

3 DEMAND FOR PATENT RIGHTS

Statistics in this chapter are derived primarily from the provisional 1998 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:

- § national procedures,
- § regional procedures, (e.g. 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.

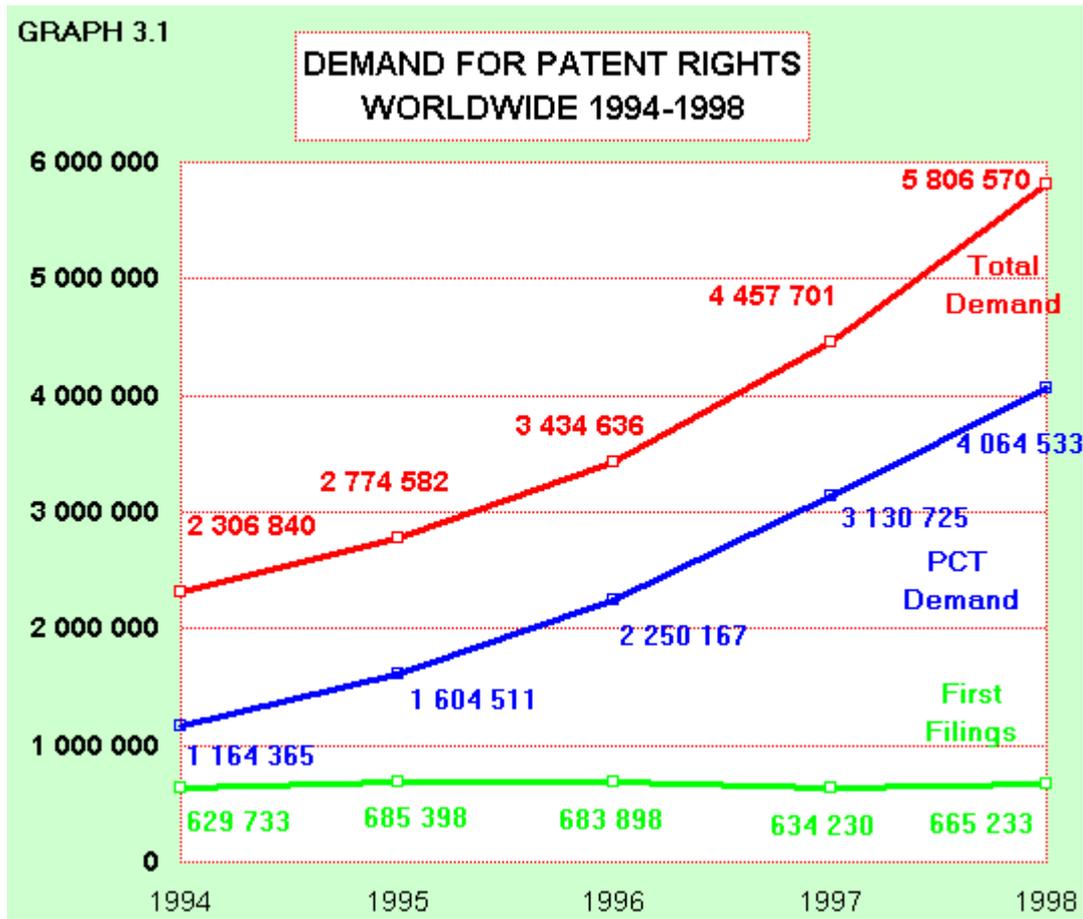
Patent rights do not necessarily have the same effect in each country all over the world. One reason is that patent law is not exactly the same in every country despite the existence of regional and international procedures.

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

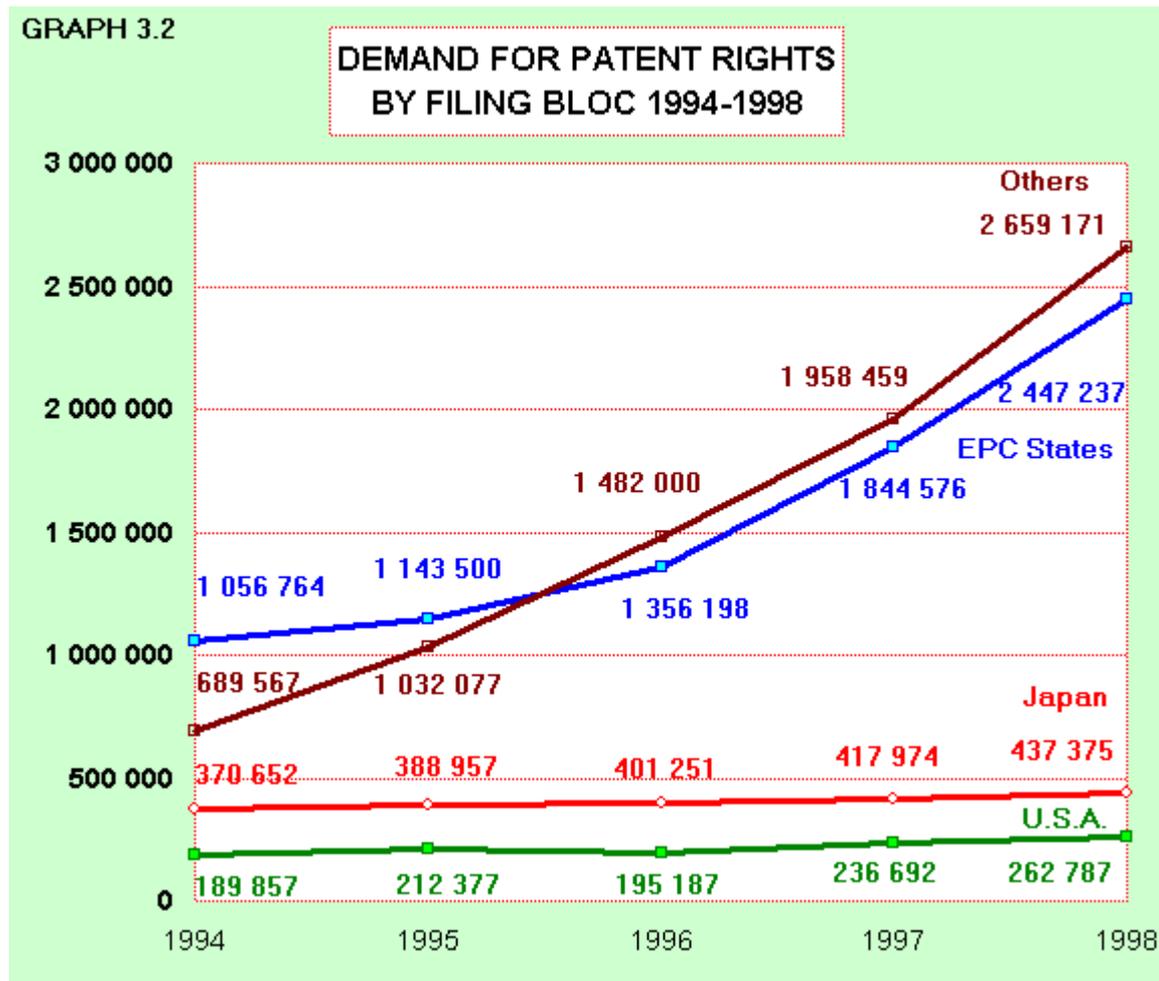
Notwithstanding such differences, statistics on patent applications filed give the number of patent rights sought by applicants all over the world. The development is shown in the graph below:



The demand for patent rights rose from 2 306 840 to 5 806 570 from 1994 to 1998, which is an increase of 152 % corresponding to an annual average increase of about 25 %. The number of first filings in 1997 was 634 230. For these first filings, one year later (1998) 5 141 337 subsequent filings were registered (i.e. 5 806 570 total minus 665 233 first filings). Thus on average one invention for which a first patent right was sought, leads to 8.1 subsequent filings of an application for patent rights in other areas. Three years ago, the rate was at the level of 3.3. This increase in the proportion of subsequent filings shows the ongoing internationalisation of patent rights.

3.2 DEMAND IN THE MAJOR FILING BLOCS

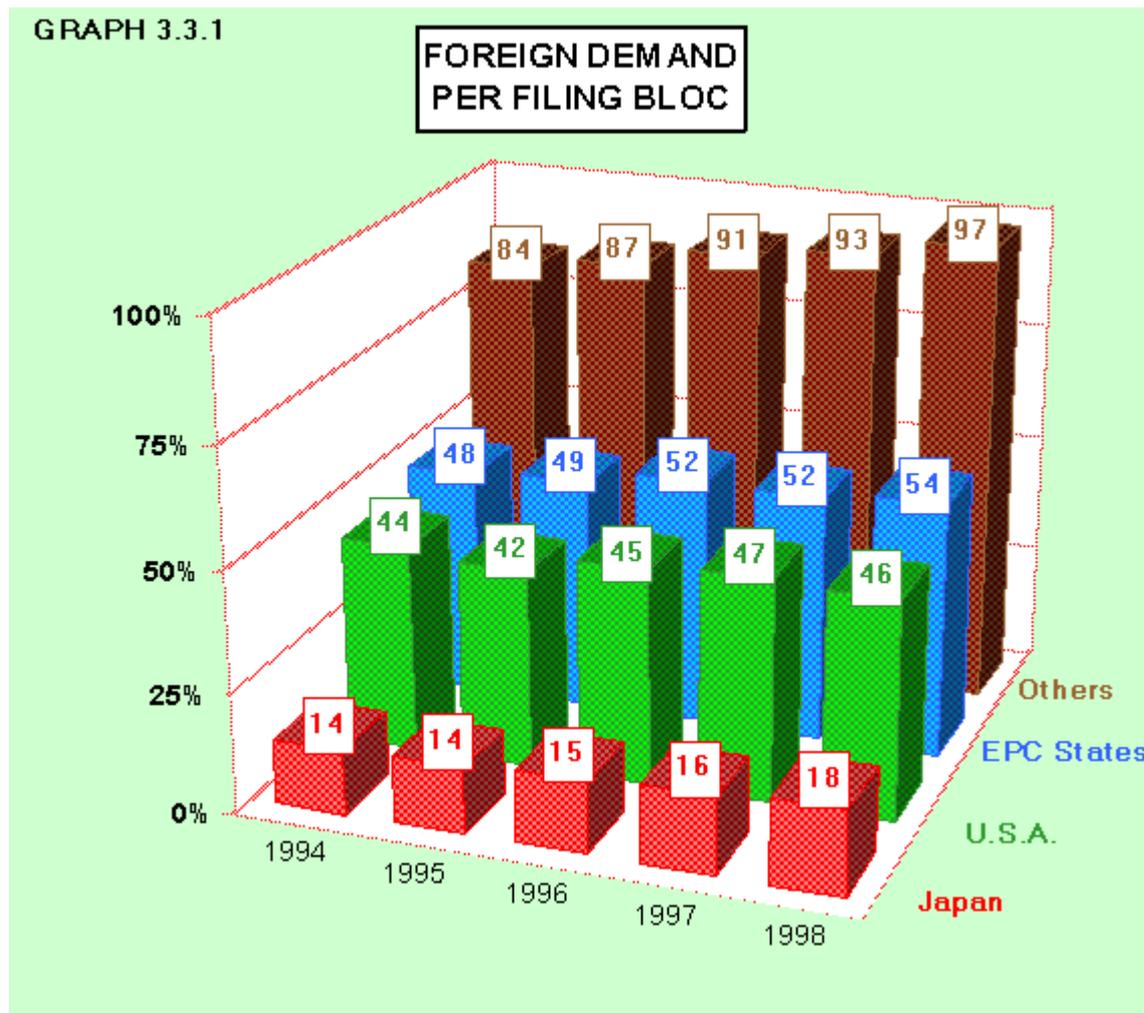
The development of demand in the major filings blocs is shown below:



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 1994-1998. The relative change was the highest in the EPC States (132 % increase 1994-1998), followed by the USA (38 %), and Japan (18%). The development in bloc "Others" (+286 %) 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

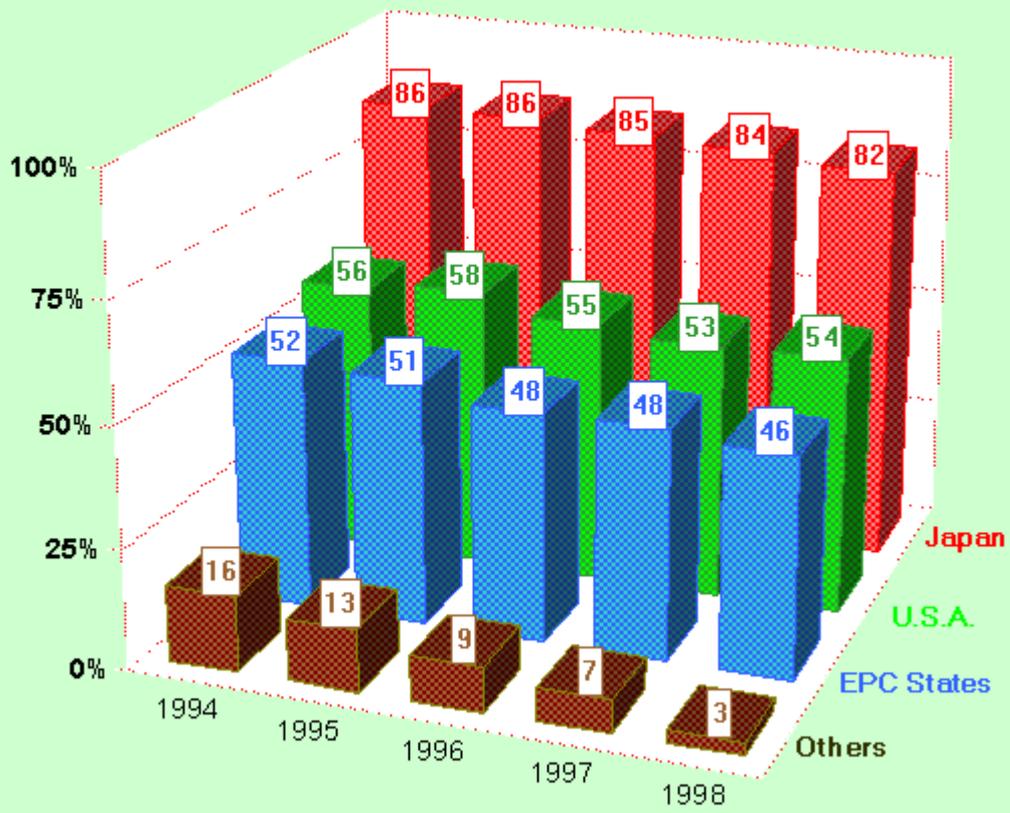
The relative importance of demand from foreign countries is shown in the graph below, followed by its counterpart: the demand for domestic filings.



The proportion of demand in the EPC-States having its origin from outside the EPC increased in 1998 to 54%. Foreign demand in the USA decreased slightly to 46% in 1998. In Japan domestic demand is at 82% in 1998, far more important than foreign demand, although the limited change towards more foreign filings (2% more in 1998) is maintained. In the bloc "Others", most of the demand is of foreign origin.

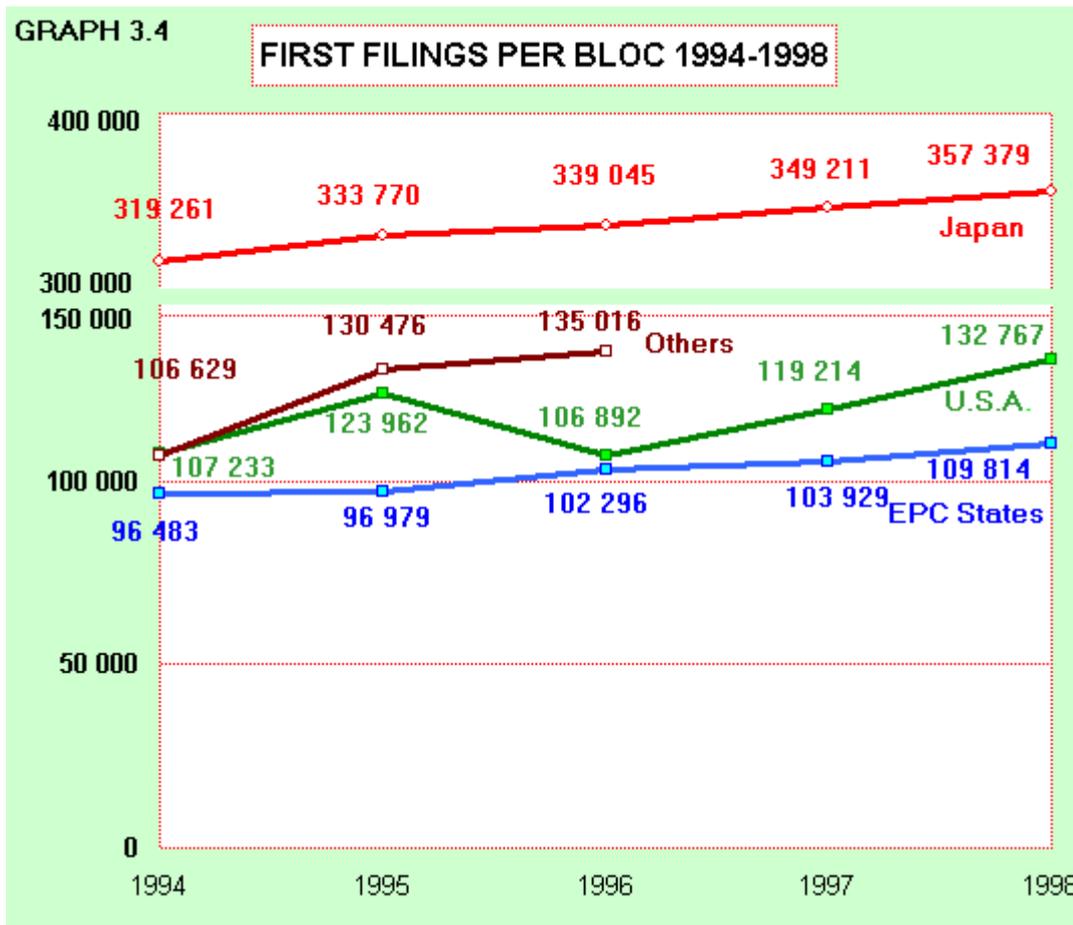
GRAPH 3.3.2

**DOMESTIC DEMAND
PER FILING BLOC**



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 1998, compared to 1997, first filings in Japan increased by 2%. In the USA, after a decrease in 1996 attributed to the change to 20 years term instead of 17 years, first filings increased by 11% in 1998. In the EPC States, first filings in 1998 increased by 4% compared to 1997. For the bloc "others", no data are reported for 1997 and 1998. This is due to the fact that the WIPO statistics questionnaire was changed from paper to electronic format in 1997 and, surprisingly, far fewer countries responded to this new form of questionnaire.

3.5 DEMAND BETWEEN TRILATERAL BLOCS

The following picture shows the flows of applications between the trilateral blocks in 1998. The 1997 figures are in brackets in the graph.

Compared to 1997, the gap in the balance of filings decreased 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 17%, Japanese filings in the United States increased by 7%.

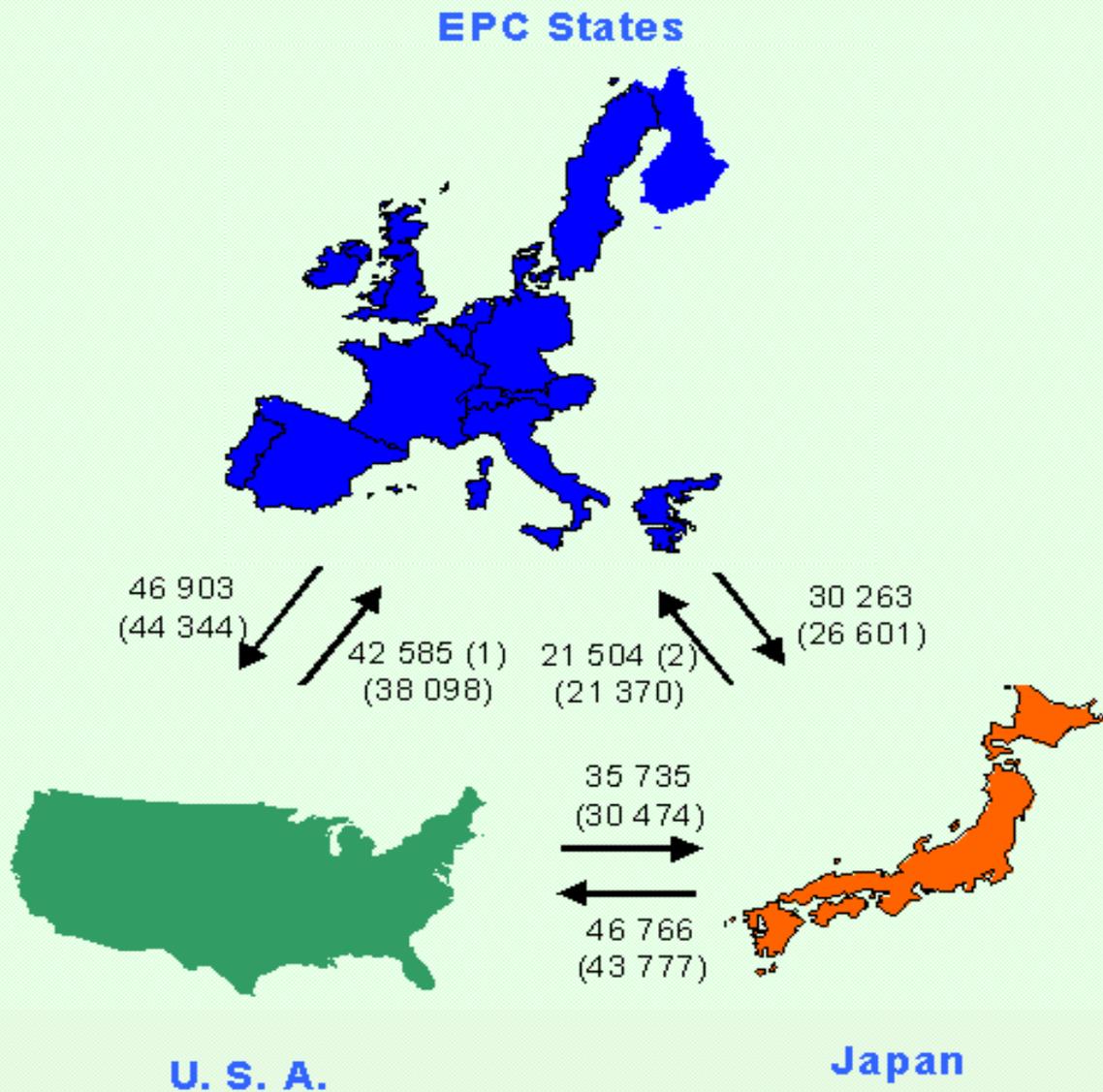
The gap in the balance of filing between the EPC bloc and the United States is the smallest and decreased further in 1998 compared to 1997. While United States filings in the EPC bloc increased by 12 %, EPC blocs filing in the United States increased by 6%.

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. While EPC bloc filings in Japan increased by 14%, Japanese filings in the EPC bloc were almost unchanged.

Requests for patent rights from the United States or Japan to the EPC States are much higher than the opposite case. This is due to the fact that 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 42 585 applications equivalent to 817 149 national patent applications, in the EPC States (19.2 per application; 16.2 in 1997). Japanese applicants filed 21 504 applications equivalent to 283 929 national patent applications, in the EPC States (13.2 per application; 9.3 in 1997). 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.

GRAPH 3.5

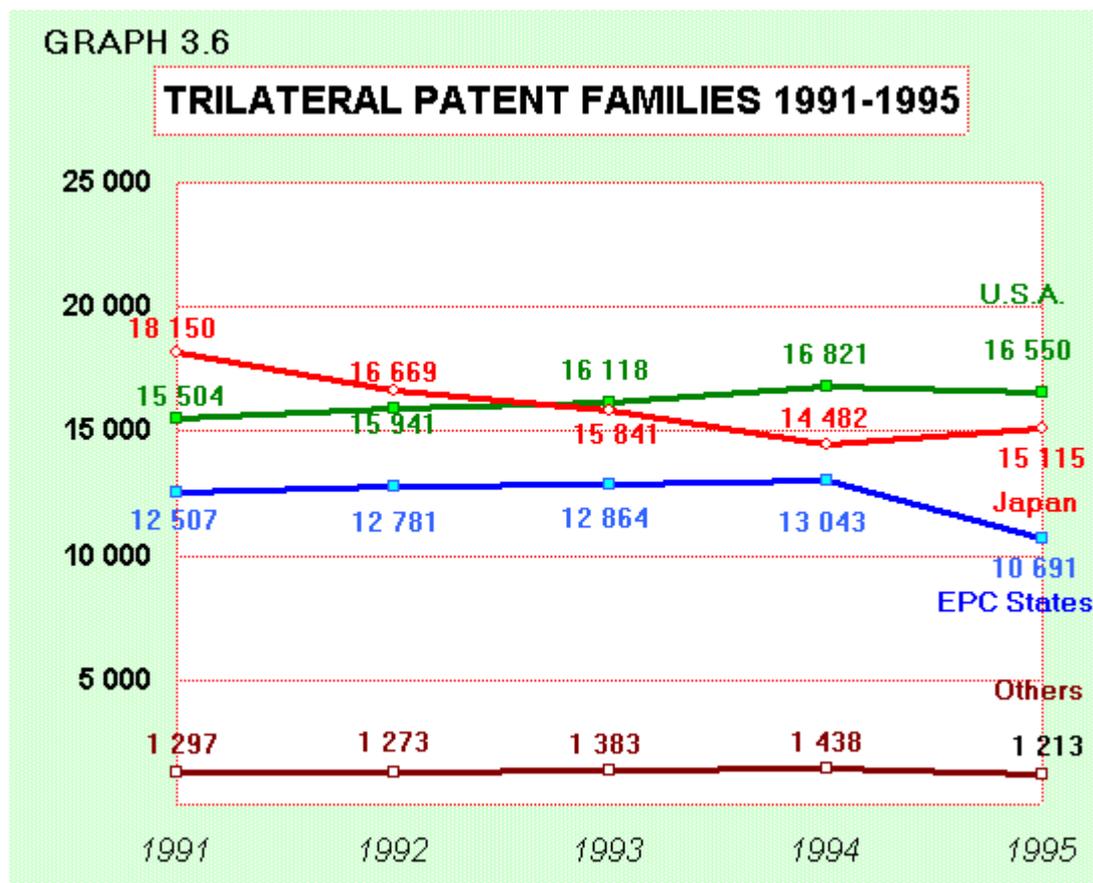
FLOWS OF APPLICATIONS BETWEEN TRILATERAL BLOCS 1998



(1) equivalent to 817 149 requests for national patent rights (615 353)
(2) equivalent to 283 929 requests for national patent rights (199 036)

3.6 TRILATERAL PATENT FAMILIES

Graph 3.6 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 USA where applications are published only after examination, the figures from 1991 to 1995 are presented here. However data on publications for 1995 may not yet be complete, which probably explains the apparent marked decline in the number of families in 1995 originating in EPC states. The data for Japan trend downwards during the period until 1994, but recover in 1995, and this development follows the same profile as that for first filings. The data for EPC and USA trend upwards. The total number of trilateral patent families in 1994 is 45 784, of which 28% originated from EPC, 32% from Japan, 37% from the USA and 3% from other states. (The corresponding figures for 1993 were a total of 45 837 trilateral families, of which 27% were from EPC states, 35% from Japan, 35% from USA, and 3% from other states).



As is shown in the table below, out of all first filings in the trilateral area in 1994 (523 104), 8.5% form trilateral families. From all first filings throughout the world (629 733), 7.3% form trilateral families. The proportions differ considerably according to the bloc of origin of the first filings. For USA, 15.7% of first filings form trilateral families (was 16.1% in 1993); for EPC states this is 13.5% (was 13.6%); for Japan 4.5% (was 4.8%), and for first filings from other countries it is 1.3% (was 1.2%).

TABLE 3.6: TRILATERAL PATENT FAMILIES AS PROPORTION OF FIRST FILINGS

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	13 043	96 610	13.5%
Japan	14 482	319 261	4.5%
U.S.A.	16 821	107 233	15.7%
Subtotal	44 346	523 104	8.5%
Other countries	1 438	106 629	1.3%
Global total	45 784	629 733	7.3%