



1

Evolving Patent Rule: the Y2K Patent Problem

Everyone knows about the Y2K problem as it affects computers and information technology. When the last two digits of the year change from 99 to 00, some computer systems will interpret this as 1900, and not as 2000. This could cause major disruptions in airline flight control, in financial and accounting systems, and throughout the whole of society. The year 2000 will also be crucial for the patent system, but for different reasons.

1.1 TRIPs

The Y2K patent problem is not a computer problem. Rather, it is an issue linked to the conclusion of the TRIPs (Trade-Related Aspects of Intellectual Property Rights) Agreement, under the Uruguay Round of multilateral trade negotiations, and the establishment of the World Trade Organization (WTO).

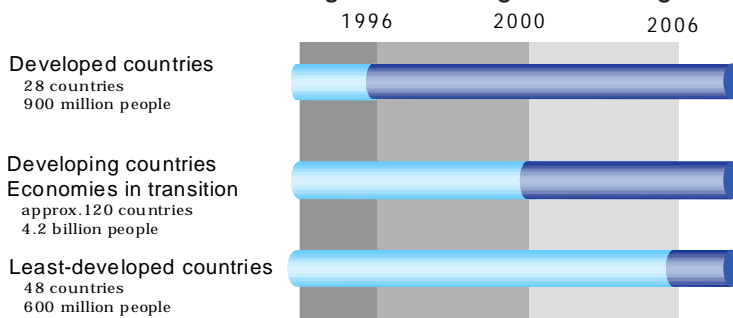
As the name implies, the TRIPs Agreement is an international protocol on the treatment of intellectual property rights and provides for the exclusion of countries from the global free trade system if they do not respect patent rights. Seeking to further develop the global economy, nations have agreed to lower their tariff rates, ease import restrictions, and otherwise facilitate the trade in goods. At the same time, progress has been made in liberalizing the trade in financial and other services, and minimum rules agreed upon for the protection of patents and other intellectual property rights.

The TRIPs Agreement also sets a schedule for implementation. Under this schedule, Japan and the other developed countries have agreed to afford full patent protection as of January 1996. These countries - the members of the Organization for Economic Cooperation and Development (OECD) - have a total population of about 900 million, and these 900 million people have been at the heart of the worldwide patent system to date.

Yet starting in the year 2000, much of the rest of the world - the 120 countries and their 4.2 billion people that are the emerging markets, developing countries, and economies in transition - will also be expected to provide patent protection. Thus, even countries such as Russia and China, which are not yet WTO members, are doing their utmost to put their patent systems in order and to modernize their examination infrastructures, so that they will be able to meet their obligations starting in 2000.

The next group of countries will be the least-developed countries, which will be expected to offer full patent protection starting in the year 2006. These 48 countries have a total population of about 600 million. (Chart 1.1)

Chart 1.1 Schedule for Phasing in the TRIPs Agreement Obligations



Given a total world population of about 6 billion, this means that the patent system, as implemented so far by the industrial 15%, will be extended to 90% of the world in 2000. This is a giant step for the global patent system - a step with major significance - for it tells all countries that want to trade with the rest of the world that they will have to provide patent protection. Even countries that used to see patents as public assets, to be drawn upon as much as possible, will now have to provide patent protection. Patents will be protected worldwide, and efforts are being made throughout the world to put the necessary legal infrastructure in place.

1.2 Being more Patent-Minded

Part of this involves making people more patent-minded. In the past, there were people in the developing countries who argued that the industrial countries should supply them with environmental protection technologies free of charge.

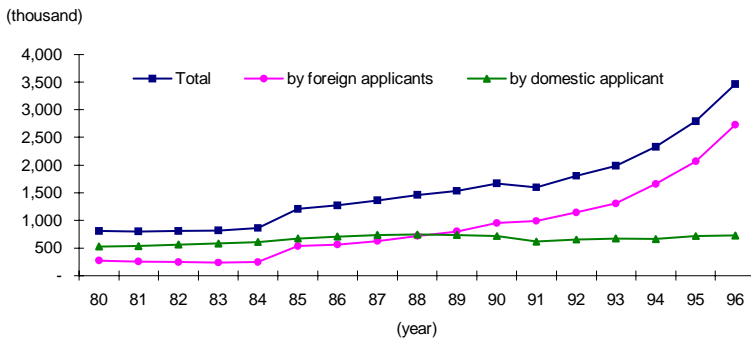
But now, people understand that they will not have any access at all to foreign technology if they do not respect patent rights.

Executives at a leading Chinese environmental research institute, for example, have remarked that, "China welcomes foreign firms as active participants in the Chinese environmental business sector, including measures to prevent air pollution and to provide for the safe disposal of urban waste. Yet there are many problems that China must resolve before we can expect strong foreign participation. Among them, it is essential that we develop a better understanding of intellectual property rights, including the need not to infringe on foreign firms' patents."

With the globalization of business, there has also been striking internationalization in the world of patent protection. In 1985, there were 1.2 million patent applications filed worldwide. By 1995 this was 2.79 million. The number of patent applications had more than doubled in only a decade.

Domestic patent applicants – where Japanese are applying for Japanese patents or Americans applying for U.S. patents, for example - stayed relatively stable at about 0.72 million over the course of the decade. By contrast, applications by foreign inventors rose fourfold in the same decade, from 0.5 million in 1985 to 2.07 million in 1995. (*Chart 1.2*)

Chart 1.2 Patent Applications

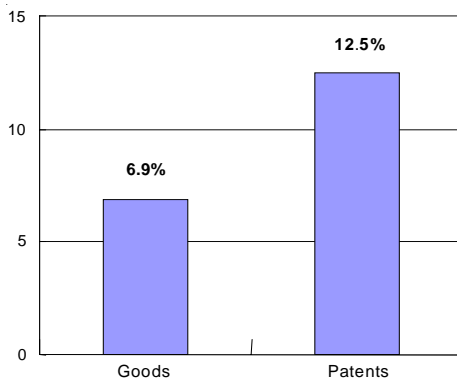


Source: *Statistics of WIPO*

International Monetary Fund (IMF) data include statistics on both the trade in goods and the trade in patents. Looking at these statistics shows that the trade in goods - which includes imports and exports of automobiles, color televi-

sion sets, and other “things” - enjoyed average per-annum growth of 6.9%. By contrast, the trade in patents grew an average of 12.5% per annum, or nearly twice as fast. (Chart 1.3)

Chart 1.3 Growth of Trade in Patents and Goods



Source: *Balance of Payments Statistics, International Monetary Fund*

Note: Figures are average per-annum growth for 1988-96

In monetary terms, the trade in goods was worth about 4.6 trillion dollars and the trade in patents worth about 50 billion dollars in 1996, or only about 1% of the goods trade. But if the average patent royalty is calculated at 5%, this would mean that patent trading actually accounted for 20 times the patent amount - or a total of 1 trillion dollars by value. Although it is largely invisible, the international patent trade is clearly crucial to the world economy.

How will the worldwide patent situation change in the year 2000?