

3 DEMAND FOR PATENT RIGHTS

Statistics in this chapter are derived primarily from the provisional 1997 Industrial Property Statistics from the WIPO. In addition to the statistics originating from the Trilateral Offices, statistics from many other Offices are necessary in order to present a picture of the worldwide patent activity. Not all Offices in the world have furnished the necessary information.

Applicants may use three types of granting procedures:

- the national procedure,
- the regional (like the European) procedure, and,
- the international procedure (PCT).

In this chapter applications are counted in the year of filing. Since one European application or one PCT international application replaces a "bundle" of national ones, it is rather the states designated that are reported..

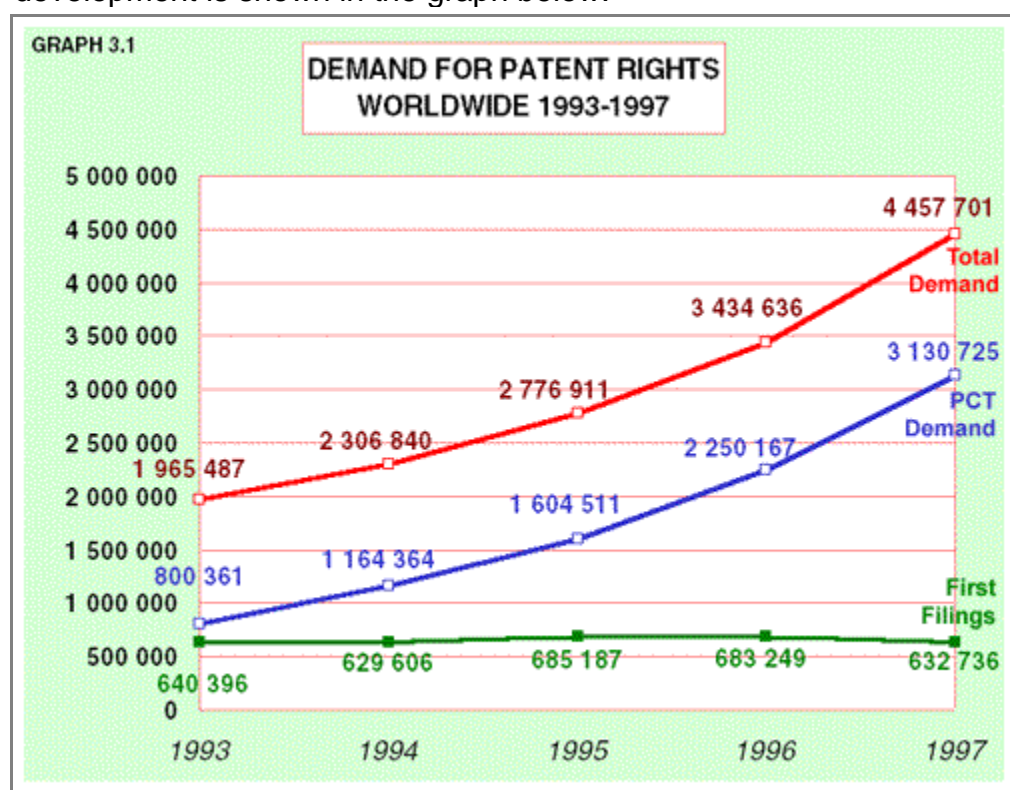
Patent rights do not necessarily have the same effect in each country all over the world. One reason is that patent law is not exactly the same in every country despite the very existence of regional and international procedures.

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 does partially explain the relatively high number of patents and patent applications in Japan compared to Europe and the United States.

Significant differences in interpretation among countries regarding the scope afforded to patent rights affect the ability to compare patents from different countries. For instance, courts of law in the United States tend to interpret patent claims according to a peripheral claiming system. Other countries, however, such as Germany, have legal systems which tend to interpret patent claims using a central claiming system.

3.1 DEMAND FOR PATENT RIGHTS WORLD-WIDE

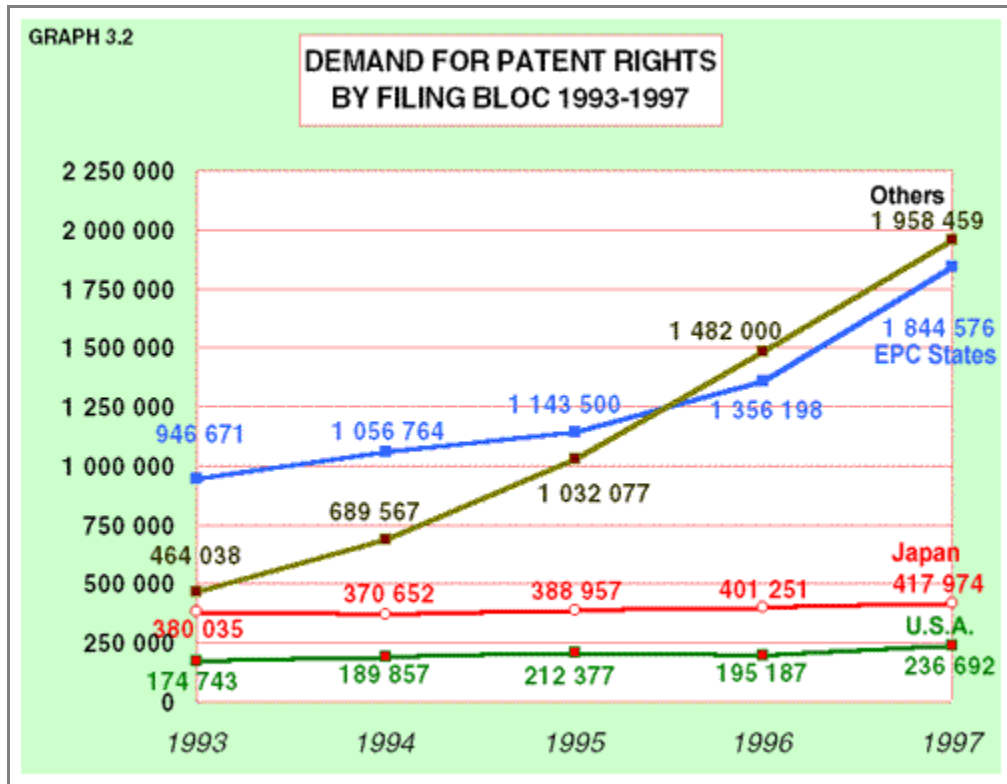
Notwithstanding such differences, statistics on patent applications filed give the number of patent rights sought by applicants all over the world. The development is shown in the graph below:



The demand for patent rights rose from 1 965 487 to 4 457 701 from 1993 to 1997, which is an increase of 127% corresponding to an annual average increase of about 22%. The number of first filings in 1996 was 683 249. For these first filings, one year later (1997) 3 824 965 subsequent filings were registered (i.e. 4 457 701 total minus 632 736 first filings). Thus on average one invention for which a first patent right was sought, leads to 5.6 subsequent filings of an application for patent rights in other areas. Three years earlier, the rate was at the level of 2.6. This increase in the proportion of subsequent filing shows the ongoing internationalisation of patent rights.

3.2 DEMAND IN THE MAJOR FILING BLOCS

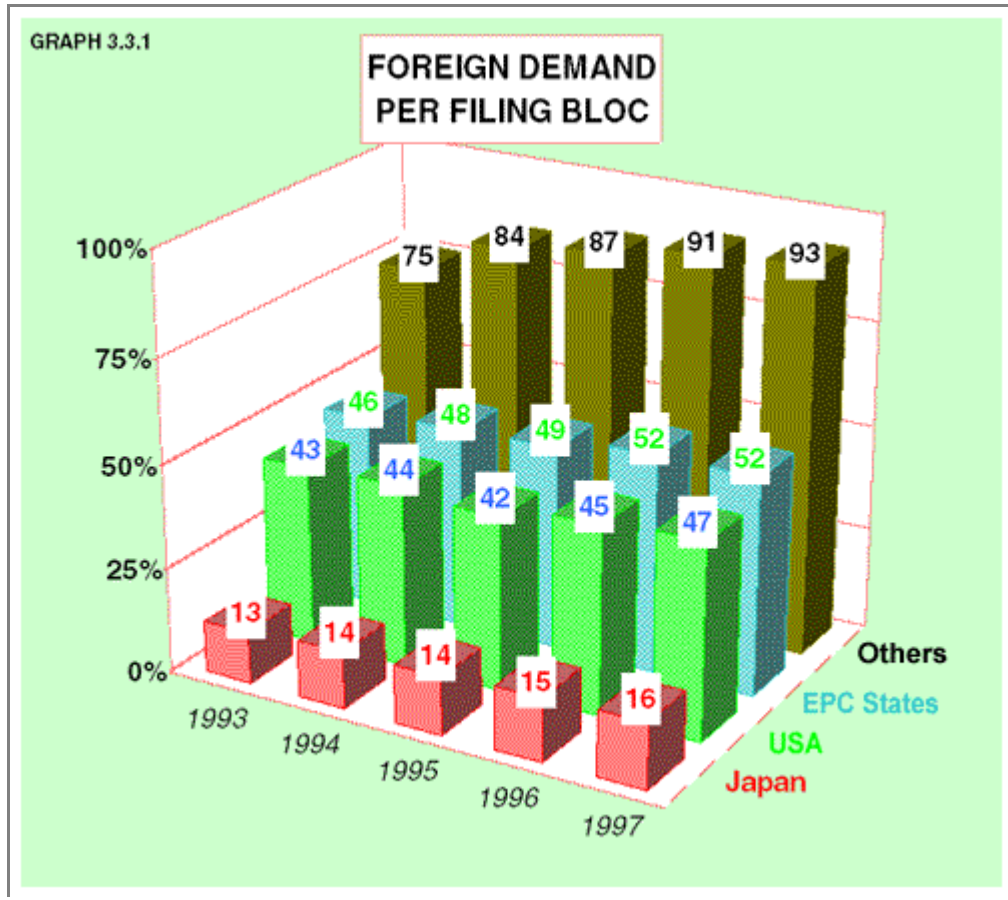
The development of the demand in the major filing blocs is shown below:

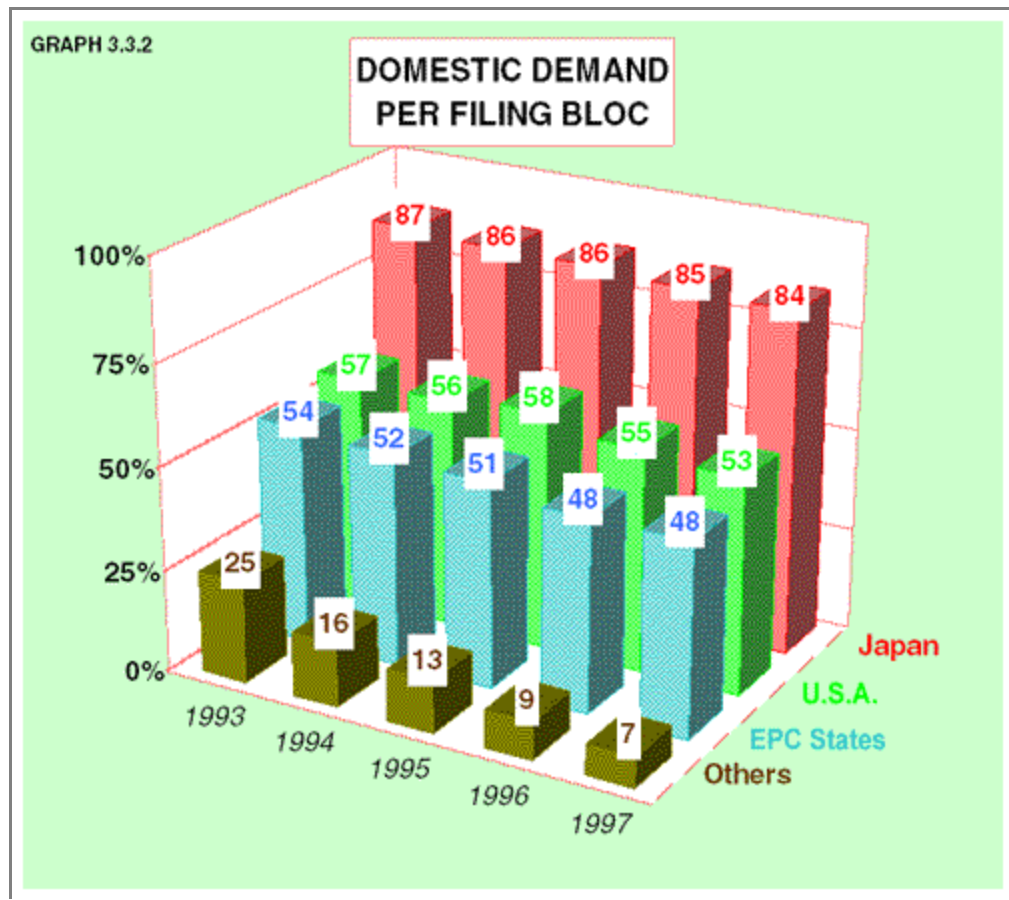


Demand in "Others" is the highest followed by the EPC States (being the sum of the demand for national patent rights in all Contracting States), followed by Japan and the United States. The demand increased in all blocs over the period 1993-1997. The relative change was the highest in the EPC States (95% increase 1993-1997), followed by the USA (35%), and Japan (10%). The development in bloc "Others" (+322%) is due to several factors. Countries setting up new protection right systems, new memberships to the PCT, and statistics becoming available for more countries are the main reasons to explain the large increase for some Central and Eastern European and some African and Asian countries. In some other countries the demand simply increased based on unchanged systems.

3.3 FOREIGN AND DOMESTIC DEMAND

The relative importance of demand from foreign countries is shown in the graph below, followed by its counterpart: the demand for domestic filings.

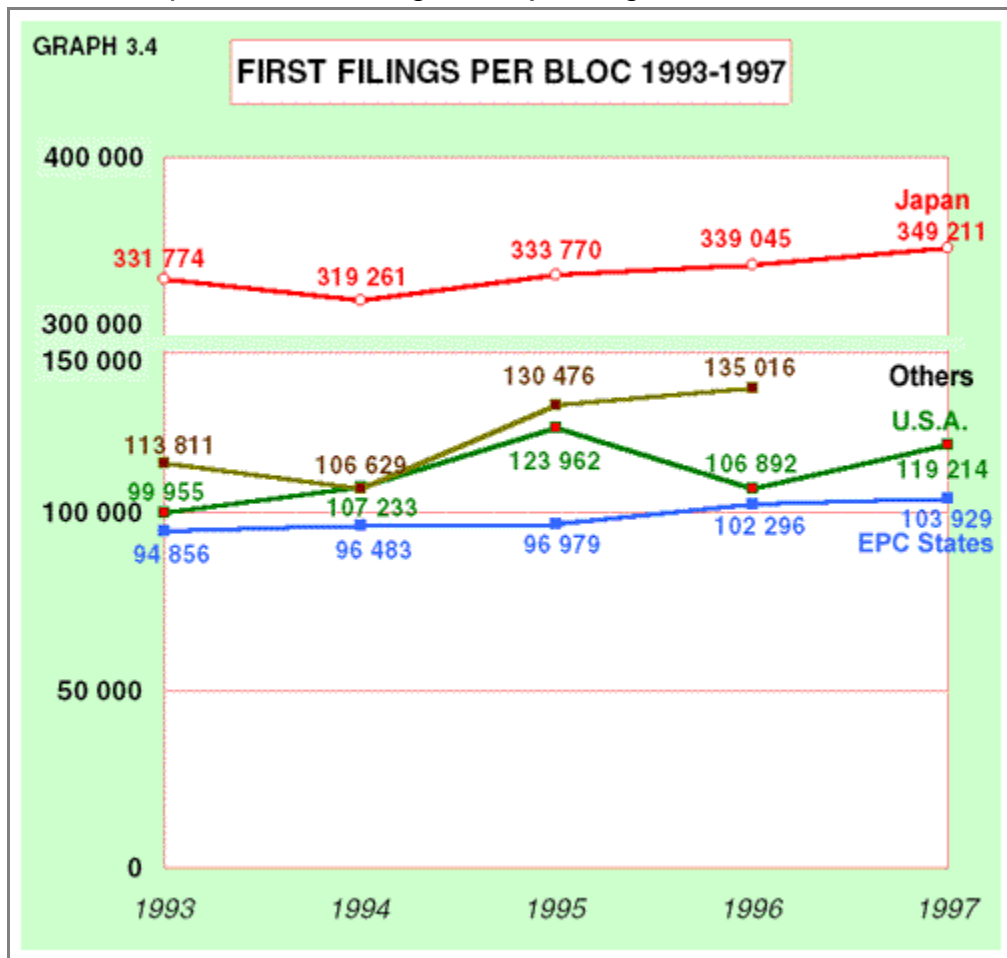




The proportion of demand in the EPC States having its origin from outside the EPC remained unchanged in 1997 at 52%. Foreign demand in the USA increased slightly to 47% in 1997. In Japan the domestic demand is at 84% in 1997, far more important than foreign demand, although the limited change (1%) towards more foreign filings is maintained. In the bloc "Others", the proportion of foreign demand increased in 1997 (at 93%) compared to the previous years (75% in 1993) because foreign demand increased much faster than domestic demand.

3.4 FIRST FILINGS

The development in first filings in major filing blocs is shown below:



The highest number of first filings is observed in Japan. In 1997, compared to 1996, first filings in Japan increased by 3%. In the USA, after a decrease in 1996 attributed to the change to 20 years term instead of 17 years, first filings increased by 12% in 1997. In the EPC States first filings in 1997 increased by 2% compared to 1996. For the time being, no reliable figure is available for the bloc "Others".

3.5 DEMAND BETWEEN TRILATERAL BLOCS

The following picture shows the foreign demand within the Trilateral filing blocs in 1997. The 1996 figures are in brackets in the graph.

The main part of the foreign demand in the EPC States originates from the United States. This constitutes the largest flow of demand for patent rights among the three blocs, followed by the demand from Japan in the EPC States. Requests for patent rights from the EPC States to the United States or Japan and between US and Japan are much lower. This is due to the fact that the demand in the EPC States includes plural applications for one and the same invention and multiple designations in each regional or international application. US applicants filed 38 098 applications equivalent to 615 353 national patent applications in the EPC States (16.2 per application, it was 13.8 in 1996). Japanese applicants filed 21 370 applications equivalent to 199 036 national patent applications in the EPC States (9.3 per application, 5.3 in 1996). It should be borne in mind that since July 1, 1997, an applicant for a European patent may delay his choice of the designated states until he requests the substantive examination.

Compared to 1996, the gap in the balance of filings slightly increased between the United States and Japan. Japanese applicants file more applications in the United States than United States applicants do in Japan. While United States filings in Japan increased by 7%, Japanese filings in the United States increased by 11%.

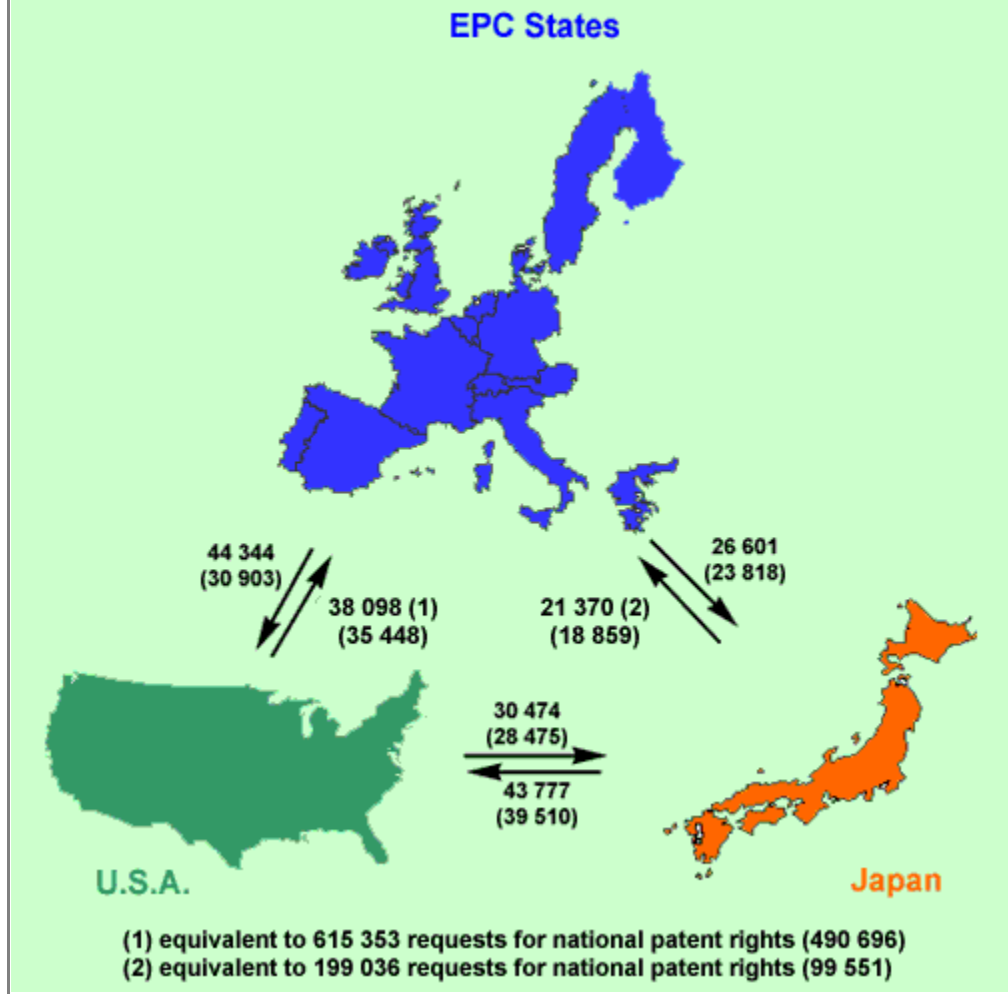
The gap in the balance between the EPC bloc and the United States is the largest and increased in 1997 compared to 1996, both in terms of filings and in terms of demand for patents. The number of United States applications in the EPC bloc increased (+7%), and so did the demand for patent rights (+25%), in particular via the PCT procedure.

EPC applicants file more in Japan than Japanese applicants do in the EPC, and the gap in the balance of filings between Japan and the EPC bloc increased slightly. But the gap in the balance of demand for patent rights between the EPC bloc and Japan increased strongly. This is mainly due to the fact that Japanese applicants used the PCT procedure more actively.

Compared to previous editions of the report, the figures presented in graph 3.5 indicate the numbers of applications filed to seek patent protection in the other blocs. In the case of the requests for patent protection in the EPC States, the demand for patent rights (as given by the numbers of designations) appears at the bottom of the graph.

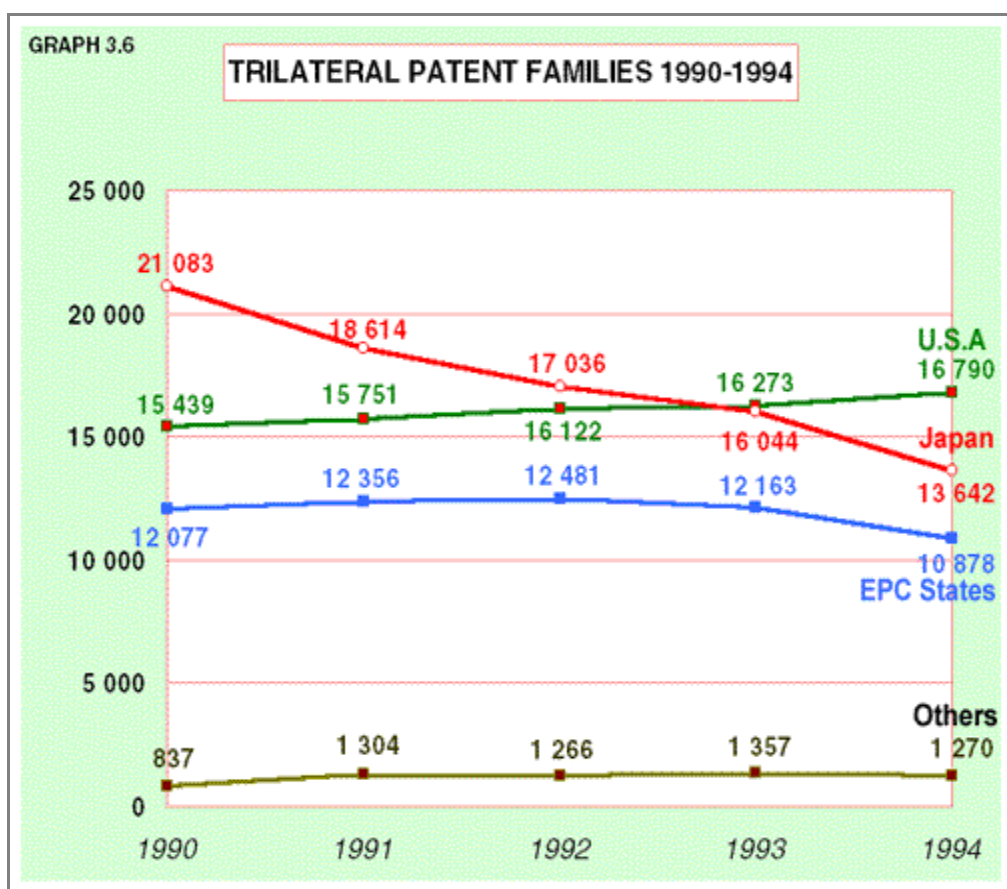
GRAPH 3.5

FLOWS OF APPLICATIONS BETWEEN TRILATERAL BLOCS 1997



3.6 TRILATERAL PATENT FAMILIES

The next graph shows trilateral patent families, which are patent applications from which priority is claimed for subsequent filings in all trilateral blocs. In each case it is not necessary for a subsequent filing to be made in the bloc of origin since a first filing is considered to claim priority for itself. The statistics are based on references to priorities given in published applications. Due to the delay in publication (from the moment of filing), in particular in the patent system of the United States where applications are published only after examination, the figures from 1990 to 1994 are presented here. However, data on publications for 1994 may not yet be complete. It is clear that the data for Japan trend downwards during the period, while the data for United States trend upwards. The total number of trilateral patent families in 1993 is 45 837, of which 27% originated from offices of the EPC states, 35% originated from Japan, 35% originated from the United States and 3% originated in other states. (The corresponding figures for 1992 were a total of 46 905 trilateral families, of which 27% were from EPC states, 36% from Japan, 34% from United States, and 3% from other states).



As is shown in the table below, out of all first filings in the trilateral area in 1993 (526 585), 8.4% form trilateral families. From all first filings throughout the world (640 396), 7.2% form trilateral families. The proportions differ considerably according to the bloc of origin of the first filings. For the United States, 16.3% of first filings form trilateral families (was 17.4% in 1992); for

EPC states this is 12.8% (was 13.4%); for Japan 4.8% (was 5.0%), and for first filings from other countries it is 1.2% (was 1.2%).

TABLE 3.6: TRILATERAL PATENT FAMILIES AND FIRST FILINGS IN 1993

Bloc of origin for which priority is claimed	Trilateral Patent Families claiming priority of	First Filings	Proportion Trilateral Patent Families of First Filings
EPC States	12 163	94 856	12.8%
Japan	16 044	331 774	4.8%
U.S.A.	16 273	99 955	16.3%
Subtotal	44 480	526 585	8.4%
Other countries	1 357	113 811	1.2%
Global Total	45 837	640 396	7.2%