CHAPTER II

THE GENESIS AND GROWTH OF THE INTERNATIONAL PATENT SYSTEM

INTRODUCTION

A study of the historical evolution of the international patent system helps to establish the fact that there is a close correlation between the level of economic, industrial and technological development of a country on the one hand, and the nature and extent of patent protection granted by it on the other. In the crucial phase of their industrial development, many of the industrialised countries of today had either no "patent" or "weak patent" standards in vital sectors in order to strengthen their own industrial and technological capabilities. It was only after they attained sufficient strength in these areas that they considered making changes in their patent system.¹

Any grant of a monopoly necessarily affects a wide variety of interests - for instance, the national patent holder, the patent granting country, the foreign patent holder, his country and the international community. These are the interests which have been at play in the evolution of the patent system. As the

diversity of interested parties indicate, there is no philosophical or practical basis on which one can suggest that all these interests are always invariably identical. In fact, conflict of interests between the monopolistic rights granted to private interests and the imperative of safeguarding public or national interest is inherent in the patent system. In its history, the patent system has been buffeted, and its evolution shaped, by these conflicts. The resultant balance between the private and the public interests have varied over time and from country to country. That is why the industrial property laws of all countries differ from each other. Differences in the degree of protection granted by countries have most often been due to differences in level of industrial and technological development. Developing countries, anxious for economic development and growth, have sometimes limited the scope of protection granted to patents or excluded certain subjects from protection altogether. This was also true in the nineteenth century and, in some states until very recently, which are now developed.

EARLY HISTORY

The patent system has a long history and seems to have its origin in the practice of granting monopolies. The first grant of patents can be traced back to seventh century B.C. when the

---

Syberites of Greater Greece granted cooks exclusive monopoly over the use of new recipes for one year. Monopoly is a Greek potanteau word made of 'mono' and 'polein'. Mono means 'alone' and polein means 'sale' indicating the 'conferrment of exclusive rights of sale' to cooks with new recipes for a particular time.

Historically, even in England, patents and industrial progress have been closely connected with monopolies and trade. The earliest authenticated royal grant took the shape of letters of protection for the nascent English textile industry (John Kampe & Co.) in 1331. These letters also contained a general promise of the same protection and privileges to be accorded to foreign weavers, dyers and fullers on condition of their settling in this country and teaching their arts to those willing to be instructed therein. Two classes of persons were considered to merit the royal grant. The importer was granted privileges for introducing new industry into the realm, and the first finder

---


qualified not on the ground of his inventiveness, but for the same reason as the importer, that he too had brought about the possibility of new industry. Thus an inventor in England derived his rights from those which were granted to reward an importer and the first person to import an invention made and communicated to him abroad could still obtain a patent in England. Grants made before 1600 included licenses for the manufacture of white soap (1561), the making of salt peter (1561), a dredging machine (1562), an instrument to drain water (1563), the manufacture of sulfur and oil (1565), and the art of making glass (1774).

The first patent statute concerning the major characteristics of contemporary patent laws is considered to have been enacted by the City State of Venice in 1474. It also added a rule that a patent must be worked or forfeited. In 1594 Galileo was granted under this law a patent for a device of raising water and irrigating the land.

7 Peter Nanyena - Takirambudde, Technology Transfer and International Law (New York, 1980), p. 57. There are records of the grant in 1449 of letters patent to Thomas Utynam for the manufacture and supply of stained glass for the windows of Eton College Chapel. In the reign of Queen Anne the provision of a written description of the invention became a normal part of the procedure for obtaining a patent. In France, a Venetian Thesco Mutio received a grant of letters patent in 1551 giving him a ten year monopoly for the manufacture of a type of Venetian glassware. Martin Khor, "A Critique of the Patents Act 1983: A Third World Perspective" in NWGPL Publication, n.1, Part VI, p. 146.
9 See n.3
10 Khor, n.7, p. 146.
The next landmark was Article 6 of the English Statute of Monopolies, 1623 by which all monopolies were declared to be void excepting letters patent and grants of privilege for a term of fourteen years "of the sole working or making of any manner of new manufactures within this realm, to the true and first inventors of such manufactures which others at the time of making such letters patent and grants shall not use, so as also they be not contrary to the law or mischievous to the state, by raising prices of commodities at home, or hurt of trade or generally inconvenient." To Article 6 can be traced the origins of modern English patent law, and was the first systematic grant of patent privileges. However, it was not until the advent of the industrial revolution that national patent laws became a common feature in the industrialized world. For instance, in the United States a patent law was enacted only in 1790 (revised in 1793). France promulgated a patent law in 1791. Both these laws made reference to the position of the individual inventor and to his rights to secure a financial reward for his efforts. The laws also stressed the requirements of promoting the progress of science and useful arts, and thus industrialization in these countries. The three reasons which were set out in a report

11 Gardiner, n.6, p. 510.

12 The case has been the consequences of the monopoly system which, in the reign of Queen Elizabeth I, though intended to encourage new industries, was found to provide the Crown and others, with considerable scope for abuse. Ibid, p. 508.
supporting the French Patent Bill are noteworthy. These were the backwardness of French industry; the threats posed to the French economy by the penetration of English products; and the desire of the French government to ameliorate the situation of the French industrial worker.

During the period from 1800 to 1870, patent laws were introduced by the Netherlands (1809), Austria (1810), Russia (1812), Sweden (1819), Spain (1826), Brazil (1859), Argentina (1864) and Canada (1869).

In the next section we sketch a brief history of some patent laws which enable us to identify the evolution of the influence of differing interests involving different parties which were at a point of time in conflict on account of any grant of a monopoly right.

SOME ASPECTS OF THE EVOLUTION OF PATENT LAW

The Shift in the Rationale of Patents

(a) Exploitation of Patents within the National Territory

The City State of Venice in its patents law distinguished four motives for the grant of patent, namely the utility to society, the encouragement of inventive activity, the refund of costs incurred by the inventor, and the inventor's rights to the fruits of his mind. The law expressly provided that

it was within the power and discretion of the government of Venice to use any patented invention subject to the provision that the patentee should be the person who had the right to work the patent on behalf of the government. A condition was inserted in many Venetian grants that due to the insufficiency of preliminary investigation a further test of the practical success of the invention be made within a fixed period. If the patentee failed to submit his invention to the test, his rights were revoked and in a case after the patentee had failed to proceed to a test, a new application by others for the same invention was successful.14

In European countries, the primary objective of patent law was considered for a long time to consist of the need to ensure that the patented inventions were actually exploited within the territory of the patent-granting country. Patents were in fact devised as incentives for the development of new industries in the patent-granting country. It was generally believed that the privilege granted would be of no value to the country unless it was locally exploited. However, with the growth in international trade, it was realized that enterprises could benefit from a patent grant without having to exploit the patented invention in the country granting it, but by importing from abroad the products protected by the patent. The response of national legislation to this practice was to establish that the use of a patent as an import monopoly would constitute a

14 Ibid, pp. 3-7.
ground for forfeiture of the patent. Thus, the French Act of 5 July 1844 in Article 32 paragraph (3) established as a ground for forfeiture of a patent the fact that its holder had imported into France articles manufactured abroad which were similar to those protected by the patent. In the United Kingdom, Section 27 of the Patents Act of 1907 provided that a patent could be revoked if the holder exploited it exclusively or principally abroad. A similar provision, but of more restricted application, was maintained in the successive Patent Acts of 1919, 1928 and 1932. A similar reasoning was also followed in Germany leading to the adoption of the patent laws of 1877 and 1881.

Similarly, failure to exploit the patented invention within the national territory constituted a ground for forfeiture of the patent under the earliest legislation on the subject. In France, Article 16 of the Decree of the National Constituent Assembly of 31 December 1790 concerning the inventors of useful discoveries stipulated that "any inventor who, within two years of the date of granting of the patent, has not put his discovery into effect and has given no good reasons for his inactivity shall be divested of the patent." In Spain, too, Article 24 of the Royal Decree of 14 October 1820 likewise provided that "the inventor, improver or introducer shall cease to be considered as proprietors if they let two years

15 UNCTAD, Historical Trends in Protection of Technology in Developed Countries and their Relevance for Developing Countries, UNCTAD/ITP/TEC/18, 26 December 1990, p. 3.
(b) Protection of Inventors and Introducers

In Europe, patents arose as an instrument to promote and encourage technological and industrial progress in the country granting them. The aim pursued was the introduction into the national territory of new technology and its industrial exploitation there. Therefore, initially no distinction was made between patents of invention and patents of importation. All patents were patents of importation, though they were purportedly granted to persons called inventors. Whether or not the invention had been previously known abroad was of no significance. What mattered was that it should be unknown in the country granting the patent. For instance, in England, although the Statute of Monopolies of 1623 provided for the granting of patents "to the true and first inventor" or inventors, a person who merely introduced an invention into the country was regarded as true and first inventor. The traditional English doctrine recognized this, affirming as it did, for example, that the purpose of patent law was to encourage the development of new local industries, that was why the introducer of an invention was always treated as the "true and first inventor". 17

16 Ibid.

17 As late as 1893 the judicial ruling given in the case of Moser v. Marsden confirmed that the holder of the patent was the true and first inventor within the meaning of the patent law, whether he actually invented or whether he merely imported a foreign invention. See UNCTAD/ITP/TEC/18 n.15, p.2.
The same concept is also to be found in the first French Patent Law, the Decree of the National Constituent Assembly of 31 December 1790 concerning the authors of useful discoveries. Article 1 paragraph 3 provided that "whoever first imports into France a useful discovery shall enjoy the same advantages as if he had been its inventor." However, paragraph 9 of the same Article provided that "the utilization of patents granted for a discovery imported from a foreign country may not extend beyond the period fixed in that country for its utilization by the first inventor." There was thus a transition from complete equivalence between inventor and introducer to a distinction between patents of invention and patents of importation. The latter, granted to those who merely introduced into the country inventions known abroad, persisted in France up to the Act of 5 July 1844, and continued in Spain until they were abolished by the new Patent Act of 20 March 1986.18

(c) Absolute and Relative Novelty

Until recently, in many European countries the standard of novelty required for the patentability of an invention was far from being absolute and depended to a large extent on the perceived usefulness of the invention for local industry. For example, the British Patents Act of 1949, which remained in force until it was replaced by the new Patents Act of 1977, required only that the invention should be new in the United Kingdom.19 Similarly in the Federal Republic

18 Ibid, p. 2. See also Doc. TD/B/AC 11/19, n.8, p. 97.
of Germany, inventions were not required to have absolute novelty in order to be patentable until the enactment of the Patent Law of 16 December 1980. According to the previous legislation of 2 January 1968, an invention was not considered new only if, at the time of the application, it has already been described in such a fashion in publications printed within recent years, or has already been used in the country in such a wide manner, that utilization of the invention by others experienced in the field seems possible "(Section 2). This meant that the novelty of an invention was not impaired either by printed publication dating from more than a hundred years before or by examples of utilization of the invention that had occurred abroad or were not widely known about within the country.

Nowadays, in the States members of the European Community, a requirement of absolute novelty has been imposed as one of the consequences entailed by the establishment of European patents, which were instituted by the Convention of Munich on the Grant of European Patents, of 5 October 1973.

(d) **Exclusion of Certain Products**

As regards the exclusion of certain products, it may be noted that in the Federal Republic of Germany, legislation

---

19 UNCTAD/ITP/TEC/18, n. 15, pp. 2-3.

20 Ibid, p.3.
prohibiting the patenting of inventions of new chemical and pharmaceutical substances was in force from the enactment of the first patent law on 25 May 1877 until the adoption of the Patents Act of 4 September 1967. Thus from 1877 only inventions of chemical and pharmaceutical production processes could be patented. Section 1, paragraph 2, sub-paragraph 2 of the Act of 1877, which was carried over into successive patent Acts until its deletion in 1967, excluded from patentability "inventions of foods, stimulants and medicaments, as also of substances produced by chemical means, provided that the inventions do not concern a specific process for the manufacture of the products." \(^{21}\) The principle invoked in support of this prohibition was similar to the one used in other countries, namely to overcome difficulties in obtaining pharmaceutical products (medicines) and to avoid unwarranted price rises that might result from a monopoly. Another aim was also to obviate possible abuse of patents in advertisements in order to promote sales of medicaments.

The justification provided for prohibiting by law the patenting of inventions of substances obtained by chemical means is also of particular significance. In the original Bill for the Act of 1877 it was laid down that inventions of foods, stimulants and medicaments could not be patented, but there was no provision

\(^{21}\) Ibid, p. 5.

\(^{22}\) Ibid.
against protecting chemicals. It was in fact a petition submitted to Parliament (the Reichstag) in March 1877 - two months before the promulgation of the Act - by the Board of Directors of the Deutsche Chemische Gesellschaft (German Chemical Company) which prompted the inclusion of the prohibition in the Act. The petition contained the following passage:

"With regard to the granting of patents for chemical inventions, the principle should be maintained that it is solely and exclusively the method of manufacture of a chemical product that can be the subject of the patent, and not the product itself."

This suggestion was justified in the petition in the following way:

"A chemical product can be obtained by various methods and from different starting materials. The grant of a patent for the product itself would prevent better processes discovered subsequently from being brought into effect in the interest of the public and of the inventors."

The prohibition was, therefore, introduced to promote the development of the chemical industry by stimulating process inventions rather than product inventions. Years later, in studying the draft revision which was to result in a new Act of 7 April 1891, the German chemical industry maintained its opposition to the patentability of chemical substances. Thus, at the general meeting of the Association for the Protection of the Interests of the German Chemical Industry, held at Bremen in 1890, it was stated in the report prepared by the Patents

---

23 Ibid.

24 Ibid, pp. 5-6.
Committee that the Committee, in studying the draft revision, had considered and rejected the possibility of making a substance patentable. "Such comprehensive protection", said the report, "has, however, always been considered by the German chemical industry as an obstacle prejudicial to the discovery of new and improved processes and has been energetically opposed." As mentioned earlier, this prohibition was maintained until the Act of 4 September 1967 abolished it, largely in response to some peculiar arguments. The amendment was not provided for in the Government's draft and was introduced by the Law Committee of the Bundestag. Basically, the argument adduced was that applicants for patents for inventions of substances which were not legally patentable tried to patent all the imaginable manufacturing processes with a view to achieving a virtual monopoly over the substance. This manner of proceeding resulted in an excessive workload for the Patents Office (Patentamt). Hence, it was argued, the removal of the prohibition would lighten the work of the Patentamt, and that was precisely the basic purpose of the new Act. It was also asserted that the prohibition was no longer justified in the present state of the German economy, and also that it was not admissible under the European Convention for the unification of Certain Features of Patent Law, signed by the Federal Republic of Germany.\(^{26}\)

This shows that the underlying reason for this change in German legislation was the changed circumstances of the chemical

26 Ibid.
industry. At the beginning of the century, in view of the limited knowledge that existed in major sectors of chemistry, the large chemical firms could achieve a monopoly of new substances by patenting all the imaginable processes for obtaining them, since it had the necessary means for conducting this kind of research. Nowadays, knowledge in the chemical field has increased to such an extent that it is no longer possible to patent all the diverse processes for obtaining a given product, so the only way for the large firms to secure a monopoly over new substances is to allow patentability of the substance itself. Moreover, since owing to the necessary concentration of research facilities, inventions of new substances take place almost exclusively in the large firms, they have been able in this way to secure a strengthened position in the market for themselves.

Similar situations prevailed in the Nordic countries up to 1968 in Switzerland until 1978; in Japan up to 1976; and Italy until 1979, concerning exclusion of certain products in connection with industrial property protection of chemical and pharmaceutical inventions.27

(e) The Scope of Protection Afforded by Patents for Chemo-
Pharmaceutical Production Processes

At the same time, the rules regarding the scope of protection afforded by patents for chemo-pharmaceutical production processes appear to have also been established to protect the

German chemical industry vis-a-vis imports of chemical substances produced abroad, specifically in Switzerland. The rules are those extending the scope of protection of the process patent to the product directly obtained, and the rule shifting the burden of proof so that it must be shown, when a substance is new, that it has been obtained by a process different from the one patented. Initially, German jurisprudence interpreted in a strict sense the provisions prohibiting the patenting of inventions of substances obtained by chemical means, ruling that the process patent did not confer an exclusive right to market the product obtained by the patented process when that product had been imported from abroad. This interpretation had some negative effects on the German industry since, taking advantage of the non-patentability of chemical inventions in other countries, especially Switzerland, factories were set up in these countries to exploit processes patented in Germany, notably for the manufacture of synthetic dyes, in order then to export the products obtained to the German market. The process patents did not give the German industrialists any legal means for preventing the import of such products. The Association for the Protection of the Interests of the German Chemical Industry took steps to deal with the problem as early as 1879 at its Congress held in Baden-Baden, where it adopted by a large majority a resolution stating:

The meeting considers that the term subject of the invention should be held to mean not only a patented product, but also any product that has been manufactured by a patented process.28

28 UNCTAD/ITP/TEC/18, n. 15, p. 7.
However, the question remained unresolved. Therefore, in 1885, in pursuance of a decision taken at the General Meeting in Heidelberg, the Association addressed a petition to the Chancellor of the Reich asking him to adopt measures for instituting effective protection of the holders of German chemical patents against foreign competition and also asking him to organize an enquiry into the effects of the patents Act on the chemical industry and the amendments that would be desirable to the patents Act in the interests of that industry. The situation was so serious that in 1886 the Association of German Synthetic Dye Factories (Vereingung Deutscher Teerfabriken) asked the Chancellor of the Reich for an immediate change to be made through an emergency law.\(^{29}\) The result of the demands led to the inclusion of two new provisions in the Patents Act of 7 April 1891:

a) the addition of a sentence in Section 4: "if the patent has been granted for a process, its effects extends also to products strictly obtained by that process"; and

b) the inclusion in Section 5, paragraph 2 of the clause called "shifting of the burden of proof", which provided that "if the subject of the invention concerned is a process for the manufacture of a new substance, it shall be considered, failing proof of the contrary, that any substance having the same characteristics has been manufactured by the process patented."\(^{30}\)

\(^{29}\) Ibid.

\(^{30}\) Ibid.
Thus, the demands put forth to protect the German chemical industry were acceded to and whose object was that the exploitation of production process inventions by firms in German territory should not have to face competition from substances imported from abroad, more particularly from Switzerland. To afford the German industry still further protection, a trade agreement was signed early in the century with Switzerland exempting from customs duties aniline and other dyes imported into Germany from Switzerland. However, Germany reserved the right to demand payment of customs duties for chemical products "if Switzerland had not amended before 31 December 1907 its legislation on patents so as to provide that article of the class referred to and their like or the processes for their manufacture should be patentable where the invention was a new one." In furtherance of the provisions of this agreement, the new Swiss Act of 21 June 1907 firstly established the patentability of chemical processes, and secondly, stipulated that patents for inventions of manufacturing processes for chemical substances could cover only a single process starting from strictly defined substances and leading to a single end-product. The usual practice of patenting a series of processes was thus prohibited by the Act.

The above discussion shows the way in which the patent system has evolved in the countries of Western Europe and records the changes gradually introduced into the system through

32 Ibid.
a long period, as the economic and technological level of those countries changed. Whereas the system was originally designed as a means of fostering the technological and industrial progress of the State granting the patent, with economic self-sufficiency in view, there has been a continuous trend towards "internationalizing" its functions so as to enable owners of inventions to exploit them not only at the national but also at the international level. It is this trend which underlines the changes described above. The grant of the right to hold a patent only to the inventor and not to the introducer and the insistence on absolute novelty at the world level have tended to result in all patents for a given invention belonging to the same inventor. At the same time, the notable weakening of the obligation to work the patent in the country granting it has facilitated the exploitation of the patented invention in a number of national markets through imports rather than through local production. This has in turn led to patents being utilized for securing exclusive rights over export markets. During the nineteenth century and the first half of the twentieth century not only was it obligatory to exploit the patent, on pain of its losing its validity, but it was also forbidden, subject to the same penalty, to utilize the patent as a means of securing an import market for one's products. However, since then, the legislation of most of these countries has undergone a radical change. The

33 Ibid, p. 9.
provisions prohibiting the utilization of a patent as a means of
securing an import monopoly, have been replaced by new ones
which confer on the holder of the patent, as one of his basic
entitlements, the exclusive right to import the products obtained
through the patented invention. This change of position has,
moreover, been reflected to some extent in the Paris Convention
for the Protection of Industrial Property, through whose
successive revisions this evolution may be observed.

Moreover, rules such as those extending the protection of
the patented manufacturing process to the product directly
obtained by that process or those on the reversal of the burden
of proof for patents concerning processes that result in new
products, which were originally devised to protect national
industries by blocking imports, came to be used for the
strengthening of exclusive import rights and thus for the
promotion of exports. The reasons for such a trend becomes
obvious. In the initial phase, patents were used in European
countries as means for achieving industrialization and
technological progress in the country granting the industrial
property rights. At a later stage, steps began to be taken
to make it easy for the technology generated by firms within
the country itself to be also exploited abroad on the
international market. In other words, once the country had
succeeded in acquiring a technological potential that needed to
be exploited on a wider market than the national one, the rules

34 Ibid, p. 4.
of patent law were placed at the service of this new policy. Emphasis on universalisation of rules favouring developed countries' patent laws at their current stage of development has also been the approach of the recently signed Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations, more particularly its Agreement on TRIPS. 36

**Nineteenth Century Conflict on Patents**

With free trade and competition, in the middle of the nineteenth century, national patent laws led to a controversy and became the focus of criticism. A clash occurred between the free traders speaking for liberalization of trade and those pleading for grant of patent monopolies. This debate is worth examining as till today some controversy exists as to the precise extent of the contribution made by a patent system to the economic development of a country.

It was asserted by some critics that national patent laws, by granting temporary monopolies, acted in the same way as prohibitive tariffs. In two European countries (Netherlands and Switzerland) the discussions led to the repeal and rejection of the national patent laws. In the Netherlands, then a newly industrialising country, the majority of the members of the

---

Parliament, citing as authority classical economists, accepted that a "good law of patents is an impossibility," and in 1869 the then existing patent law was repealed. Another patent law could not be introduced before 1912 that is, 43 years later.

The Banks Committee of the United Kingdom that examined the patent system and patent law impliedly accepted that there was a relationship between the abolition of the patent system and the low rate of economic development in Holland. "It was demonstrated that Netherlands was the only country whose exports showed a diminishing proportion of manufactures and concluded that the change which has been taking place over a long period in Holland was due to the absence of a patent system". A study of the patentless period in the Netherlands from 1869-1912 and Switzerland from 1850-1907 has demonstrated that there is no conclusive evidence that the patentless period was either beneficial or detrimental to the economies of the two countries. "All in all, the differential analysis as applied to this material does not reveal a degree of differentiation that would strongly suggest a causal connection between the absence of a patent


system and the slow growth of productivity in the Netherlands. Schiff identified historical, sociological and political factors as the reasons for the slow growth of industrialization in the Netherlands, although 'conceivably' the patentless situation could have contributed. The controversy in Switzerland, another newly industrializing country, raged vehemently, where, under the Swiss Constitution, the Federal Government could not establish a general patent law directly - a popular referendum endorsing a constitutional amendment was first necessary. Calls for the referendum on a patent law itself were rejected five times in 1849, 1851, 1854 and twice in 1863. Later, two referenda on the subject were defeated in 1866 and 1882. It was only in 1887 that the referendum was successful.

In Switzerland, there was no patent system of any sort until 1888. During the period preceding the introduction of the system there were debates on the value of the system. The opponents of the system insisted that the freedom to use other


41 Switzerland is in relation to its population, by far the biggest exporter of inventions in the world. 8.5 percent of all patents granted to non-residents in developing countries are the property of Swiss individuals or corporations particularly in the chemical-pharmaceutical sector. Richard Gerster, "Switzerland and the Revision of the Paris Convention", Journal of World Trade Law, vol. 15, no. 2, March-April 1981, p. 111.

42 See n. 8, p. 4 and 71 respectively.
people's inventions had done more to stimulate industrial progress than the prospect of monopoly on one's inventions would have done. Despite the international pressure, two industries in particular, remained convinced that harmful effects outweighed the beneficial ones. These were the chemical and textile industries whose view was that in the event of introducing a patent system, they should be left out. Industrial activity grew up rapidly during the patentless and semi-patentless decades before 1907. As has been observed, the controversies over the Swiss patent legislation constitute a lesson in a policy frequently seeking its own advantage, yet attempting to assuage the public by arguing in favour of the collective welfare as against private profits. Nor were the controversies limited only to having a law or not having it. They were also reflected in the very content of the patent laws thus showing a shift in the rationale of patents which have already been discussed in the preceding few pages.

With the heated discussion on patents which took place in the period 1850-1873 and which resulted in the effective success of the patent advocates and the initiation in the Vienna Conference of 1873 of schemes to develop an international convention for patents, the emphasis of arguments shifted markedly from philosophical concepts to economic ones. In particular, justification for the grant of patent monopolies was

43 Schiff, n. 38, p. 92. See also Twinomukunji, n. 40, p. 51.
44 Gerster, n. 41, p. 111.
offered on three grounds: (a) providing a fair and just reward to the inventor; (b) encouraging individual inventive activity; and (c) giving an increase in the stock of knowledge publicly available though not publicly usable. These different justifications for grant of patents have been examined in detail while discussing rationale behind the grant of patents in chapter I. Each of these three arguments was discussed at great length during the patent controversy but unfortunately neither then nor since as we have seen, has any conclusive empirical evidence been provided for or against any of these propositions. 45

Although the patent-controversy remained unresolved, in the sense of providing clear evidence for or against patents, the number of countries which adopted patent laws slowly but steadily increased. By the end of the nineteenth century, the establishment of national patent laws in nearly all of what are now the developed market-economy, socialist and the southern European countries was already virtually complete.

The Third World Countries (the newly industrialising countries of the twentieth century) have faced similar debates on the usefulness of the patent system for best serving their

45 UNCTAD Doc. TD/B/AC 11/19, n. 8, p. 98.
46 The emergence of the newly industrialising countries (NICs) as highly dynamic economies exporting manufactured goods is a relatively new phenomenon. Varying criteria for establishing categories have been mentioned in major studies of the recent spurts in industrialization; growth and trade. The first major study of the NICs was published by the OECD in 1979. While acknowledging that borderline between categories were "bound to be arbitrary" 10 countries were identified as NICs based on their rapid penetration of world markets of manufactures; a rising share of industrial
national interests. These debates have formed the basis of the industrial property laws, which in several cases were introduced by the colonial powers during the nineteenth century. India, for example, had its patent law in 1859 just two years after the First War of Independence, long before any laws on subjects of vital public concern were enacted. The patent law was introduced in Liberia in 1864, Mauritius in 1875, Zaire in 1886, and in Sri Lanka in 1892. It would be difficult to suggest that these colonial laws had anything to do with serving the interests of these colonies. They were simply meant to reserve markets for the Metropolitan Powers. The debris of the colonial inheritance could only begin to be cleared upon liberation of these countries in the post-1950 period.

Contd......

employment and an increase in real GDP per capita relative to the more advanced industrial countries. These criteria established as NICs Greece, Portugal, Spain, Yugoslavia, Brazil, Mexico and the Gang of Four in East Asia-Korea, Taiwan, Hongkong and Singapore. The Chatham House study of the NICs published in 1989 focussed on the Gang of Four plus Brazil, Mexico, Argentina and India, all of which had achieved exports of manufactures in excess of $1 billion by 1976. The Development Assistance Committee (DAC) in its 1982 Review examined "second tier" exporters and distinguished between NICs and potential NICs based on both the magnitude of manufactured exports in 1979 and their growth rate between 1972 and 1978, while maintaining the classification of the 10 OECD-designated countries as NICs. The World Bank and the IMF categories of major exporters of manufactures includes Greece, Yugoslavia, Portugal, Argentina, Brazil, Hong Kong, Singapore and Korea as well as Israel and South Africa. This category excludes Taiwan for non-economic reasons and also leaves out Spain which is classified by the World Bank as an "industrial market economy" and Mexico which is classified as a "middle income oil exporter". The World Bank adds two additional countries - The Philippines and Thailand. However, even though it seems to be clear which countries are NICs, it is not as clear what it means to be a NIC. See Colin I. Bradford, Jr, "Trade and Structural Change: NICs and Next TierNICs as Transitional Economies", World Development, vo.15,no.3,March 1987, pp. 299-300. Patel, n.2, pp. 11-12.
EVOLUTION OF MULTILATERAL MECHANISM FOR PATENT PROTECTION

Need for an International Regime

The need for an international regime to protect property rights across national boundaries was realised in the nineteenth century due to the increased growth of international trade. There was no international mechanism to provide the necessary protection. Protection was provided through bilateral arrangements covering various forms of property rights. When international trade became crucial to the economic life of what were then the major countries, it became urgent to create national regimes of exclusive rights in intellectual property in countries other than those of the inventors and innovators. However, national patent legislations bearing different provisions with regard to patentable inventions, novelty, time limit for exploitation, different and complicated procedure for grant of patent created problems in getting inventions patented and an invention which used to be patentable in one country might be excluded from being patented in another country. Exclusive national patent legislation without an international dimension was found inadequate; for, a process or product invented or developed in one country could be imitated by a foreigner in his own country and the latter could capture the international market for the product. The lack of

adequate protection of foreign inventions became particularly apparent when the Government of the Empire of Austria-Hungary invited the other countries to participate in an international exhibition of inventions held in 1873 at Vienna. Participation was hampered by the fact that many foreign potential participants were not willing to exhibit their "wares" (inventions) at that exhibition due to inadequate legal protection offered to exhibited inventions. This led to two developments: firstly, a special Austrian law secured special temporary protection to all foreigners participating in the exhibition for their inventions, trademarks and industrial designs. Secondly, the Congress of Vienna for Patent Reform was convened during the same year 1873 at the initiative of Government to convene an international conference on patents emphasizing on the interdependence of national patent systems and to promote the necessary international protection.  

---

49 See Lakshman Kadirgamar, "The Paris Convention for the Protection of Industrial Property", in WIPO Publication, WIPO-IAWASIA Seminar on Industrial Property (Geneva, 1983), p. 41. The following statement was made by the Government of Austria: "We live no longer in the day of industrial action which is strictly confined to an removed from foreign competition, and where slow communication prevents or delays the custom policy, steam and electricity have newly united once isolated seats of industry in a way undreamt of; and the mutual exchange of goods shows today a magnitude which a generation ago one could not have imagined. Under such altered conditions the patent granted for an invention in one country becomes in fact a restriction unprofitable and obstructive, if the same invention without limitation or increase in price, becomes in an adjoining country common property. The artisan who in the one country must work with the auxiliary material there patented and therefore dearer in price, will suffer an essential injury as soon as the same material is produced in the other country, not only without restriction, but with a damaging competition.

Contd....
Establishment of Paris Convention

Consideration started to be given to formulation of minimum rules which were to be observed by different countries. The initiative for the establishment of such norms appears to have had as its strongest supporter the United States of America. Although the initial invitation for an international conference on patent rights came from the Austrian Government in 1872, it specifically noted:

... following a suggestion of the Government of the United States of America, the General Direction of the Universal Exposition intends to unite with the Exposition and International Congress, which shall discuss the question of patent right: should this discussion, as may be foreseen, induce a vote in favour of patent protection, it will then be the task of this Congress on the basis of the experience of various countries and the materials collected, to proceed to a declaration of fundamental principles for an International Reform of Patent Legislation. 50

The preparatory work towards a multilateral arrangement for patent protection began with the International Conference held at Vienna in 1873. The Vienna Congress which was held from

Contd...

Moreover, a continuance of hitherto antagonistic views and measures would scarcely conduce to the preservation of general harmony; and if for example, patent protection were maintained in one country, so as to attract thereby skilled operatives from another, then the danger of disturbance of the international industrial balance might readily be apprehended. Such and similar inconveniences can be met by the common action of all civilized states, disposed to the maintenance of patent protection." Heinrich Kronstein and Irene Till, "A Re-evaluation of the International Patent Convention", Law and Contemporary Problems (Durham, NC), vol. 12, no. 4, 1947, p. 768.

50 Ibid, pp. 765-81.
3-9 August 1873 was a failure. Conflicting ideas were expressed by the leading countries. On the one extreme was the view of the United States that absolute protection be given to patents as they represent property rights sanctioned by natural law. At the other end of the spectrum was the anti-patent viewpoint of Germany, aimed at destruction of the patent system. In between the two extremes was the view of Britain and France for protection of patents with built-in-safeguards to check possible abuse of patents. They recognized patents as instruments of national policy designed to accelerate the process of industrialization. The Vienna Congress passed several resolutions setting forth a number of principles on which an effective and useful patent system should be based, urging governments' "to bring about an international understanding upon patent protection as soon as possible".  

Subsequent to the Vienna meeting further conferences were held in Paris in 1878, 1880 and 1883. The main result of the Second Congress of 1878 held in Paris was a decision that one of the governments should be asked to convene an official international (diplomatic) conference "with the task of determining the basis of uniform legislation" in the field of industrial property. As a follow up to that Congress a final

---

51 Nanyena-Takirambudde, n. 7, p. 64.

52 See generally Kadirgamar, n. 49, p. 41; Jayagovind, n. 48, p. 48.
draft proposing an international "union" for the protection of industrial property was prepared in France and was sent by the French Government to a number of other countries, together with an invitation to attend the International Conference in Paris in 1880. The Paris Congress on Industrial Property which was held in 1880 appointed a Permanent Commission to draw up legislation that could promote unification. It covered not only patents but also trade marks, designs, models etc. The convention drafted at this Congress was the first multilateral mechanism for the protection of exclusive rights in inventions and innovation across national borders. That draft, on a number of points, contained already the basic framework of substantive provisions which are still today the focal points of the Paris Diplomatic Conference of 1883. Ultimately, the Paris Convention for the Protection of Industrial Property came into force on 20 March 1883.

The Paris Convention was initially adopted by 14 states: namely Belgium, France, Great Britain, Italy, the Netherlands, Portugal, Serbia, Spain and Switzerland (from Europe): Brazil, Ecuador, Guatemala and El Salvador (from Latin America), and Tunisia (from North Africa). The United States acceded in 1887 and Asia was wholly absent. There are several interesting

---

features about the 14 original signatories to the Paris Convention. Tunisia became a member through adherence, on her behalf, by France; Serbia had no patent law upto 1918, and Ecuador, El Salvador and Guatemala withdrew from the International Union, respectively in 1886, 1887 and 1895. The Netherlands and Switzerland also did not have national patent laws at that time. As has been noted earlier, many countries, mostly the newly industrialised countries of Europe, had serious misgivings about such a Convention. They felt that it would serve the monopolistic interests of patent holders of the then developed countries, particularly Great Britain, the United States and France. 54

Revisional Conferences - Adoption of Successive Texts

Since its adoption, the Paris Convention has been revised six times at Brussels on 14 December 1900; at Washington on 2 June 1911; at The Hague on 6 November 1925; at London on 2 June 1934; at Lisbon on 31 October 1958; and lastly at Stockholm on 14 July 1967. Each of the revision conferences, starting with Brussels in 1900, ended with the adoption of a revised Act of the Paris Convention. Therefore, the Paris Convention has been described as "a series of Conventions embodied in the successive texts established at the Revision

54 The organisers of the Conference had thus sensed the danger of disagreement. Therefore the United States brought with it to Paris, its protectorates - Ecuador, El Salvador and Guatemala. Brazil too was brought in. France brought along Tunisia. The five helped to create a majority through block stock-voting. Those who did not have their national patent laws at that time also signed. The 1883 conference where the convention was agreed to was called a "theatre of the absurd" by some opponents of the United Nations a century later. Five signatories had no idea of what it was all about, and three could not even persuade their own countries to have patent law. Patel, n. 2, p. 13.
Conferences. However, the series of Conventions called "Acts" (of the same Convention) since the Revision Conference of Washington in 1911, has constituted and maintained one and the same Union." Thus members of the Union are not all signatories to the same text. But each revision only further strengthened the monopolistic rights of the foreign patent holders and the substance of the Paris Convention has remained almost the same.

The Paris Convention remained for long a "rich man's club" since its establishment. Its membership has now increased to 108 covering


The other earlier Acts are therefore still of some significance, although the great majority of the countries are now a party to the Stockholm Act of 1967.


58  The following states are party to the Paris Convention: Algeria, Argentina, Australia, Austria, Bahamas, Bangladesh, Barbados, Belgium, Benin, Brazil, Bulgaria, Burkina Faso, Burundi, Cameroon, Canada, Central African Republic, Chad, Chile, China, Congo, Cote d'Ivoire, Croatia, Cuba, Cyprus, Czech Republic, Democratic People's Republic of Korea, Denmark, Dominican Republic, Egypt, Finland, France, Gabon, Gambia, Germany, Ghana, Greece, Guinea, Guinea-Bissau, Haiti, Holy See, Hungary, Iceland, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Israel, Italy, Japan, Jordan, Kazakhstan, Kenya, Lebanon, Lesotho, Libya, Liechtenstein, Luxembourg, Madagascar, Malawi, Malaysia, Mali, Malta, Mauritania, Mauritius, Mexico, Monaco, Morocco, Mozambique, Namibia, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Romania, Russian Federation, Rwanda, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, San Marino, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, Solomon Islands, Somalia, Spain, Sri Lanka, Sudan, Suriname, Sweden, Switzerland, Syrian Arab Republic, Tajikistan, Tanzania, Thailand, Togo, Tiongkok, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, Ukraine, Union of South Africa, United Arab Emirates, United Kingdom, United States of America, Uruguay, Uzbekistan, Vietnam, Venezuela, Yemen, Zambia, Zimbabwe.

Contd....
a majority of developing countries which have joined it only in the last three decades.

The last revision conference with the particular aim of meeting the needs of the developing countries had started in Geneva under the auspices of the WIPO in February 1980, and continued in 1981, 1982 and 1984, but no conclusions could be reached. Later on deliberations were held in June 1991 at the WIPO-Diplomatic Conference for the Conclusion of a Patent Law Treaty, the details of which have been discussed in chapter IV devoted to the criticism of Paris Convention.

The Concept of a "Union" under the Paris Convention

The Convention established a Union for the protection of Industrial Property (Paris Union) of which at the present time 108 countries are members. The concept of a "Union" is of importance for various reasons: (1) In creating a Union, the Paris Convention goes beyond a mere treaty establishing rights and obligations. It also establishes a legal entity in international law with the necessary organs to carry out certain tasks; (2) A state which becomes a member of the Union by acceding to the most recent (Stockholm) Act of the Paris Convention becomes bound with respect to all member countries, even those not yet party to the Stockholm Act. This is in accordance with

Contd...

Mongolia, Morocco, Netherlands, New Zealand, Niger, Nigeria, Norway, Philippines, Poland, Portugal, Republic of Korea, Romania, Russian Federation, Rwanda, San Marino, Senegal, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Sudan, Suriname, Swaziland, Sweden, Switzerland, Syria, Togo, Trinidad and Tobago, Tunisia, Turkey, Uganda, Ukraine, United Kingdom, United Republic of Tanzania, United States, Uruguay, Viet Nam, Yugoslavia, Zaire, Zambia, Zimbabwe. WIPO, General Information (Geneva, 1993), p.18.
Article 27 (3) which says that such a country must apply the Stockholm Act also to member countries of the Union not yet party to that Act. The same provision also provides that such a country recognizes that member countries not yet bound by the substantive provisions of the Stockholm Act may apply, in their relations with it, the earliest Act which is the most recent of the Acts to which they are party; (4) if a member country denounces any of the Act of the Paris Convention which it has accepted, it will lose its membership in the Paris Union; and (5) since the entry into force of the Stockholm Act, countries may no longer accede to earlier Acts of the Paris Convention as provided in Article 23. This provision also applies both to member countries and to newly adhering countries.

The Paris Convention also created an International Bureau, with tasks including liaison between the patent administrations of the countries of the Paris Union, the preparation of revision conferences and the publication of documents and other information.

ESTABLISHMENT OF OTHER INTERNATIONAL TREATIES OF WORLDWIDE APPLICATION

The Convention Establishing the World Intellectual Property Organisation

The Convention establishing the WIPO was adopted at Stockholm on 14 July 1967 by the same diplomatic conference which


The following 135 states are party to this Convention: Albania, Algeria, Angola, Argentina, Armenia, Australia, Austria, Bahamas, Bangladesh, Barbados, Belarus, Belgium, Benin, Brazil, Bulgaria, Burkina Faso, Burundi, Cameroon, Canada, Central African Republic, Chad, Chile, China,
revised the Paris Convention and which came into force on 26 April 1970. The two objectives of the Convention are (1) to promote the protection of intellectual property (including industrial property) throughout the world; and (2) to ensure administrative co-operation among the inter-governmental Unions established by international agreements for the promotion of intellectual property (including the Paris Union and the Berne Union for the Protection of Literary and Artistic Works).

The origins of WIPO go back to 1883 when the Paris Convention was established and to 1886 when the Berne Convention was organised. Both Conventions provided for the

Contd....

Colombia, Congo, Costa Rica, Coted'Ivoire, Croatia, Cuba, Cyprus, Czech Republic, Democratic People's Republic of Korea, Denmark, Ecuador, Egypt, El Salvador, Fiji, Finland, France, Gabon, Gambia, Germany, Ghana, Greece, Guatemala, Guinea, Guinea-Bissau, Haiti, Holy See, Honduras, Hungary, Iceland, India, Indonesia, Iraq, Iceland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Latvia, Lebanon, Lesotho, Liberia, Libya, Liechtenstein, Lithuania, Luxembourg, Madagascar, Malawi, Malaysia, Mali, Malta, Mauritania, Mauritius, Mexico, Monaco, Mongolia, Morocco, Namibia, Netherlands, New Zealand, Nicaragua, Niger, Norway, Pakistan, Panama, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Romania, Russian Federation, Rwanda, San Marino, Saudi Arabia, Senegal, Sierra Leone, Singapore, Slovakia, Slovenia, Somalia, South Africa, Spain, Sri Lanka, Sudan, Suriname, Swaziland, Sweden, Switzerland, Thailand, Togo, Trinidad and Tobago, Tunisia, Turkey, Uganda, Ukraine, United Arab Emirates, United Kingdom, United Republic of Tanzania, United States, Uruguay, Venezuela, Vietnam, Yemen, Yugoslavia, Zambia, Zimbabwe.

See WIPO Publication, n. 58, pp. 10-11.
establishment of an "International Bureau" or Secretariat. These were united in 1893 and functioned under various names, the last being the United International Bureaux for the Protection of Intellectual Property known by its French acronym "BIRPI". BIRPI still has a legal existence for the purpose of those states which are members of the Paris or Berne Unions but have not yet become members of the WIPO; in practice, however, the WIPO replaced BIRPI and is indistinguishable from it.

The WIPO aims to promote the protection of intellectual property throughout the world through co-operation among states and where appropriate, with other international organisations. It administers various international treaties, of which the most important are the Paris Convention for the Protection of Industrial Property (1883) and the Berne Convention for the

60 For details, see Year Book of the United Nations, ibid, pp. 1032-4; UNCTAD, The Role of the Patent System in the Transfer of Technology to Developing Countries, Doc. TD/5/AC.11/19 Rev. 1, 1975, p. 15.

61 WIPO's co-operation consists mainly of advise, training and the furnishing of documents and equipment. The advice is given by the staff of the WIPO, experts chosen by it or international meetings called by it. The training is individual (on-the-job) or collective (courses, seminars and workshops). Legal and technical aspects of intellectual property involves revision of treaties, revision of classification of goods and services, preparation for entry into force of new treaties, and for other possible new international instruments. See WIPO Publication, n. 58, pp. 55-56.
Protection of Literary and Artistic Works (1886). The organisation itself has four organs: a General Assembly; a Conference; a Coordination Committee; and a Secretariat called the International Bureau of Intellectual Property which is also the depository of most of the treaties "administered by WIPO".

The WIPO Convention contains no substantive treaty obligations concerning the national laws of member states in the field of intellectual property, and is open to states which

62 A list of other treaties "administered by WIPO" as regards 'International Protection of Industrial Property' includes:


63 See Article 6 of the Convention establishing WIPO.

64 Article 7 ibid.

65 Article 8 ibid.

66 Article 9 ibid.
are not members of any of the Unions which WIPO administers. However, the role of such non-union states is severely limited by the fact that they have no voting rights, and are consequently relegated to a merely advisory role. The original proposal for reorganisation had made no such distinction among members. However, the power of non-union members to adopt resolutions was deleted from the final text. The organisation thus created was one in which only states already members of the individual unions had decision-making power, those states outside the unions represented were offered little more than a forum for discussion.69

However, from the point of view of developing countries, the WIPO Convention includes provision for a programme of legal technical assistance to developing countries, within which the member states have established in 1973 the "WIPO Permanent Legal Technical Programme for the Acquisition by Developing Countries of Technology Related to Industrial Property", supervised by an intergovernmental Committee of both developing and industrialised countries; the means of action concentrate on licensing, patent documentation and model provisions for national industrial property laws.70

67 See Doc. TD/B/AC.11/19, n. 8, p. 36.
68 Anderfelt, n. 13, p. 262.
69 Dhavan, Harris and Jain, n. 53, p. 165.
70 Doc. TD/B/AC.11/19, n. 8, p. 36.
The WIPO through a 20 Article Agreement between it and the United Nations, became a specialised agency of the latter on 14 December 1974, responsible for promoting creative intellectual activity and for facilitating the transfer of technology related to industrial property to the developing countries in order to accelerate their economic, social and cultural development, subject to the competence and responsibilities of the United Nations and its organs. In the field of industrial property, the main objectives of the WIPO's co-operation with developing countries are:

i) to encourage and increase, in quantity and quality the creation of patentable inventions by their own national and in their own enterprises, and thereby to increase the degree of their technological self-reliance;

ii) to improve the conditions of acquisition of foreign patented technology;

iii) to increase the competitiveness of developing countries in international trade through better protection of the trademarks and servicemarks of reference in such trade; and

iv) to facilitate access by developing countries to the technological information contained in patent documents.

In order to achieve these objectives, most developing countries need to create or modernise domestic legislation and

71 See Article 1 of its Agreement with the United Nations.
governmental institutions, to accede to international treaties, to employ more specialists in government, in industry and in the legal professions; and to acquire more patent documents and better methods of analysing their contents. These activities are supervised by the WIPO Permanent Committee for Development Co-operation Related to Industrial Property; membership of which is voluntary and carries no financial obligation with it.

The International Patent Documentation Centre (INPADOC)

The INPADOC was established in Vienna, Austria pursuant to an Agreement signed between the Republic of Austria and the WIPO in Geneva on 2 May 1972 which entered into force on 22 June 1973. Since its founding in 1972, the aim of the INPADOC has been to provide quick and reliable access to newly issued patent documents, and thus to a part of the world's increasingly complex body of scientific and technical literature, so that the information contained in these documents may be put to maximum productive use. When BIRPI - the predecessor of the WIPO launched the idea of a World Patent Index in 1965, keeping up with the world's patent literature was an almost impossible job. At that time, about 650,000 patent documents (i.e. patents, inventors' certificates and utility certificates as well as applications for

72 Industrial Property (Geneva), 1973, p. 290.
The same) were published every year. This number of patent documents has grown in million.  

The primary functions of INPADOC are the provision of the Patent Family Service (a service identifying patent documents as being connected by a common priority claim under the Paris Convention) and the Patent Classification Service (a service identifying patent documents as being connected by a common symbol of the International Patent Classification (IPC)), as well as the provision of a copy service for patent documents. These and other INPADOC publications and information services are provided by reference to INPADOC's data base (I & B), the basic key to the patent literature of the world. 

The Patent Co-operation Treaty (PCT) 

The PCT was signed at Washington on 19 June 1970 and came into force on 24 January 1978. As the name indicates, the PCT

---


74 Ibid, p. 2.

75 The following 57 states are party to the PCT: Australia, Austria, Barbados, Belgium, Benin, Brazil, Bulgaria, Burkina Faso, Cameroon, Canada, Central African Republic, Chad, Congo, Cote d'Ivoire, Czech Republic, Democratic People's Republic of Korea, Denmark, Finland, France, Gabon, Germany, Greece, Guinea, Hungary, Ireland, Italy, Japan, Kazakhstan, Liechtenstein, Luxemburg, Madagascar, Malawi, Mali, Mauritania, Monaco, Mongolia, Netherlands, New Zealand, Niger, Norway, Poland, Portugal, Republic of Korea, Romania, Russian Federation, Senegal, Slovakia, Spain, Sri Lanka, Sudan, Sweden, Switzerland, Togo, Ukraine, United Kingdom, United States, Viet Nam. See WIPO Publication, n. 58, p. 25.
is an agreement for international cooperation in the field of patents and, more specifically in the procedure for the protection of inventions and the provision of technological information relating to such inventions. It is recognised as being the most significant advance in international cooperation in this field since the adoption of the Paris Convention itself. It is, however, largely a procedural and information-disseminating treaty and thus complements the Paris Convention for the Protection of Industrial Property. The Treaty does not provide for the grant of "international patents". The task and responsibility to grant patents remains exclusively in the hands of the patent offices of, or acting for the countries where protection is sought (the designated offices). The origin of the PCT started in 1966 with the suggestion of the states that a study be conducted by the WIPO "to determine duplication of search efforts for applications filed in a number of foreign countries."

The preamble of the treaty refers to the desire of the contracting states to simplify and render more economical the obtaining of protection of inventions where such protection is sought in a number of countries. Apart from this, two other objectives of the PCT referred in the preamble are: (a) to facilitate and accelerate access to the technical information contained in documents describing new inventions; and (b) to foster

---


77 For details see Doc. WO/INF/80, ibid, pp. 31-32.
and accelerate the economic development of developing countries, both, by the adoption of legal measures, by increasing the efficiency of their national and regional patent systems and by providing easily accessible information, the availability of technological solutions applicable to their special needs and facilitating access to the ever-expanding volume of modern technology.

The PCT has four main features which give a picture of how it meets its objectives. These features are: international application; international search, international publication, and international preliminary examination. The treaty provides for the filing of an "international application" where protection is sought for an invention in several countries. The formalities of the international application are regulated in detail. Filing of such applications has the same effect as if applications had been filed separately in each of the countries in which protection is desired. The international application is then subjected to a search to discover "prior art" and also, if specially requested by the applicant, to a preliminary examination to find out whether the invention seems to be new, non-obvious, and industrially applicable. International preliminary examination is carried out by an authority appointed under the PCT and is known as an International Preliminary Examining Authority. Once the relevant reports are established the application is processed separately in the various countries, each of which will then grant or refuse protection.

78 For details, see n. 76, pp. 34-39 and pp. 2-4 respectively.
The Patent Co-operation Treaty thus contains a provision specially created for the developing countries. Its purpose is to enable a patent office without the resources necessary to carry out a comprehensive novelty search and examination to make an adequate evaluation of a patent application filed at the office. This provision implies that a country can submit all national applications to an international searching authority, where they are subjected to a qualified search. However, there is no corresponding provision with regard to preliminary examination. But any country is free to enter into an agreement with a PCT authority to have all its patent applications subjected to a preliminary examination.

An important advantage of the PCT for developing countries lies in its information effect. It is now always very difficult to obtain a complete picture of all the patent documents published in many countries and many languages and of the most recent state of the art resulting there from. Since many important inventions are the subject of PCT applications, developing countries have, through the international publication of these applications, early and easier access to modern technological information. The access will be early, because international applications are published 18 months after the priority date of the application. It will be

---

79 Major Patent Offices appointed as international searching authorities by 1 January 1993, include the Patent Offices of Australia, Austria, Japan, the Russian Federation, Sweden, the United States and the European Patent Office. See WIPO Publication, n. 58, p. 27.
easier, because the application will be published in one of the most important languages and, where not in English, with an English language abstract; and because the international search report, published together with the application, will make it easier to evaluate the technology disclosed in the application. Thus the PCT offers distinct advantages for developing countries participating in this new system of international cooperation and requires no payment of contributions. Sufficient awareness of these advantages is, moreover, confirmed by the fact that an impressive number of developing countries are party to the treaty.

Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure

The Budapest Treaty adopted on 28 April 1977 and entered into force in 1980, provides for the deposit of a microorganism for the purposes of patent procedure with a depository institution which has acquired the status of an international depository authority. In order to attain such a status, depository institutions need to conform to specific requirements ensuring uniform treatment of deposits, storage and availability of samples of microorganisms. The provisions of this treaty shall

See Doc. WO/INF/80, n. 76, pp. 41-42.


The following 24 states are party to this treaty: Australia, Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Hungary, Italy, Japan, Liechtenstein, Netherlands, Norway, Philippines, Republic of Korea, Russian Federation, Slovakia, Spain, Sweden, Switzerland, United Kingdom, United States.

See WIPO Publication, n.58, p. 28.
form the subject of discussion at the appropriate place in the chapter on subject matter of patent protection.

**SUMMATION**

From a study of the historical evolution of the international patent system it can be concluded that the developing countries demanded what was prevalent in the developed countries of today at earlier phases of economic, technological and industrial development. The developing countries' demands in the Uruguay Round of Multilateral Trade Negotiations were in the direction of maintaining the same rules that were in force in the industrialised countries at earlier stages. The logic behind this seems to be their different levels of economic, technological and industrial development which can influence the evolution of any international or domestic patent system in future. Such an inference becomes clear as there was no patent or weak patent standards in many of the industrialised countries of today in important sectors with the prime objective of strengthening their own industrial and technological developments. Therefore, this important historical factor, too, goes against the demand of today's industrialised countries for a strong patent regime which is aimed at universalising rules suitable to their own patent law at the current stage of development.

Another inference which can be drawn from a study of the genesis and growth of the international patent system is that the function of patent and thus of patent legislation should be
determined by the economic, technological and industrial interests of the country enacting the law. In other words, it suggests that the rules regarding patent protection or the nature and extent of patent protection cannot be the same in all countries and at all times, thus leaving scope for different options in the field of patents. As a result legislation adopted by various countries at different times may, therefore, differ on important aspects. Moreover, there can be made substantial changes in the patent legislation of any country so as to adopt it in accordance with the changing interests in the economic, technological and industrial areas.

The history also reveals that in the origin, enactment and revision of Paris Convention, the major role had been that of the developed countries. For a long it remained an instrument of developed countries. Moreover, their concern for facilitating exploitation of patented inventions at the international level, led to the introduction of modifications into the Convention so as to strengthen national legislative provisions.

At this juncture it becomes pertinent to have a glance at the major provisions of the Paris Convention prescribing basic norms and standards of patent protection - a study of which has been made in the following chapter.