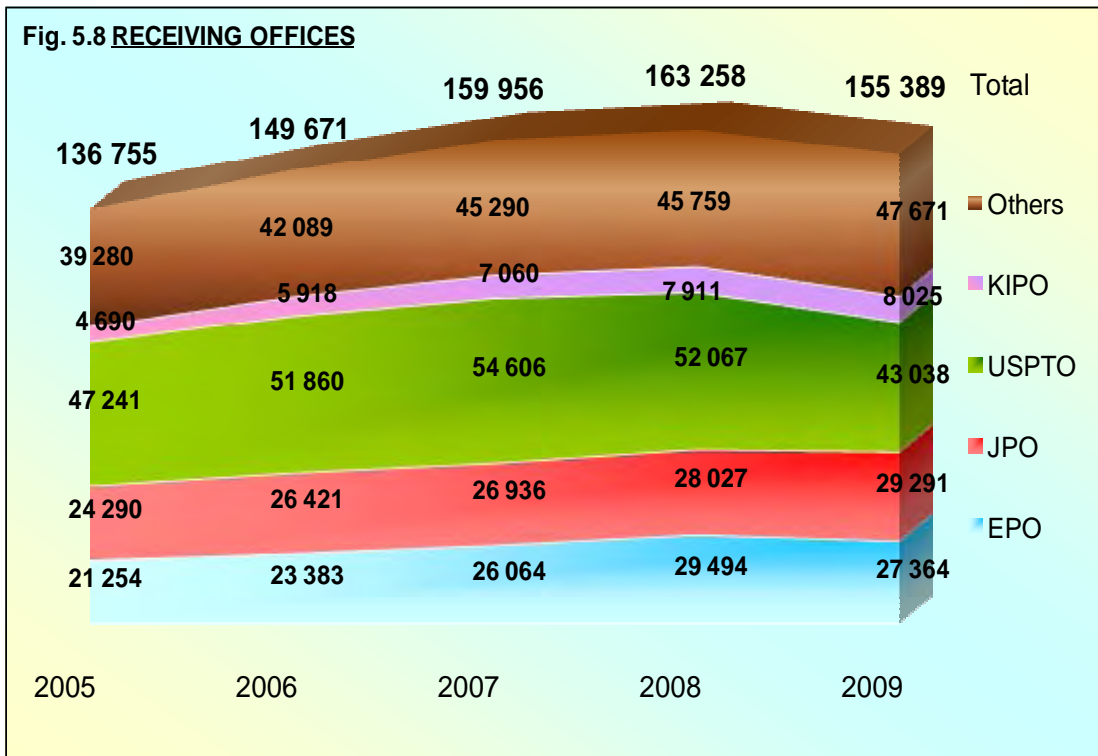
The usage of the PCT system has generally grown in the Four Blocs families over the period from 2001 to 2004. Fig. 5.7 confirms that the PCT system is indeed a useful way to obtain an increased international distribution of subsequent filings.



## PCT AUTHORITIES

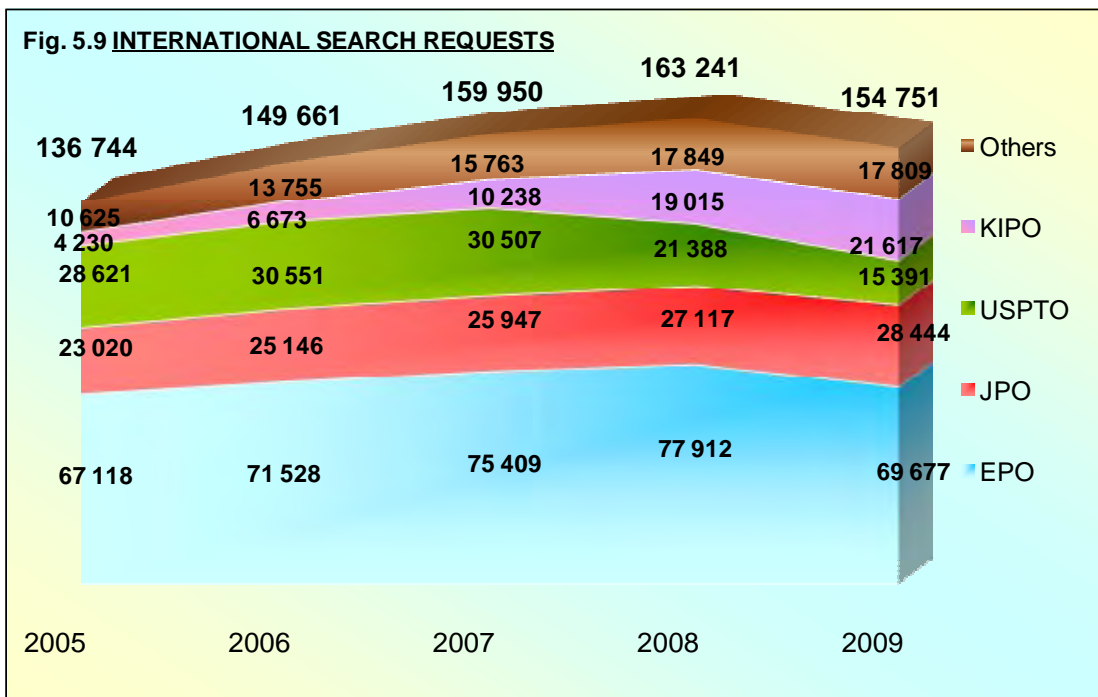
Under the PCT, each of the Four Offices acts as RO, mainly for applicants from its own geographical zone, and as ISA and IPEA for non residents and residents. The following graphs show the trends from 2005 to 2009.

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



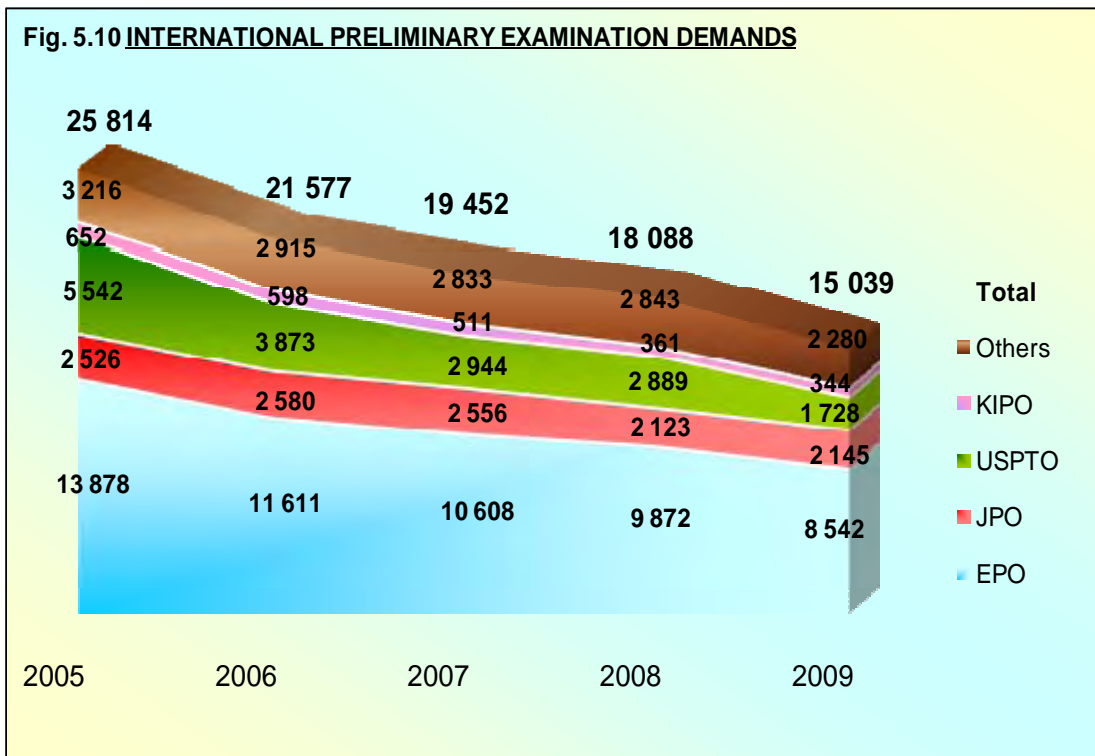
EPO and the JPO received fewer international applications than USPTO and KIPO received far fewer applications. In 2009, there were declines of 17 percent at USPTO and 7 percent at EPO compared to 2008. At JPO and KIPO there was a growth 5 percent and 1 percent respectively in 2009.

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



The Four Offices together received 87 percent of the PCT international search requests in 2009. 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 number of search requests declined markedly.

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



The number of demands for international preliminary examination declined substantially after rule changes (in 2004) 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. Together the Four Offices were in charge of 85 percent of the work as IPEA in 2009 compared to 88 percent in 2005.

EPO still performed more than half of the examinations in 2009.