CHAPTER VII

WORKING OF PATENTS AND SAFEGUARDS AGAINST THEIR NON-WORKING

INTRODUCTION

The effective use of patents or ensuring their working has traditionally been the basis for granting of patents. It has been a general belief that privilege granted would be of no value to the country unless it was locally exploited. In European countries it was for a long time a priority objective of patent law to ensure that the inventions patented in the country were actually exploited within the national territory. ¹

For example, the basic aim of the British patent system and indeed its effect has been considered "to encourage the successful industrial application of inventions". ² Even in the United States, whose patent law does not contain any general provision relating to working, recent trends seem to admit the granting of compulsory licences on grounds of non-use of patents. ³

¹ UNCTAD, Historical Trends in Protection of Technology in Developed Countries and their Relevance for Developing Countries, UNCTAD/ITP/TEC/18, 25 December 1990, p. 3.


Thus, it is generally recognised that patents are granted to be effectively used. One finds a reflection of this rationale of encouraging and ensuring the working of inventions in the patent laws of developing countries, the Indian case being examined in the next chapter. 4

A major problem in the developing countries however has been the failure to work protected inventions. This has been a subject of serious concern in view of the fact that only a small proportion of the patents granted in developing countries are directly exploited within their territories. In connection with working of patents in the country of grant, the following four basic facts have been pointed out from the experience of developing countries:

1. Patents are seldom worked in developing countries, even when it is techno-economically feasible to do so.
2. The working of the patent in the host country leads to saving of scarce foreign exchange (which is a major constraint

4 See Chapter VIII. The relevant provision is Section 83 of the Indian Patents Act (IPA), 1970.

5 Developing countries account for about two-thirds of patents held by foreigners in the developing countries granting patents but the use in production of patents held by developing countries is hardly above 5 or 10 percent of the total. The small number of foreign patents used in production in these countries varies from 10 to 20 thousand and are those which can be considered relevant to the transfer of technology to developing countries. See Doc. TD/B/AC.11/19, n. 2, pp. 89-90, 126.

to the economic development of developing countries) and the lowering of prices of products, particularly in critical sectors such as food, pharmaceutical, agro-chemicals and the like.

3. Without the working of the patent, there can hardly be any transfer or diffusion of technology and the promotion of industrial activity in the host country.

4. Without working patent protection would degenerate into a mere monopoly for the importation of the patented article into the country, and a device for the reservation of the host country market by the patent owner.

In this chapter an attempt is made (a) to examine the various reasons for non-working of patents and the need for reinforcement of working through legal reforms in the direction of elaborating the meaning of working; (b) to determine whether importation amounts to working or not; (c) to clarify the obligations of the patent holder to work the patent; and (d) to examine the various remedies against non-working of patents with emphasis on compulsory licences. The chapter will examine the position in these regards both before as well as after the TRIPS Agreement.

SOME CONSIDERATIONS FOR NON-WORKING OF PATENTS

There are a number of factors that contribute to non-working of patents. In some cases the inventions contained in a registered patent is not of sufficient economic significance. Such a patent is in the strictly economic sense, a useless one, and presumably lapses at the time when its holder becomes unable, or considers it
inadvisable, to continue paying the annual patent fees. Other patents, though of potential economic value to the country concerned, may remain unworked owing to the inadequate level of economic and technological development of the patent granting country. Still other patents are taken out so that goods produced elsewhere, but protected under the patent grant, may be imported. In this case, the purpose of taking out the patent is the prevention of its use for productive purposes, and the reservation of the market of the patent granting country for the benefit of the patent holder. 7

To decide whether a particular technology can be economically used in a country, a national producer may not be guided by the same considerations as a multinational corporation. This can be explained with reference to the problems of profitability of local production and suppression of patented inventions.

Profitability of Local Production

A multinational corporation, whose geographical horizons encompass many countries of the world and whose time horizons for calculating and collecting profits may be quite different from

those of producers located within one single country, may hold
patents for the same item in many different countries. The
corporations' decisions on where to locate production, however,
will be determined by considerations of profitability and
efficiency of supply; and it is extremely unlikely that all
markets would appear to be equally good from this angle.
Moreover, if there are economies of scale in production and
management which outweigh economies in transport costs the
same corporation would likewise have sound economic reasons
for confining the location of its production of the patented
items to only one or two of the places where the patent has
been obtained. In this case the global holding of the patent
serves the function of preventing potential competition in all
markets, and thereby securing those markets for the production
of the company, without forcing the company to engage in what
would, from its point of view, be relatively uneconomic
locations of production. On the other hand, a private
undertaking in a developing country could arrive at quite
different conclusions with respect to the profitability of local
production. Moreover, if the decisions were to be made at a
public level, considerations of social costs and benefits could
also have a significant bearing on it.

8 Doc. TD/B/AC.11/19/Rev. 1, ibid, p. 49.
The international production and marketing strategies of the multinational corporation holding many patents show their motive to maximise their profits through appropriate control over the locations of their production and over the possibilities for inter-country sales of products. The absence of local production represents a deliberate choice by the foreign holder of a patent, taken as part of the implementation of an international production and marketing strategy. The position can be summed up in this direction by quoting the observations of an UNCTAD study:

In developed countries a large extent of non-use is likely to be due to realization that the patented inventions are not, or are no longer, of commercial interest. In developing countries, however, this factor probably plays a smaller part, and the percentage of foreign-held patents worked successfully abroad is likely to be higher. The non-use must therefore be connected with business interests and commercial strategies of maximizing the profits of the foreign patent owners - interests and strategies unrelated to the requirements of economic advance of the countries concerned.

Suppression of Patented Inventions

A second problem as regards non-use of patents is the suppression of patented inventions for the purpose of limiting competition. A distinction needs to be made between reasonable

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9 Doc. TD/B/AC.11/19, n. 2, p. 90.
non-use of the patented invention and an outright suppression. If a patent owner takes a business decision based on reasonable consideration that it is economically unfeasible for him to practice the patented invention such non-use should be permissible and the grant should be fully enforceable against others. If there is a collusive agreement to suppress patented inventions, either to fence in the available technology or to block in a competing technology, anti-trust violations may exist at least in United States or European Economic Community. It might also come within the requirements of Section 84 of the Indian Patents Act (IPA), which provision deals with compulsory licences.

Prima facie evidence of suppression would exist in cases where the patentee is not working the patent himself and is known to have rejected applications for the licence of the patents which are based on the offer of reasonable terms and conditions for the licence. In the absence of any application for licences, however, it is not easy to prove whether inventions have been or are being suppressed. Such proof would require a demonstration that the use of the inventions would be economically practicable and while this might be possible to show in the case of cost-saving

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inventions it would seem an extremely complex task for inventions whose function would be to introduce new products to the market.11

Meaning of the Concept of "Working"

No attempt is made in the Paris Convention to define "working". The definition will depend upon the relevant national law in each case, but normally the concept includes manufacture of the patented product or industrial application of a patented process. The concept of "working" is also not defined in the text of "basic proposals" which were approved or forwarded by the Preparatory Intergovernmental Committee to the Diplomatic Conference for the Revision of the Paris Convention. In this regard, as per WIPO Director General, it is generally understood in the sense that, in cases of product patents, the products

11 Doc. TD/B/AC.11/1Rev.1, n. 7, p. 49.


13 This Committee was established by the Assembly of the Paris Union at its September/October 1976 session, on the basis of a recommendation adopted by the Ad-hoc Group of Experts at its third session. See Docs. AB/VII/II and AB/VII/23, para 128(ii) quoted in WIPO Doc. PR/DC/3, ibid, p.8.
comprising the invention are manufactured, and, in cases of process patents, the process comprising the invention is used in manufacture. Thus exploitation means the actual use of a patented process or the manufacture of a patented article in the country of protection. Different countries use, in fact, different criteria regarding this matter. But most require that the patentee manufacture the patented product or use the patented process within the country. In simple words, it means using the patent for commercial exploitation. However, the term "non-use" of the patent in an UNCTAD study has been understood to mean "the absence of production within the country, importation and distribution of the patented product or process nevertheless may take place, effected either by the patentee himself or by a licensed distributor."

The concept of non-exploitation of patents, as has been noted, varies from country to country, ranging from the absolute non-utilisation of patents to not meeting the demand of an internal market.

14 WIPO Doc. PR/DC/3, ibid, p. 41.
15 Cabanellas, n. 7, p. 165.
17 Doc. TD/B/AC.11/19, n. 2, p. 123.
In a number of developing countries, the trend has been towards formulation of express definitions of what is deemed to be "exploitation". The change introduced in these countries' patent laws included a more precise definition of working. For instance, according to Article 31 of Decision 85 of the Commission of the Cartagena Agreement (Andean Group):

> Working shall mean the permanent and regular use of the patented processes or the manufacture of the product covered by the patent in order to put the end result on the market under reasonable marketing conditions, provided that such acts have occurred on the territory of the member country which grants the patent, without prejudice to the provisions of the sectoral industrial development programmes referred to in Articles 33 and 34 of the Cartagena Agreement.18

The Mexican Law on Inventions and Trademarks of 1976 provided that "exploitation shall be the permanent use of the patented process or the manufacture of the product covered by the patent, either directly by the patentee or by his successors in title or licensees, in quantities that amount to effective industrial exploitation and on satisfactory conditions as to quality and price."19

The above-mentioned definitions apart from including the element of "permanent" and "regular" exploitation also set out conditions for the supply of the product resulting from the use of


19. Article 43.
the invention. The supply must be "reasonable" or "satisfactory" in the circumstances of the market. Moreover, in the Mexican Patent Law, as in the IPA of 1970, the market not only included the domestic one, but also export markets that are not adequately covered by the exploitation of the patent. Failure to meet export demand "to an adequate extent and under the right conditions" also constitutes an abuse of patent rights under the patent law of Republic of Korea.

The concept of "working" or "use" of patent has also been defined in legislations of a few developed countries. For instance, the Russian Patent Law on Inventions of 1991 has defined "use" of an invention in Article 22 (1) "as introduction into the economic circulation of a product manufactured through an application of a patented invention or an application of a process protected by a patent." This provision on the other hand does not require that the product be manufactured in Russia as importation falls within the scope of "use". Working is defined in Article 2(3) of the Japanese Patent Law enacted in 1959 as amended in 1986 as "acts of producing, using, transferring, lending, displaying for transfer or lending of or of

20 Article 50 (iv).
importing the patented invention or products of the patented process. However, most of the definitions are silent about the place of manufacture or production of the patented product or use of the patented process.

**Importation and Working**

Working of the patent is usually assumed to mean working of the patent in a patent granting country. Importation of the patented product cannot be considered as working. Even in the countries of Western Europe during the nineteenth century and the first half of the twentieth century, there was a prohibition to utilise the patent as a means of securing an import market for one's products. However, since then, such a prohibition has 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.

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25 For example, Article 32 paragraph 3 of French Act of 5 July 1844; Section 27 of the Patents Act of 1907 of the United Kingdom; and paragraph 11 of German Patent Laws of 1877 and 1881.

This change of position, has moreover, been reflected to some extent in the Paris Convention.

There are two provisions in the Paris Convention relating to the matter of importation. The first one is Article 5A(1) which states that:

Importation by the patentee into the country where the patent has been granted of articles manufactured in any of the countries of the Union shall not entail forfeiture of the patent.

Another aspect of import monopoly has been stipulated in Article 5 Quater according to which:

When a product is imported into a country of the Union where there exists a patent protecting a process of manufacture of the said product, the patentee shall have all the rights, with regard to the imported product, that are accorded to him by the legislation of the country of importation, on the basis of the process patent, with respect to products manufactured in that country.

There is no direct stipulation in the Paris Convention to the effect that imports should be regarded as working of the patent. Moreover, importation of patented products is not in itself a ground for forfeiture of the patent. However, in legitimising the notion that imports of articles involving patents "shall not entail forfeiture of patent" on the ground of non-use in Article 27

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27 This provision was introduced in the Paris Convention on the initiative of Swiss delegate at the Lisbon Revision Conference in 1958. It was specially directed against France which had a prohibition against such importation in its national patent legislation. France and some other countries with same attitude felt that this would enable foreign patentees not to work their technology in a particular country and prohibit others from doing so, and thereby convert it into captive markets for their products manufactured elsewhere. E.T. Penrose, The Economics of the International Patent System (Baltimore, 1975), p. 75.
5A(I), imports into the country was thus equated with the use of the patent into the country.

Article 5 Quater directly deals with additional privilege to the patentee derived from process patents. As has been stated by UNCTAD, control over process is enough to give the import monopoly and thereby control the domestic market in the patent granting country. It may be mentioned that even during the Diplomatic Conferences for the revision of the Paris Convention it was proposed that the provision for importation of products made by a process patented in the importing country should either be deleted or made inapplicable to developing countries. While the developed countries felt that the provisions of the Paris Convention should be applicable to all countries, the developing countries proposed that the article should be deleted. The reaction of the developed countries to this had been that it could create serious problems in the relationships under the Paris Convention between the developed countries, and therefore, they were prepared to make it inapplicable to developing countries.


It is worth mentioning here that failure to work or insufficient working can be justified by the patentee by "legitimate reasons" under Article 5A(4) of the Paris Convention. Although not defined, the concept of legitimate reasons is extremely wide to cover almost every conceivable reason or excuse. Laws and regulations of the country prohibiting the working of the patented invention on the territory of that country are certainly such reasons and so also are other reasons; they will have to be considered case by case, taking into consideration all the relevant circumstances prevailing in connection with the given case. Thus this very wide concept may cover any possible legal, technical or economic justification for non-exploitation in a particular country. This could mean that "mere profitability or convenience could be enough to justify importation rather than local production." Thus, justifying importation under the banner of legitimate reasons would imply that importation of the patented product by a patentee from a developed country can be treated as equivalent to the effective working of the patent.

32 See WIPO Doc. PR/DC/3, n. 12, p. 49.
On the other side, Section 135 of the WIPO Model Law for Developing Countries on Inventions of 1979 includes importation in the definition of exploitation. "The working of patents in developing countries is of primary importance for development. In no way can it be replaced by importation, nor by creation of a monopoly with respect to such importation" has been recognised in Part A paragraph 9 of the agreed conclusions and recommendations of the Group of Governmental Experts on the Role of the Patent System in the Transfer of Technology to Developing Countries. Earlier, the same was recommended by UNCTAD's Committee on Transfer of Technology: "The importation of the patented product is not as a general rule a substitute for the working of the patent in the developing country granting it."

As a matter of fact, the tendency in the recent/past has been that patent laws specify a clear requirement for manufacture so that importation does not amount to working of the patented article. An example is the patent law of Israel, which provides that the exercise of the patent rights is regarded as an abuse if the product, the subject of the patent, is not manufactured in Israel. The definitions of exploitation under Mexican Law and

35 WIPO, Model Law for Developing Countries on Inventions, volume I: Patents (Geneva, 1979), p. 84.
36 For text, see UNCTAD, Report of the Committee on Transfer of Technology, First Session, 24 November - 25 December 1975, Annex. III.
37 UNCTAD, Committee on Transfer of Technology Resolution No. 3 (1), 5 December 1975, para (c).
Decision 85 discussed earlier, as well as Article 83 of the IPA make it clear that imports are not to be regarded as a form of working of patent. This was also expressly stated in the laws of Brazil, Colombia and Philippines. In Brazil actual working was not considered to have taken place where production was replaced or substantially supplemented by importation; actual working must be proved by the patentee in the sense of proven continuous and regular working of the invention on an industrial scale through production by the patentee or under licence in Brazil. It was made clear in the Colombian law that exploitation existed when the patented process was used or the patented product was manufactured in Colombia.

Similarly, Section 84 (1) of the IPA provides for grant of a compulsory licence to exploit a patented invention if the invention is not available to the public at a reasonable price or if the reasonable requirements of the public with respect to the invention have not been satisfied. The reasonable requirements of the public under Section 90 are deemed not to have been satisfied —

(a) If, by reason of the default of the patentee to manufacture in India to an adequate extent and supply on reasonable terms the patented article or a part of the patented article which is necessary for its efficient working or if, by reason of the refusal of the patentee to grant a licence or licences on reasonable terms.

39 Article 33.2 of the Brazilian Code of Industrial Property.
40 Article 588.2 of the Colombian Code of Commerce; see also Section 3403 of the Presidential Decree No. 1263 of the Philippines.
(c) if the patented invention is not being worked in India, on a commercial scale to an adequate extent or is not being so worked to the fullest extent that is reasonably practical; or

(d) if the demand for the patented article in India is being met to a substantial extent by importation from abroad...

(e) if the working of the patented invention in India on a commercial scale is being prevented or hindered by the importation from abroad of the patented article.

One finds a similar tradition in the patent laws of the United Kingdom, and countries like Australia, Ireland, Malawi, Newzealand and Nigeria. At the same time meeting a demand for the patented article to a substantial extent through importation, or where the commercial working in the country is being prevented or hindered by the importation of the patented article, have also been provided as grounds for taking different measures against failure to work. The position of India in this regard is contained in Article 90 (d) and (e) which has already been mentioned above. Under Nigerian Patent Law, it was also a ground for an application for a compulsory licence that the working of the invention in Nigeria is being hindered or prevented by the importation of the patented article. In the United Kingdom, it is a ground for an application for a

41 Doc. TD/B/AC.11/19, n. 2, p. 27.
compulsory licence and for the marking of the patent "licence of right" (with provision for revocation if the purpose of the licences cannot otherwise be achieved) if:

(a) a demand for the patented article in the United Kingdom is being met to a substantial extent by importation, or

(b) the commercial working of the invention in the United Kingdom is being prevented or hindered by the importation of the patented article.43

At the same time the United Kingdom Patents Act 1977 has specified that the commercial working in the United Kingdom is being prevented or hindered from being so worked "where the invention is a process, by the importation of a product obtained directly by means of the process or to which the process has been applied."44

In the patent laws of Morocco, Syrian Arab Republic, Tunisia and Turkey, revocation or automatic lapse of a patent following importation of the patented article was applied as a primary measure and not as a supplementary measure dependent upon the failure of compulsory licences to achieve their purpose.45

In connection with the importation of products made by a process patented in the importing country, it may be pointed out that a big step forward has been attempted in the direction of depriving the patent holder from the right of preventing the

43 See Sections 37(2)(b) & (c) and 42(revocation of Patent) of the United Kingdom Patents Act, 1949 and Section 48(3) (b) & C, ibid, 1977.

44 Section 48(3(c)(ii).

importation of the products covered by the patent or manufactured with the protected process. This exclusion of import monopoly from the rights conferred to the patentee has been provided in Mexico, Colombia, Ecuador and Peru. The Mexican Law has established that "the patent shall not confer the right to import the patented product or a product manufactured by means of the patented process." A similar provision is to be found in the Regulation on Industrial Property of the Andean countries and the changes in Colombia, Peru and Ecuador have been based on this through the incorporation into their national legal systems of Decision 85.

The above discussion of legal reforms therefore indicate an express or implied exclusion of importation as a means of working of patents. Moreover, the suppression of the import monopoly in the recent legislations, as has been stated by UNCTAD, mean that the patent holder will not be in a position to prevent a third party from introducing and selling in the country the product covered by the patent, although he could certainly prevent the manufacturing of the relevant product in the country. Thus an emphasis has been put on the specifically industrial function of patents and limiting their use as mere instruments for private

46 Article 37(2) of the Mexican Law on Inventions and Trademarks of 1976.
47 Article 28 of Decision 85 of the Commission of the Cartagena Agreement.
48 It was adopted by Ecuador on 10 March 1977, by Colombia on 26 June 1978 and by Peru on 15 May 1979.
49 See Doc. TD/B/C.6/AC.5/3, n. 18, p. 5.
regulation of trade. An important implication of the elimination or reduction of the import monopoly conferred traditionally by patents would thus subject the patentee to competition by suppliers from abroad and prevent him from legally obtaining monopolistic rents through higher prices of imported products.

Therefore, it can be said that to regard importation as a form of working of the patent would be against the industrialisation of developing countries as its purpose has been towards private regulation of trade through the grant of a patent monopoly in favour of developed countries.

**Obligation of Patent Holder to Work**

Historically speaking, from the nineteenth century till the first half of the twentieth century, it was obligatory in European countries to exploit the patent on pain of its losing its validity. In this regard it has been observed that the compulsory working system originated in the French law of 1791 and was adopted by practically all the principal patent systems excepting that of United States at present. The important feature of this system was the invalidation of the patent if the inventor failed to work his invention within two years from the date of the grant unless he could justify his inaction.

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50 Doc. UNCTAD/ITP/TEC/18, n.1, p. 4.

51 Michael, *Principal Patent Systems*, vol. 1, pp. 14-15 quoted in Justice N. Raja Gopala Ayyangar *Report on the Revision of the Patents Law* (Delhi, 1959), para 125, p. 50. The Japanese patent laws also contained exploitation requirement from the beginning, although they became progressively less stringent. Under the present patent legislation of Japan enacted in 1959 as amended in 1986 there is a change in the procedure by which an interested party can secure the right...
When the Paris Convention was adopted a great importance was attached to the idea that patents should be worked by the patentee or, if they were not worked by him, there should be possibility for others to obtain licences to work the patent or for the government to revoke the patent grant if there was clear evidence that neither working by the patentee or licensing to others was taking place. The original wording of 20 March 1883 provided for the obligation to exploit the patent within the country. Thus the original text of Article 5A paragraph 1 contained a provision stating that in the case of importation of patented articles, the patentee remained under the obligation to exploit the patent in accordance with the law of the country into which he introduced the patented article. As has been observed, "the Article, however, did not put any conditions and restrictions on the member states in respect of implementing measures to force a patent holder to use his invention. All subsequent revisions upto 1967 aimed at liberating the patent holder from those burdens and gave him more rights while the working of the invention was no more his primordial obligation."

Contd....

to work an invention and also relaxation of working requirements. Mackley, n. 23, p. 161.

The United States patent law has no requirement that a patent be worked. The patentee can choose to use the patent as an import monopoly only or to make no use of the patent right at all. A patentee who has an import monopoly does not use the patented process or manufacture the patented product in the United States, but does import the patented product into the United States. Since the patentee has an exclusive right to make use or sell the patented product in the United States, only the patentee can import the patented product. This is in contrast to position in most countries who require the patentee to work the patent. Baxter and Sinnott, n.16,p.117.

52 Doc. TD/B/AC.11/19, n.2, p. 106.
In the Washington revision of 2 June 1911, the first limitation was imposed with regard to the possibility of forfeiture for non-working. The patent could be forfeited only for failure, without good reason, to exploit locally the patent within three years from the date of filing of the application for it [Article 5A(2)]. In the revision adopted at the Hague on 6 November 1925, forfeiture on the grounds of non-exploitation was made conditional upon the prior granting of a compulsory licence, and although the time during which it could remain unexploited without good causes was maintained at three years, it was counted from the date of granting of the patent [Article 5A(2),(3) and (4)]. As a result of this, the right of the patent holder was considerably broadened while the right of the state to impose measures for working the patent was limited. In the London revision of 2 June 1934 it was stipulated that compulsory licences for failure to exploit the patent could be granted only for non-working without legitimate reasons for three years from the date of granting of the patent, and that forfeiture could be declared only after a lapse of two years from the granting of the first compulsory licence (Art. 5A). Finally, the revision adopted at Lisbon on 31 October 1958, which is still in force, introduced a technical improvement in the working of Article 5A, specifying in addition that the time which must elapse before compulsory licences were granted was four years from the date of application for the patent or three years.
from the date of its granting, whichever period last expired, and
that a compulsory licence for failure to exploit could not be
exclusive, nor be transferred independently of the enterprise or
part thereof exploiting the licence granted. The effect of
these revisions was to put limitations on the right of the
states to take measures to ensure working of the inventions and
to broaden the scope of the exclusive rights of the patent
holder.

The subject of obligation to work has been the most debated
issue during the whole history of the Paris Convention. Article
5 of the Convention in setting out 'the minimum standards that
member countries have to comply with', constituted a compromise
among the different interests involved in the grant of patents
that is a compromise between the interests of the individual
patentee in obtaining the maximum return from the patent and the
national economy as a whole. The Article clearly does not
refer to compulsory working of the patents, this being a
subject left free to each country to legislate within the
constraints set forth in the provision.

The Paris Convention does not require as such the working
of an invention in a country where it is patented. But 'failure
to work' has been given as an abuse of patent rights under
Article 5A(2) and authorises remedial action to prevent such an
abuse. Moreover, as has been mentioned earlier, "failure to work"

54 UNCTAD/ITP/TEC/18, n. 1, p. 4.
or "insufficient working" can be justified under Article 5A(4) by the patentee by "legitimate reasons" - the term has not been defined in the Convention. As a consequence, the patent holder becomes legally exempted from the obligations to work the patent in the country of grant, by taking advantage of the concept of legitimate reasons to justify his inaction to work.

Therefore, the obligation to exploit registered patents has been one of the major issues in the process of the revision of the patent system at the international and national levels. At the international level, a distinct trend can be observed, as shown above, in the evolution of Article 5A of the Paris Convention, in its successive revisions, towards diluting the conditions, extending the time limits and weakening the sanctions related to the exploitation of patents. The main result of this trend has been to make revocation of non-worked patents a subsidiary remedy.

On the other hand, the agreed conclusions and recommendations of the Group of Governmental Experts on the Role of the Patent System in the Transfer of Technology to Developing Countries noted in December 1975 that the process of the revision of the Paris Convention should address itself to resolving, among other things, the need:

(b) to establish a balance between the rights of the patent owners and their duties and obligations.56

56 See Part A para 9. The same kind of recommendations can also be found in UNCTAD's Committee on Transfer of Technology Resolution 3(I) of 5 December 1975, para C; The Declaration on the objectives of the Revision of the Paris Convention adopted by the Adhoc Group of Governmental Experts under the WIPO, paras ii and iii.
It was clearly stipulated in the draft Article 5A(I)(a) of the basic proposals for the revision of the Paris Convention that:

Any country of the Union has the right to require by a law that the inventions for which that country has granted a patent, or in the case of countries providing for a deferred examination when a provisional protection has been granted, be worked in its territory by the owner of the patent or under his authorization.

A number of developing countries have made attempts to find the right legal approach in order to ensure the effective working of patents. The rationale underlying this trend is well reflected in Article 83 of the IPA of 1970; and the patent laws of countries like Peru and Israel whose legislative provisions have already been quoted earlier.

However, the developed countries have been averse to the idea of working of the patents in other countries. At the Diplomatic Conference on the Revision of the Paris Convention they argued for the dilution of the provisions on "working" of the patents. Draft Article 5A(I)(a) of its basic proposals provided that any country may require by its national law that

57 For the draft text of Article 5A(I)(a), see WIPO Doc. H/R/DC/3, n. 12, p. 40, 42; see also "WIPO: Revision of the Paris Convention", Journal of World Trade Law, vol. 13, no. 6, November-December 1979, p. 569.

58 In countries in which "provisional protection" exists, it consists in giving certain rights (for example, the right to claim damages or compensation) that may be used against anyone who, after the date of the publication of the said application, exploits the invention without the applicant's authorization. WIPO Doc. H/R/DC/3, ibid, pp. 41-42.
the inventions be worked in that country by the owner of his licencee. However, under its Article 5A(1)(b), any country of the Union has the right to regard the importation of articles incorporating the patented invention or made by the patented process as fulfilling the requirements of working the patented invention. It had been argued by them that in several developing countries the conditions for working of patents do not exist and the use of patents in such countries were detrimental to the interests of the patentees. An interesting dimension of the debate, relevant in this context, that came up in the Diplomatic Conferences was the attempt on the part of the developed countries to change the nomenclature 'compulsory licence' to 'non-voluntary licence'. Thus, as has been observed:

Compulsory licensing, which was deemed to be a right of the patent granting country to ensure that a patent was 'worked' in keeping with the spirit of the patent system, was sought to be converted into a system of coercion imposed on the patentee. The attempt in the Diplomatic Conferences for the revision of the Paris Convention was, thus, centered around making the rights of the patentee unsurmountable by making his obligations for 'working' the patent less stringent.

Remedies Against Non-Working

The problem of non-working has been sought to be confronted through various remedial measures including compulsory licences, licences of right, automatic lapse, revocation, and use and expropriation by the state. However, a distinction needs to be made.

made between measures applicable where the invention is not worked and those applicable upon grounds other than non-working of the invention. This distinction recognises the importance attached to the working of an invention in the country. Other grounds upon which measures may be taken include refusal to grant a licence on reasonable terms, satisfaction of demand for a patented invention substantially by importation (rather than by manufacture in the country), failure to satisfy a demand in the market, the impossibility of using a patented invention without using an earlier patented invention (interdependent patents), and the importance of the patented invention for the defence of the economy of the country, for public health or for some other aspect of public interest. Herein follows a more detailed examination of measures for non-working of patents.

(a) Compulsory Licences

If anybody exploits the patented invention without the authorisation of the owner of the patent for invention, he commits an illegal act. In the laws of some countries, there may be exceptions to this principle. Exceptions are constituted by what are called "compulsory licences."\(^6^0\)

(i) Meaning

A compulsory licence, as distinct from a contractual licence given by the owner of the patent for invention, is granted by the

competent government authority, usually by the Patent Office. The expression 'compulsory licence' is used in contrast with voluntary licence. It is an authorisation by an authority designated for this purpose (usually the competent administration or a court) to a person other than the patentee to do, without authorisation by the patentee, acts which would otherwise be excluded by the patent.

Therefore, a compulsory licence is an authorisation to exploit the invention. However, this authorisation is not given by the owner of the patent for invention; it is given by a governmental authority. It is generally given only in very special cases, defined in the law, and only where the entity wishing to exploit the patented invention is unable to obtain the authorisation of the owner of the patent for invention. The conditions of the granting of compulsory licences are also regulated in detail in laws which provide for them.

(ii) Rationale

The rational of compulsory licencing is stated to be that a state undertakes to protect IPRs only to ensure that new products are available cheaply and in abundance for its people.

62 Chimni, n. 34, p. 59.
63 Ibid, pp. 59-60.
Further, in the case of foreign patents, that the working of patent within the country which grants it would yield considerable advantages ranging from the saving of foreign exchange to the transfer of requisite technology. Where the patentee abuses his rights by not working the patent it is necessary that the state retain the power of granting a compulsory licence which would allow a third party to use the patent. Such compulsory licensing is essential not only to remedy the failure of the patent owner to work the patent in the host country, but also to meet the public interest needs of the host country.

The social advantages of compulsory licensing are many. It can reduce, although not altogether eliminate, wasteful duplicating research by rivals seeking access to existing but patented technology or by the patentee seeking patents blocking outsiders from such alternatives. It can also reduce the discouragement to research on invention suffered by an outsider who recognises the probability that the use of any improvement may be blocked by the array of patents already held by the firm or firms dominating the industry. It can facilitate the spread of technology and erode ultimately monopoly power by creating alternative producers who can then compete with know how constrained by royalties and compete without constrain after the patent's obsolescence, termination or invalidation. It also eliminates the need to tolerate the licence restrictions in order to induce the patentee to grant licences.

The existence of the provision for compulsory licence in the statute book might have the effect of inducing patentees to voluntarily grant licences on reasonable terms with the result of no necessity to approach the government for relief under these provisions. It, therefore, seems probable that the mere existence of the provisions tends to bring about the establishment of manufacture in the country concerned.

(iii) Compulsory Licensing Under the Paris Convention

As has already been mentioned, the Paris Convention does not require as such the working of an invention in a country where it is patented but authorises remedial action to deal with abuses associated with non-working. As it now stands, the Convention has sought to cope with the problem of non-working through the device of compulsory licensing and has been described in its Articles 5A(2) to 5A(4). To consider how the problem of failure to work may be met, it becomes necessary to examine the compulsory licensing provisions of the Convention. Article 5 of the Convention sets the minimum standards that member countries have to comply with. The relevant paragraphs of Article 5A of the Convention read as follows:

(2) Each country of the Union shall have the right to take legislative measures providing for the grant of compulsory licences to prevent the abuses which might result from the exercise of the exclusive rights conferred by the patent, for example, failure to work.

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65 Jhala, ibid, p. 58.
(3) Forfeiture of the patent shall not be provided for except in cases where the grant of compulsory licences would not have been sufficient to prevent said abuses. No proceedings for the forfeiture or revocation of a patent may be instituted before the expiration of two years from the grant of the first compulsory licence.

(4) A compulsory licence may not be applied for on the ground of failure to work or insufficient working before the expiration of a period of four years from the date of filing of the patent application or three years from the date of the grant of the patent, whichever period expires last, it shall be refused if the patentee justifies his inaction by legitimate reasons. Such a compulsory licence shall be non-exclusive and shall not be transferable, even in the form of the grant of a sub-licence, except with that part of the enterprise or goodwill which exploits such licence.

Thus, the standards which are to be given effect by a country through its national law concerning compulsory licensing include the following:

(a) Each country may take legislative measures providing for the grant of compulsory licences to prevent the abuses which might result from the exercise of the exclusive rights conferred by the patent, for example, failure to work.

(b) Compulsory licence may not be applied for on the ground of failure to work or insufficient working before the expiration of a period of four years from the date of application or three years from the date of the grant of the patent, whichever period expires last.

(c) The request for compulsory licence shall be refused if the patentee justifies his inaction by legitimate reasons.
(d) Such compulsory licence shall be non-exclusive and shall not be transferable, even in the form of the grant of a sub-licence, except with that part of the enterprise or goodwill which exploits such licence.

The Convention deals with two types of compulsory licences which are:

(i) Compulsory licences for failure to work or insufficient working.

(ii) Compulsory licences to prevent abuses other than non-working or insufficient working.

Article 5A(4) of the Convention deals with the first type. Failure to work by a patentee has been defined in Article 5A(2) as an abuse of the exclusive rights conferred by the patent system and to counter such abuses provides for the use of compulsory licences.

Compulsory licences for failure to work or insufficient working of the invention may not be requested before a certain period of time of non-working or insufficient working has elapsed. The said time limit expires either four years from the date of filing of the patent application or three years from the date of the grant of the patent for invention. The applicable time is the one which in the individual case, expires last. The time limit of three or four years under Article 5A(4) of the Paris Convention is a minimum time limit. The patent owner can get a longer time limit if it or he can give legitimate reasons for its
or his inaction, which reasons as such justify the refusal of
an application for compulsory licence. In other words, the
patent owner can produce evidence that legal, economic or
technical obstacles prevent working or working more intensively,
the invention in the country. If that is proved, the request for
a compulsory licence needs to be rejected at least for the time
being. The time limit of three or four years is a minimum time
limit also in the sense that a national law can provide for a
longer time limit.

A compulsory licence for non-working or insufficient working
under Article 5A(4) must be a non-exclusive licence and can only
be transferred together with that part of the enterprise or
goodwill which exploits such licence. In other words, the
compulsory licencee may neither sell (or otherwise transfer)
his licence to a third person (in which case, he himself could
no longer work the patented invention), nor can he authorize
a third person to work the patented invention (in which case,
both he himself and the third person could work the patented
invention). Thus the patent owner must retain the right to
grant other non-exclusive licences and to work the invention
itself or himself. These limitations are intended to prevent
a compulsory licencee obtain a stronger position in the market
than is warranted by the purpose of the compulsory licence, namely
to ensure sufficient working of the invention in the country. 68

66 Kadirgamar, n. 61, p. 52.
67 WIPO Doc. PR/DC/3, n. 12, p. 51.
68 Kadirgamar, n. 61, p. 52.
With regard to abuses other than failure to work or insufficient working the remedial action by countries is regulated by Articles 5A(2) and 5A(3). Abuses other than failure to work may be excessive prices or unreasonable terms for contractual licences or other restrictive measures which hamper industrial development. The case of refusal by the patent owner to grant licences on reasonable terms may arise in two ways: either no licence is granted because the unreasonable terms are not accepted by the persons who seek licences, or agreement is reached but the patentee imposes conditions which are unreasonable, the establishment or development of industrial or commercial activities in the host country is prejudiced, failure by the patentee to satisfy or to satisfy on reasonable terms a demand in the national interest, or a market for the export of any patented article manufactured in the host country. In practically all these cases, the granting of compulsory licences will be dictated by considerations of public interest.

Apart from all these, a compulsory licence is also provided to protect the public interest in unhampered technological progress. This is the case of interdependence of patents and a compulsory licence is issued in favour of the so-called dependent patents. Where a patented invention cannot be worked without also using another invention for which a patent has been granted to another

69 These grounds can be found in the patent laws of India, Ireland, Israel, Newzealand, Nigeria, Pakistan, Philippines, United Kingdom, Zambia.
person on the basis of an earlier application (for instance the later invention constitutes an improvement of the earlier invention) then the owner of the later patent (dependent patent) has under some laws the right to apply for a compulsory licence under the earlier patent to enable the later patent to be worked. Such a compulsory licence is thus granted not only in the public interest but also in the private interest of the owner of the later patent. If the owner of the dependent patent for invention obtains the compulsory licence, it or he may, under certain circumstances, be obliged to grant a licence to the owner of the earlier patent for invention.

Independently of the attitude of the patentee (whether he uses the patent to manufacture in the country or not, whether he grants licences or refuses them etc), overriding grounds of public interest may require measure of compulsory licences to be taken in order to ensure a particular exploitation of a patented invention. These include cases where a patent for invention affects a vital public interest in the fields of national defence, public health and national economy.

Compulsory licences in the case of dependent patents have been provided in the following countries: Algeria, Austria, Egypt, Hungary, Iraq, Israel, Mexico, Netherlands, Newzealand, Nigeria (but only where the later invention constitutes substantial technical progress or serves purposes different from those of the earlier invention), Nordic countries, Peru, Switzerland, United Kingdom, Russia.

The compulsory licences under the later patent in favour of the owner of the earlier patent have been provided for in the following countries: Argentina, France, Iraq, Italy, Mexico, Sudan.
It is to be noted that the time limits for granting of compulsory licences provided for in the case of non-working in Article 5A(4) do not apply to the second category of compulsory licences for abuses other than failure to work. In other words compulsory licences granted in the name of public interest are not subject to the restrictions provided for in Article 5A(4). This means in particular that compulsory licences in the public interest can be granted without waiting for the expiration of any time limit. Nevertheless, concerning abuses other than failure to work, member countries are equally subjected in some instances to a severe restriction on the choice of the nature and sequency of the measures that might be needed to control such abuses. Thus, forfeiture is only permitted under the conditions specified in the Convention, provided that a compulsory licence is granted before.

(iv) Ineffectiveness of the Provisions

In practice, however, the provisions of the Paris Convention relating to compulsory licensing have posed various problems and the compulsory licensing procedure has proved virtually of no value to most of the developing countries. There are a number of reasons for their ineffectiveness in many cases. A proviso under Article 5A(4) imposing the condition that a compulsory licence shall be refused if the patentee justifies his inaction by "legitimate reasons" allows the patentee to escape the requirements of working. The term "legitimate reasons" not being defined in
the Convention, is vague and lends to interpretations which may have distinct consequences in regard to the possible content of national legislation. As mentioned earlier, the term may thus cover any legal, technical or economic reasons to avoid local production in the host country. According to an UNCTAD report:

Where such reasons can be shown, for example, by evidence of mere advertisement in a local newspaper of licensing opportunities under a patent - the applicant for a compulsory licence may be confronted with serious problems in producing evidence in rebuttal. 72

All this renders the device of compulsory licensing a weak one. As regards control of abuses, full range of legislative options of measures which may be available to countries have not been described in the Convention. Instead, compulsory licences have been placed as the primary instrument. The use of instrument of forfeiture has been made conditional upon the grant of compulsory licences being insufficient to prevent the said abuses. Moreover, the use of compulsory licences is subjected to conditions which make it still less likely that such a device, could, in practice, be effective to prevent the abuses which might result from the exercise of the exclusive rights conferred by the patent. 73 On the other hand, the absence of a provision for forfeiture until after a further two years from the first compulsory licence as provided for in Article 5A(3) means in

72 Doc. TD/B/AC.11/19 Rev. 1, n. 7, p. 51.
practice that the privileges of the patentee will continue in
force for a long period. The reason underlying this has been
described as under:

Domestic entrepreneurs are generally reluctant
to have a direct confrontation with foreign
patent holders, who are frequently powerful
corporations with a dominant position in the
market. The result is that, in developing countries,
national entrepreneurs would seldom resort to
the legal machinery to initiate the granting of a
licence, thus hindering possibilities of local
innovation as well as manufacture. Therefore,
Article 5A(3) constitutes an important constraint
to the possibilities of promoting the actual
working of the patent in the granting country.

The time lag to obtain a compulsory licence is
likely to be much longer than the periods indicated in Article
5A(4), especially where prior examination is required in the
country for the granting of the title or if patent offices
are themselves backlogged; the patent application maintains
priority rights for the exclusive use of the patent, if it is
finally granted, throughout this period. Hence, it may well be
that compulsory licensing procedures may not even commence until
some years after the initial application for the patent grant
and when the application for a licence is to be handled - as is
often the practice - by the judicial rather than the administrative
branch. Under these circumstances the value of a compulsory
licence (if one were granted in the end) would be drastically

74 Ibid, p. 12.
reduced as compared with what it would have been in the absence of such delays. It has also been pointed out that:

An additional element that may increase the difficulties which confront would-be applicants for compulsory licences is the requirement on them of proving the failure to work of the patent concerned. The Paris Convention is at present silent on this topic. It should be remembered that when the holder of a patent is a transnational corporation it might conclude a contractual arrangement with a subsidiary, or otherwise related company, operating in the patent granting country. This arrangement may not in fact lead to exploitation of the patent within a reasonable period. The existence of the arrangement may, however, suggest that the patent is being used and thereby cause even longer time lags before a compulsory licensing proceeding could be initiated by an enterprise unrelated to the transnational corporation. A way of avoiding these difficulties could be the adoption of the rule that the burden of proof on the actual use of the patent should rest with the patentee.

Even if the compulsory licence is granted there might be difficulties stemming from the availability or otherwise of any necessary know-how with which to operate the patent - in other words, unless the domestic regulations governing disclosure are so stringent as to eliminate the need for additional co-operation on the part of the patentee the prospects of establishing a successful activity on the basis of the compulsory licence are small. As already discussed in Chapter I, in majority of cases in which necessary manufacturing know-how is not disclosed by patents, effective transfer of technology can take place only with the voluntary cooperation of the patentee. In other words, where

75 Ibid, p. 11.
the voluntary cooperation of the patentee is necessary for the effective utilisation of the patented invention, a compulsory licence has little value. This is normally the case when the patent disclosure is inadequate in that it does not include necessary manufacturing processes and know how. The practical difficulties in imposing the requirement of imparting know-how while granting a compulsory licence in order to secure for the licencee the know-how and supplementary technical information needed to work the invention will form the subject-matter of discussion in the forthcoming chapter. It is suffice to say here that know-how can be bought and sold in voluntary cooperation. The situation has been described thus:

If the invention cannot be worked by the licensee without further instruction from the patentee there would be inadequate working notwithstanding the licence, and hence the conditions for the revocation of the patent would be satisfied. To avoid this contingency and ensure the continuance of the royalty payments, it would be to the interest of the patentee to supply the licensee with such additional instruction in his possession as to enable the latter to work the invention adequately. As it would be to the interest of the licensee also to work the invention and derive profits therefrom, it may be expected that the patentee and the licensee would arrive at a satisfactory arrangement as regards the payment to be made for the "know-how" so that the patent is maintained in force.77


77 See Ayyangar's Report, n.57, para 162, p.68. The relationship between patent holders or licensors and licencees are freely determined by agreement between them under Article 23(1) of the Russian Patent Law on Inventions of 1991. Even in India under Section 88 of IPA, 1970, the terms of the licence may be mutually agreed upon.
Another problem is related to the nature of the compulsory licence. "Non-exclusive" nature of the licence is to be granted under Article 5A(4) as it stipulates that "such a compulsory licence shall be non-exclusive." The non-exclusive nature of such a licence reflected in the Convention through the 1958 Conference at Lisbon and then only in relation to the non-use or insufficient use of the invention. The limiting condition adopted at that Conference provided that non-voluntary licences granted on the grounds of non-use or insufficient use of the invention could only be non-exclusive.

In case of non-exclusive compulsory licensing system, the patented invention may be worked concurrently by the owner of the patent, by any licencsee of that owner (contractual licencsee) and by the non-voluntary licencsee. On the other hand, in case of an exclusive compulsory licence, no one other than the non-voluntary licencsee—not even the owner of the patent throughout the period of time during which the licence is in force—may work the patented invention on the territory of the country whose authorities have granted the patent and the non-voluntary licence. Thus the difference in the "non-exclusive" and "exclusive" nature lies in the total exclusion of the patentee to work the

79 WIPO Doc. WI/DC/3, n. 12, p. 53.
patent in the latter case. Because of technical or economic shortcomings the licencee in a developing country will have to overcome many obstacles to commence the working of the patented invention. In such cases an exclusive licence could have some valid justification.

(v) Proposals for Revision at the WIPO Diplomatic Conferences

The revision of Article 5A of the Paris Convention was at the heart of the objectives of the developing countries during the diplomatic conference held under the auspices of the WIPO. The draft of basic proposals for a new text of Article 5A provided in paragraph (2) Clause (B) that "any country of the Union has the right to adopt legislative measures to prevent abuses resulting from the exercising of the rights granted by the patent."

One of the measures which may be adopted is the grant of a "non-voluntary licence." One thus finds a change of nomenclature from 'compulsory licence' to 'non-voluntary licence' at the instance

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80 See n. 12 and 13.

81 The proposal for a new text of Article 5A in the draft of basic proposals was unanimously approved by the Preparatory Intergovernmental Committee in its second session, held in June/July 1977. See Doc. PR/PIC/11/13, para 32 and Annex. II. See also WIPO Doc. PR/DC/3, n. 12, p. 39. For the text of draft Article 5A with notes of the WIPO Director General, see PR/DC/3, ibid, pp. 38-63 and also WIPO, Synoptic Tables Concerning Articles 1, 5A and Quater of the Paris Convention for the Protection of Industrial Property, PR/DC/INF/51, September 1984, pp. 7-17.

82 PR/DC/3, ibid, p. 44.
of the developed countries who have opposed the device of compulsory licensing as the patentees from such countries have been averse to the idea of working of patents in other countries.

The concept of a non-voluntary licence has been defined in draft Article 5A(2)(a). This concept is mentioned in several of the subsequent provisions of the draft, namely in paragraphs (3), (4), (6), (7) and (8). Such a licence means "a licence to work a patented invention without the authorisation of the owner of the patent; it also means a licence to work a patented invention given by the owner of the patent where the national law obliges him to give such a licence." The definition shows that a non-voluntary licence can be the result of a licence given by the owner of the patent - namely, where the national law (of the country where the invention is patented and the licence is desired) obliges the owner of the patent, to give the licence - or that it may be "granted" without the authorisation of the owner of the patent. The text is however, silent about to whom the prospective beneficiary of the non-voluntary licence must apply for such a licence, or who grants it or who refuses the application. As per WIPO Director-General the answers to these

83 For text of draft Article 5A(2)(a), see ibid, p. 44.

84 This verb is used in paragraphs 6 and 8 (a) of the draft Article 5A. For text of these provisions, see ibid, p. 50 and 56 respectively.
questions are given in the national laws; in the countries having a system of non-voluntary licences, it is a court, a ministry or other government authority which receives and decides upon applications for such licences.

Such a non-voluntary licence takes the place of a compulsory licence and the existing provisions of Article 5A(3) and 5A(4) of the Paris Convention are virtually repeated in the draft text. Under these provisions a non-voluntary licence may not be applied for on the ground of failure to work or insufficient working before the expiration of a period of four years from the date of filing of the patent application or three years from the date of the grant of the patent, whichever period expires last; it shall be refused if the patentee justifies his inaction by legitimate reasons Draft Article 5A(4). In addition, forfeiture of the patent shall not be provided for except in cases where the grant of non-voluntary licences would not have been sufficient to prevent the said abuses. No proceedings for the forfeiture or revocation of the patent may be instituted before the expiration of two years from the grant of the first non-voluntary licence. Draft Article 5A(3).

85 Ibid, p. 45.
87 Ibid, p. 46.
It would thus seem from this text that there must be a grant of at least one non-voluntary licence before proceedings for forfeiture or revocation may be taken.

Draft Article 5A(6) dealt with certain features of non-voluntary licences such as their non-transferable and non-exclusive nature. These were provided in the following way:

Any non-voluntary license shall generally be non-exclusive and shall not be transferable, except in the form of a grant of a sub-license, except with that part of the enterprise or goodwill which exploits such license. However, in special cases where exclusive licenses are necessary to ensure local working, such exclusive licenses may be granted for a period of upto six three years subject to the condition that the patent may not be forfeited or revoked for insufficient working for a further period of one two years after the expiration of the exclusive license.

The non-transferable feature resembles with that contained in Article 5A(4) of Paris Convention and has been discussed earlier. However, it provided for an exception to the grant of non-exclusive licence. In other words, it provided for grant of an exclusive licence in special cases where exclusive licences are necessary to ensure "local working". The judgement on whether such necessity exists and, if it does, the decision on whether the non-voluntary licence should be exclusive are made by the

88 For text, see ibid, p. 50.

89 "Local Working" means working on the territory of the country whose authorities have granted the patent and the non-voluntary licence. See ibid.
authorities of the country which are entrusted with receiving and deciding upon applications for non-voluntary licences. The draft Article also placed a limitation on the duration of the period for which an exclusive non-voluntary licence may be granted.

It may be mentioned that the Preparatory Intergovernmental Committee on the Revision of the Paris Convention was not able to agree whether the length was to be six or three years or one or two years in the respective cases, the former number of years having been proposed by the Group of Developing Countries and the latter by the Group B countries.

As the experience of the developing countries in respect of the non-exclusive compulsory licensing has not been encouraging, these countries, so as to make this provision more effective asked at the diplomatic conferences for the provision of exclusive compulsory licences and which was also incorporated in Draft Article 5A(6). The nature of the non-voluntary licence, whether it should be exclusive or non-exclusive has indeed given

90 See n. 13.
91 WIPO Doc. PR/DC/3, n. 12, p. 53.
rise to controversy between the developing and developed countries. The supporters of exclusive licences point out that Article 5A of the Stockholm text deprive non-voluntary licences based upon non-working or insufficient working of a good part of their efficacy in advance. According to this argument working by the beneficiary of a non-voluntary licence often involves a considerable investment, to which must be added the patent dues under the non-voluntary licence. If after these investments have been made, the beneficiary finds himself exposed to the competition of the owner of the patent or other licencees, he may not be able to be competitive, especially if this competition is from imported products. The risks encountered by the beneficiary are thus considerable, which discourage request for the grant of non-voluntary licences and consequently, prevent the system from achieving its goal, which is the promotion of local working. It may also be added that the necessity of permitting the grant of exclusive non-voluntary licences in certain cases is recognised even in some developed countries. In this regard, the law of the United Kingdom permits the grant of non-voluntary licences, in particular for non-working or insufficient working, having the effect of depriving the owner of the patent of the right to work the invention or to grant licences; and also having the effect of revoking existing licences.

93 Jhala, n. 10, p. 69.

94 Section 49 (3) of the United Kingdom Act of 1977.
Therefore, it was pleaded by the developing countries in the WIPO diplomatic conferences on the revision of the Paris Convention that there should be a short duration exception in favour of the exclusive non-voluntary licences. In this regard, the Spanish delegate observed:

Experience had shown on frequent occasions that the system of non-voluntary licenses was doomed to disaster if the licenses had necessarily to be non-exclusive. The working of the invention, which had to be undertaken by whoever obtained the non-voluntary license, called for some investment, and that investment would only be made if a reasonable prospect of profitability existed. Such a prospect of profitability could well not exist, however, if the license granted were non-exclusive.

As has been stated above this is because the market may be small or already dominated by patentee's imports or involved confrontation with huge multinationals with whom the non-voluntary licences could ill afford to compete. Under such situations, there would obviously be few, who would readily apply for a non-voluntary licence. It seemed essential therefore, to provide that non-voluntary licence could, in certain cases, at least, be made exclusive. In this regard it is worth to quote the observation of the delegate from erstwhile Soviet Union:

At present, the financial and manufacturing possibilities of many corporations were considerably larger than those of many developing countries and under that condition the question arose whether the licensee who was granted a

96 Ibid. See also Chimni, n. 34, p. 61.
non-voluntary license would be in a position to struggle and compete with a transnational corporation that was the patent holder. Such licensee, by all means, needed protection... Under that condition the most effective measure for protection was the non-voluntary exclusive license.97

On the other side, the opponents to exclusive non-voluntary licences point out that the possibility of the grant of such licences will discourage the filing of patent applications, because the potential owner of the patent will risk being excluded from exploiting his invention and thus finding himself in a less favourable position than if he had not taken the trouble to obtain a patent, except of course in the cases where he would be sure to work the invention in question in the country himself or through a licence. But, it is not possible to work an invention in each country where the invention may be patented, especially in developing countries, the domestic market does not permit, from the economic point of view, the local manufacture of a given product, at least initially. For this reason, it is frequently the practice to establish a centralized production facility where the invention may be sufficiently worked to satisfy the market of an entire geographical area, which may encompass several countries. If patent protection is not obtained on an invention because of the risk that an exclusive non-voluntary licence may be granted, this will severely jeopardize the chances that the invention will ever be worked

97 WIPO Doc. PR/SM/12, n. 78, p. 69.
in the country, due to the fact that any person wishing to work the invention will be unable to protect his investment.

The exclusion of the patentee himself from working the invention is the main argument for opposing the system of exclusive non-voluntary licences. For, as has been argued, "such exclusivity was the very negation of the patent... it turned the patent against the patentee: the latter could no longer even work his invention", "after the grant of such (exclusive non-voluntary) licence, the owner of the patent was prohibited from working the invention in the country concerned." Further, it has been stated by the developed countries that once an exclusive non-voluntary licence is issued, "... the owner of the patent himself would be unable to import products containing his patented invention." The rejection on the part of the developed countries is based on the assumption that a patentee has an inherent right to import and an exclusive non-voluntary licence takes away this right from him.

The response of the developing countries to the developed countries' arguments led to the proposal of the concept of relatively exclusive non-voluntary licence where "the patent owner, if he wishes to work his invention on the spot, will be free to do so

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98 Jhala, n. 10, p. 69.
99 WIPO Doc. PR/SM/6, n. 95, p. 50.
101 WIPO Doc. PR/SM/6, n. 95, p. 33.
alongside the holder of the exclusive non-voluntary licence."

The argument of detrimental effect on transfer of technology taken by the developed countries against the system of exclusive non-voluntary licences is that as it affords only a lesser level of protection, patents may not be taken in the developing countries which may in turn affect the technology transfer. It has been stated by the United States that "if a company decides to file an application in a developing country, a primary reason for this is that there appears to be a prospect to supply technology to that country." If this were true, the provision of exclusive non-voluntary licence would not deter a prospective patentee from taking a patent in that country because as he will be transferring technology by working the patent himself or through a licence there would be no need to invoke this provision. The provision of exclusive non-voluntary licence would have no dissuasive effect on technology owners who mainly took their decisions to invest on the basis of economic criteria and not solely according to the level of protection granted.

102 WIPO Doc. PR/CM/11/1, n. 100, p. 11.
Another suggestion which came up from the developing countries was that the right to authorise exclusive use should vest only with the developing countries. In fact at the Second Session of the Conference which was held in Nairobi in September/October 1981 the provision of exclusive non-voluntary licences was taken away from the draft Article 5A(6) which was to have a universal application to both developed and developing countries and included as draft Article 5A(8) (abis) to be applicable only to developing countries. The position of the developing countries in this regard was to abide by the Nairobi Agreement. Even then there was reluctance on the part of developed countries to introduce the idea of exclusive non-voluntary licences into the Paris Convention. This was inspite of the fact that the Nairobi text of paragraph (8) (abis) was drafted by a majority of member countries of Group B and it was not so drafted by any individual country of the Group of Developing Countries. Moreover, this text

105 The Nairobi text of Article 5A(8) (abis) clearly stated that developing countries, and only they, had the right to issue exclusive non-voluntary licenses, limited to a period of four and a half years of non-working or insufficient working were one of the elements constituting the abuse of patent rights. Nevertheless, there were enough restrictions for the developing countries when they would make use of that right. See WIPO Doc. PR/SM/12, n. 84, pp. 69-70. Thus according to the Nairobi text a non-voluntary licence may only be exclusive if four conditions are fulfilled - (1) It is granted by a developing country, (2) the patentee has abused the patent, (3) the non-working or insufficient working of the patent may not as such be considered an abuse; it may only be one of the elements which constitute abuse, and (4) the licence may not exceed four and a half year. Ibid, p.65.

106 Ibid, p. 60.
as stated was for the developing countries the only step forward in comparison with the present text (Stockholm Act) because the provisions contained therein could become the most efficient means to prevent abuses of patent rights by foreign patent holders. The situation has been described in the following way:

It was surprising that the request of the developing countries to have the right, not in general, but for a limited period of time (four and a half years), to use the institution of the exclusive non-voluntary license was considered as something extraordinary although the countries had such a right. The Nairobi text refused such right to the developed countries but left it in force for the developing countries; that compromise as well was considered as something extraordinary and unacceptable.108

Inspite of the succession of shows of will to arrive at a compromise, the developing countries in the Working Group of Main Committee I, had to face serious reservations coming this time from the whole of Group B on the issue of exclusiveness. The conference encountered great difficulties on its way to consensus on the central problem of Article 5A. In contrast to Nairobi text, the text worked out by the Chairman of the Main Committee I, at its thirty first meeting held on 16 March 1984,

107 See Statement of Mr. Zubarev (erstwhile Soviet Union) in the name of Group D, WIPO Doc., ibid, p. 70.


109 This Group was set up by joint agreement in the fourth session of the Diplomatic Conference, the purpose of which was to hold discussions on all pending issues in the field of patents, the central issue this Main Committee had to deal with was Article 5A. WIPO Doc., ibid, p. 60.
however, contained the feature of "no exclusive non-voluntary licence."

On behalf of the developing countries there were also three "ideas concerning Article 5A" put before the Main Committee I. The first idea was simply to delete simultaneously paragraph (6) and 8 (abis) of the Nairobi agreements. The second was to replace paragraph 8 (abis) with a draft along the following lines:

When a non-voluntary license has been issued in any developing country, such country shall have the right to take all appropriate measures to protect the interests of the non-voluntary licensee, in accordance with its laws.

The third idea was to insert, as a last element in paragraph (4) of the Nairobi text, the following:

Such non-voluntary license shall be generally non-exclusive and shall not be transferable, even in the form of a grant of a sub-license, except with that part of the enterprise or goodwill which exploits such license.

According to developing countries, the third idea would be completed with the simultaneous deletion of paragraphs (c) and (8) (abis). This third alternative resembled to that of the Stockholm Act, concerning non-voluntary licences whether they be exclusive or not. The Group B, however, needed time to study them.

110 Ibid, p. 66.

111 These were ideas on a possible basis from which the Conference could make exploratory work. These were not official proposals being tabled by the Group of 77. These were not even thoughts which fully reflected the position of the Group of 77. See statement of Mr. Pereira (Argentina) in the name of the Group of Developing Countries, WIPO Doc. ibid, p. 61. For text of these ideas, see pp. 61-62.
Paragraph (8)(a) of the draft Article 5A contained provisions giving special powers to developing countries in cases where the patent is not worked or is not sufficiently worked in the country and is in derogation of the provisions contained in paragraphs (3) and (4). The reason is that in practice the owner of a patent has a longer period than is specified in paragraphs (3) and (4) to enjoy a patent without working it, and in order to avoid an undue prolongation of this period, developing countries should have the right to grant a non-voluntary licence after a shorter time. The period put forward by the developing countries was two years from the date of grant of four years from the filing of the patent application, while the Group B countries considered that three years or five years was the proper period to allow.

Paragraph (8)(a) reads:

Any developing country has the right to grant non-voluntary licenses where the patented invention is not worked, or is not sufficiently worked, by the owner of the patent or under his authorization in the territory of that country within two years from the grant of the patent in that country, unless the patentee can satisfy the national authorities competent to grant non-voluntary licenses that there are circumstances which justify the non-working of the patent. Where the national law provides for deferred examination for patentability and the procedure for such examination has not been initiated within three years from the filing of the patent application, the time limit referred to in the preceding sentence shall be four years from the filing of the said application.

112 WIPO Doc. PR/DC/3, n. 12, pp. 58-59. See also "WIPO: Revision of the Paris Convention", n. 57, p. 570.

113 The text is reproduced from PR/DC/3, ibid, p. 56.
Paragraph (8)(b) of the basic proposals for Article 5A had provided that:

Any developing country has the right to provide in its national law that the patent may be forfeited or may be revoked where the patented invention is not worked, or is not sufficiently worked, in the country before the expiration of three/five years from the grant of the patent in that country, provided that the national law of the country provides for a system of non-voluntary licenses applicable to that patent, unless the patentee has been able to convince the national authorities competent for forfeiture or revocation that circumstances exist which justify the non-working of the patent.114

The provisions of paragraph (8)(a) and (b) applied where the patented invention was not worked or was not sufficiently worked. The difference in the two lies in that (a) dealt with the situation in which the measure was the grant of a non-voluntary licence to work, whereas (b) covered the situation in which the measure was the forfeiture or revocation of the patent. These two were the provisions which only developing countries had the right to apply. It is to be noted that these provisions dealt with the same measures — namely, non-voluntary licences, forfeiture and revocation — as paragraphs (3) and (4) of Article 5A but in certain respects (cases and situations in which such measures might be applied, time limits etc.), they differed from the said paragraphs. All this becomes clear from the introductory statement or words preceding and governing both (a)

114 Ibid.
and (b) of paragraph 8 which reads as follows:

(8) Notwithstanding anything contained in paragraphs (3) and (4), developing countries have the right to apply the following provisions:

(a)...

(b) ...

Furthermore, both 5A(8)(a) and 5A(3) provided for forfeiture (or revocation) as a sanction but the former applied only in cases where the patented invention had not been worked, or was not being sufficiently worked. Under the latter provision, the sanction of forfeiture applied in cases where the patent rights were abused.

Thus in the case of forfeiture or revocation, the developing countries had put forward a period of three years, while Group B had proposed five. As already noted, the forfeiture or revocation under this paragraph only applied to non-working, and not for abuse of the patent rights, and that the patentee had a right to show circumstances which justified the non-working of the patent. Some of the Group B countries considered that paragraph 8 should be generally applicable to all countries and not only to developing

115 Non-working and insufficient working are not per se abuses, although under certain circumstances they may amount to abuses. As per an observation made by one of the delegates in the Provisional Steering Committee, only "circumstances surrounding the failure to work" rather than the facts of failure to work under certain circumstances may constitute an abuse. Doc. PR/PSC/7, para 35, quoted in WIPO Doc. ibid, p. 59.
countries. In addition the French delegation proposed an alternative that the rights under sub-paragraph (b) should be limited to suspending the patent until the holder is able to show that he is working it satisfactorily. It was considered however that this being less detrimental than forfeiture or revocation, it would in any case be open for states to introduce legislation in their national laws to that effect. This proposal to the effect that instead of forfeiture or revocation the measure should be suspension was based on ideas which were at that time already being discussed in a group of African developing countries, namely the Group of African Intellectual Property Organization (OAPI) countries.

The proposal, however, was not discussed in detail by the Preparatory Intergovernmental Committee, the ideas being not ripe at that moment. But later on, with the Bangui Treaty of African Countries providing for this new measure, the Group B delegation of Canada, speaking also on behalf of some Group B countries not represented in the Working Group expressed reservations concerning paragraphs (3) and (4) in relation with their intention to see the scope of paragraph (8) generalized. See Doc. PR/PIC/II/113, Annex II, footnote, also quoted in PR/DC/3, n. 12, p. 51. Proposal of universal applicability of this paragraph was also made before the Main Committee I at its second meeting of 3 March 1980. WIPO, Final Summary Minutes of the First Session of the Diplomatic Conference on the Revision of the Paris Convention, Geneva, 4 February to 4 March 1980, PR/SM/3, 12 September 1983, p. 93.

"WIPO: Revision of the Paris Convention", n. 57, pp. 570-71. See also WIPO, Doc. PR/SM/3, ibid, p. 92.
countries thought for a detailed study of the measure of suspension as they considered it a reasonable one. In their view this measure is a better one than forfeiture or revocation. "On the one hand, it helps the developing countries, on the other hand, it does not remove all the incentives to make an investment because the patent as such remains valid and only the rights are suspended; therefore, the patentee is still interested in working the patent in the country." The concept of suspension was unacceptable to the Group of Developing Countries as it would, indeed, create practical difficulties. What would become of the investment of a person who works the patented invention while the patent is suspended once the suspension ends? Would he have to stop working the patent and loose the investment he had made? In any case, suspension should not be made a possible pre condition of deciding revocation or forfeiture." Moreover, forfeiture and revocation, in the view of developing countries should be possible without any pre condition as there were statistics to show that non-voluntary licences, as a first hurdle before revocation or forfeiture were not a serious impediment. The sanctions available today to enforce the obligation on the patentee to work the patented invention

118 See statement of Mrs. Steup (Erstwhile Federal Republic of Germany) in the name of Group B, WIPO Doc., ibid, p. 92.

119 See statement of Mr. Vanderpuye (Ghana), WIPO Doc., PR/SM/6, n. 95, p. 41.
were, in effect, nil. Non-voluntary licences were wholly ineffective.

An important over-riding provision in the proposed Article is paragraph (5) which enables any country to provide in its national law for exploitation (i.e. by working or importation) at any time in the public interest of the patented invention by the government of that country or by third persons authorised by it. It is irrespective of whether the owner has committed an abuse or not, or whether the patent is being insufficiently worked. Public interest does not seem to be exhaustively defined, although a wide range of possibilities are specified. The four cases of public interest are mentioned expressis verbis: "national security", "nutrition", "health", and "the development of"

120 For example, between 1958 and 1963, in Australia, none was granted. In Canada, between 1935 and 1970, 192 and 79 were granted and this was the highest number ever granted anywhere in the world. In Denmark, seven were applied for, one was abandoned, three were granted. In Ireland, one was filed, none was granted. In Norway, between 1910 and 1963, 27 were filed, two refused, 11 abandoned, 11 granted. In New Zealand, between 1958 and 1963, and in Switzerland, in 1952 and 1953, none was applied for and none was granted. In the United Kingdom, between 1959 and 1968, 57 were applied for, six were granted. See Proposal by the Delegation of Ghana on behalf of the Group of Developing Countries, WIPO, Doc. PR/DC/33, quoted in WIPO Doc. PR/SM/6, n. 95, p. 89.

121 Draft Article 5A(5) states:

Any country of the Union has the right to provide in its national law, where the exploitation of the patented invention is required by reason of public interest, in particular national security, nutrition, health or the development of other vital sectors of the national economy, for the possibility of exploitation, at any time, of the patented invention by the government of that country or by third person authorized by it.

The text is reproduced from WIPO Doc. PR/DC/3, n. 12, p. 50.
other vital sectors of the national economy." When the exploitation of the patented invention under this paragraph is not made by the government itself but is made by a third person, that third person must obtain the government's authorisation. Further rules concerning the possibility provided for in this paragraph are contained in paragraph (7).

Another provision qualifying the grant of a non-voluntary licence has been set out in paragraph (7) under which "any decision relating to the grant of a non-voluntary license or to exploitation in the public interest, including the amount of the just payment to which the patentee is entitled, or any decision relating to the revocation or forfeiture of a patent shall be subject to review at a distinct higher level in accordance with the applicable national law." It was understood by the Preparatory Intergovernmental Committee that 'the just payment to which the patentee is entitled' meant that when a non-voluntary licence is granted or exploitation in the public interest is decided, the patentee had the right to receive a just payment. It was further understood that 'a distinct higher level' meant that "the national law of any member state is free to decide whether such 'level' will be administrative or judicial, for example, if the decision is made by the Patent Office, the 'review' may be carried out by the

122 Ibid, p. 54.
Minister under whose jurisdiction the patent office is or by a court."

(vi) **Statutory Provisions on Non-Voluntary Licences**

In the United States where there is no specific provision for compulsory licensing or endorsement of licences as licences of right, the application of compulsory licensing has been limited to relief and has come to be widely applied in a variety of "misuse" situations. Under the anti-trust laws, the courts can impose compulsory licensing in cases where competition has been restricted by action taken under the umbrella of patent protection. Mere threat of anti-trust action is believed to have resulted in many voluntary licensing arrangements.

Compulsory licensing has also been included in Hungarian Patent Law, 1983. New Patent Law of Spain, 1986 contains local working and compulsory licensing requirements. In Japan if working has not been properly carried out for longer than three years (or four years from the date of filing an application),

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123 Ibid., p. 57. See also "WIPO : Revision of the Paris Convention," no. 57, p. 570.

124 The first compulsory licensing decree in a litigated case was entered in *Hertford Empire Company vs. U.S.* (1945) where the United States Supreme Court held that compulsory licensing at a reasonable rate is within the range of remedies available where necessary to correct past and prevent future anti-trust violations. Jhala, n. 10, pp. 61-62.

any person can request a non-exclusive licence to exploit the invention. If an agreement is not reached, the person desiring the licence can demand that the Director-General of the Patent make a decision. The Canadian Patent Act of 1935 as amended in 1952 and 1969 contained a number of compulsory licensing provisions. Section 68 of the Act empowers the Commissioner to grant to an applicant a compulsory licence where one or more abuses of exclusive rights by patentees listed in Section 67 of the Act have been established and upon such terms as the Commissioner may deem expedient. Failure to make or work a patented invention has been put in the list of abusive acts under Section 67(a). The Commissioner may grant such a compulsory licence only after the expiration of three years from the date of the grant of the patents. However, the Canadian Patents Act was amended in 1987 making profound changes in the provisions of Section 41 with respect to compulsory licences of food and drug patents. The main features of such modifications are the following: the introduction of the system of deferrals of compulsory licensing rights delaying the exercise of rights of holders of compulsory licences to manufacture and/or import the pharmaceuticals subject to patent protection for the periods determined by the statute. Compulsory licensing of patents relating to medicines

(after 7 year period) is provided if local market is not substantially supplied by local manufacture.

Compulsory licensing in Russia is provided of inventions not used there within five years from the date of recordation of the All-Union Register of Inventions. It is, however, not automatic in Russia. After the grace period has run, an entity interested in acquiring the licence and "willing and able to use the invention" can petition the Patent Court, specifying the scope of its needs and the amount of royalties it is prepared to pay to the patent holder. Nonetheless, the Patent Court is not required to grant the petition. Even if granted, a compulsory licence cannot be exclusive because the firm that receives a compulsory licence cannot prevent the licensor, or any other competitor, from working the invention. The Russian Patent Law may ease patent holder's fears of losing their exclusive rights to compulsory licensing through a provision which allows a patent holder who can present reasonable grounds for not using (or underexploiting) his or her invention to keep if off limits to compulsory licensing. Thus compulsory licensing


targets only those patent holders who negligently or wilfully fail to use their rights to the detriment of society. The situation where one patent blocks the use of another, impedes technological progress, in Article 23 has been dealt with in this way—"If a patent holder cannot use an invention because that invention uses another invention patented by another citizen or juridical person, he has the right to demand from the latter permission to use this invention on conditions provided by a contract."

Many legislations in force recognise various policy measures to ensure working of patents. These include different types of licensing systems (including the grant of an exclusive licence), automatic lapse of patents, revocation and use and expropriation by the state. Moreover, changes were made towards the easing of the conditions for granting non-voluntary licences in developing countries. Herein follows a discussion of these measures and reforms.

(b) Licences of Right and Licences d' Office

Apart from the system of compulsory licences discussed above, there are two other distinct kinds of licensing, namely "licences of right" and "licences d'office." Some of the procedural difficulties which may be met by applicants for compulsory licences are alleviated under the system of compulsory "licences of right".

129 For details, see Litman, n. 22, pp. 211-15.
When a patent (or a group of patents) has been declared by the appropriate authority or in the law itself to be subject to licences of right, no fixed periods of time need to elapse, no grounds for the grant of a licence need to be proved and no requirements as to qualifications of an applicant need to be satisfied. The difference between compulsory licences and licences of right is that an applicant for a compulsory licence must justify the grant to him of a licence in the particular circumstances of the case, whereas any applicant for a licence of right once the patent has been so marked is entitled as of right to the grant of a licence.

A patent may be marked "licences of right", and the effect of this marking is that any person is then entitled as of right to the grant of a licence. Marking the patent in this way is in effect an invitation to interested parties to seek licences under the patent. A patent may be marked "licences of right" upon a voluntary application by the patentee to the competent administration (i.e. that which granted the patent). Such a provision for application by the patentee is contained in the patent laws of Algeria, Germany, Ireland, Malawi, New Zealand, Nigeria, the United Kingdom and Zambia.

130 Doc. TD/B/AC.11/19/Rev.1, n. 7, p. 51.

131 Ibid, p. 10. See also Sections 23(1) and 34 of the German Patent Law, 1981; Section 46 of the United Kingdom Patents Act, 1977.
In Britain and Germany additional special incentives have been offered to encourage such a voluntary application for licenses of right to produce the patented inventions. In both these countries, patent owners who publically allow their patents to be licenced by any or all comers i.e. declared "licences of right" are generally granted substantial reduction in the amount of annual fees of taxes payable under the patent. Thus, under Section 23(1) of the German Patent Law, 1981, "if the applicant or the person registered as the proprietor of the patent in the Register (Section 30, Sub-section 1) files a written statement with the Patent Office that he is prepared to permit any person to use the invention subject to a commensurate compensation, the annuities for the patent which fall due after receipt of the statement shall be reduced to half the amount specified in the table of charges...." Under the endorsement procedure prevalent in the United Kingdom, the advantage to the applicant is that the availability of his invention is publicised and the annual fees for maintaining its patent are reduced. The advantage to the person requesting a licence is that in default of agreement, the court will fix the terms of licence, taking into account all interests concerned. The advantage to the general public and the consumer is that no one may be excluded from working the patented invention and the

product or the process as indicated in the patented application will be available. Moreover, an order for revocation of patent can also be passed on the ground that reasonable requirements of the public in respect of the patented inventions were not satisfied or the patented invention was not available to the public at a reasonable price.

In Germany, Section 24(1) of the Patent Law, 1981, stipulates that "if the applicant or the proprietor of a patent refuses to permit the invention to be used by a third party offering a commensurate compensation and a security for the compensation, permission to use the invention shall be granted to said third party (compulsory licence), if this permission is in the public interest. The grant of the compulsory licence shall be admissible only after the grant of the patent. The compulsory licence may be granted subject to limitations and conditions."

Marking of patents with the words "licences of right" can also be without an application by the patentee, upon an application by another interested party to the competent administration or other authority designated for this purpose, or ex officio by the designated authority. Such a provision is found in the patent laws of India, Ireland, New Zealand and

133 Sections 46-53 of the United Kingdom Act of 1977. See also Jhala, n. 10, pp. 67, 70-75.

134 English translation is reproduced from Kinkeldey and Stockmair, n. 132, p. 43.
the United Kingdom. In the Indian law the system applies automatically three years after the grant of patents for food, medicine or chemical processes. The law also sets a maximum royalty of four percent of the net ex-factory sale price in bulk.

Non-voluntary licences, not directly related to non-working have also been provided for in Colombia by Decree 1410, and prior to the incorporation of Decision 85, in Mexico and in the Philippines. According to Colombian Decree 1410, patents relevant to public health or the needs of economic development could be subject to 'licences of right'. The Ministry of Industry and Trade in Mexico may, at any time decide that, for reasons affecting the public interest certain patents may be exploited by means of the grant of licences of 'utilidad publica' (public interest). Special compulsory licences are granted to meet investment requirements in Philippines. All products or processes involved in any industrial project approved by the Board of Investments under the Investment Incentives Act shall be deemed products or processes "vital to the national defence or

135 Doc. TD/B/AC.11/19/Rev.1, n. 7, p. 10. See also Section 86, IPA, 1970; Section 48(1)(b) of the United Kingdom Patents Act, 1977.
136 Section 87, IPA, 1970.
137 Section 88(5), ibid.
139 Ibid.
economy or to public health." Therefore, whenever the proponent of the project is neither the holder nor a licencee of the respective patents, a compulsory licence may be granted. In this case the applicant is, moreover, exempted from complying with terms and other conditions required for other types of compulsory licences (including for the general category of "vital products and processes" under Article 34A), and in addition, the maximum acceptable royalty (on net wholesale price) is three per cent instead of five per cent as in the general case.

Another type of system to be found in the laws of France and Colombia is that of "licences d'office", appears to fall between the normal system of compulsory licences and the system of compulsory licences of right. It has much the same effect as Section 35 of the BIRPI Model Law on Inventions. Under this system, no time limits apply and the applicant need not establish that the statutory grounds for compulsory licences exist, because the patent (or group of patents) has been declared subject to the system by the appropriate authority. However, a procedure is still required, for licences are granted to individual applicants who justify the grant to them, rather than to any person, as in the case of licences of right. The Model Law suggests that the licences to be granted under this procedure

should extend to importation alone without the requirements of production in the country; a similar provision in the case of medicines is to be found in the Indian law on licences of right.

(c) Other Remedial Measures

Other remedies for failure to work the patent include the following:

(i) Automatic Lapse

A patent usually lapses automatically upon the expiration of the period of grace for paying any fee required to maintain its existence, when that fee has not been paid. Automatic lapse may also result from provisions of the law concerned with the occurrence or non-occurrence of events other than payment of fees, in which case it is used as one of the applicable measures to limit the exercise of patent rights in the public interest. In this direction one can quote section 21(1) of the German patent law whereby "the patent shall lapse if (1) the proprietor of the patent renounces it by a written declaration to the patent office, (2) the declarations prescribed in Section 37, Subsection 1, are not filed in due time after service of the official notification (Section 37, Subsection 2), or (3) the annuity plus the additional fee are not paid in due time after service of the official notification (Section 17, Subsection 3)." Under Section 53(2) of

141 See generally, Doc. TD/B/AC.11/19 Rev.1, n. 7, p. 51.
142 English translation is taken from Kinkeldey and Stockmair, n. 132, p. 39. Other countries containing provisions on automatic lapse include Argentina, Cuba, Italy, Lebanon, Spain, Syrian Arab Republic, Turkey and Venezuela, Doc. TD/B/AC.11/19 Rev. 1, ibid, p. 10.
the IPA, 1970, a patent shall cease to have effect notwithstanding anything contained therein or in this Act on the expiration of the period prescribed for payment of any renewal fee, if that fee is not paid within the prescribed period or within that period as extended under this Section, which period can be extended under Section 53(3). However, law also provides for restoration of lapsed patents through its provisions contained in Sections 60-62.

(ii) Revocation

Revocation is a measure terminating a patent and such a measure may be called forfeiture, repeal or lapse. However, it is distinguished from automatic lapse by the fact that it is not automatic but is the result of a judicial or administrative process when the grounds for applying the measure are found to exist. Revocation was even provided as a remedial measure in the very early legislation on the subject, for instance, in the Venetian law of 1474, the French law of 1844, the Belgian law of 1859 and the Argentinian law of 1864. In the contemporary patent laws of a number of countries, statutory provisions exist for revocation of a patent where it has not been exploited within a given number of years of its issuance or where its use has been discontinued for a certain period of time. In countries where compulsory licensing is available, revocation is frequently

143 Doc. TD/B/AC.II/19/Rev. I, ibid, p. 46.
used as a supplementary measure, to be invoked only in cases where the grant of compulsory licences fails to achieve its intended purpose, and only after the expiration of a minimum period (normally two years) from the grant of the first compulsory licence.

In Peru, refusal to sell or the fixing of an unjustifiably high price shall be ground for revocation of the patent. One finds different grounds of revocation of a patent in India. There is revocation of patents by the Controller for non-working two years after the date of granting of a compulsory licence on the ground that the "reasonable requirements of the public" with respect to the patented invention are not effectively met or that the patented invention is "not available to the public at a reasonable price." The High Court may revoke a patent on the petition of any person interested or of the Central Government on any of the grounds mentioned in Section 64(1) such as non-entitlement of the patentee to the patent, obtaining patent by misrepresentation or fraud, non-disclosure of necessary information, non-compliance with directions for secrecy, subject of claim not being a patentable invention, invention not being useful etc. It can also revoke a patent on the petition of the Central Government, if the High Court is satisfied that the

144 Article 69 of the Industrial Property Regulations of 1971.
145 See Sections 89 and 90 of IPA, 1970.
patentee has without reasonable cause failed to comply with the request of the Central Government to make, use or exercise the patent invention. It also provides for revocation by the Central Government on the ground that "a patent or the mode in which it is exercised is mischievous to the State or generally prejudicial to the public", or by the Controller on directions from Central Government in cases relating to atomic energy.

It was established in 1972 by the Supreme Court of Argentina in the case of France Duranti versus Suprammar S.A. that a patent was subject to automatic revocation, according to Article 47 of the patent law, when the invention was not effectively exploited within two years of being granted. It was also declared in a number of other decisions of lower courts dealing with the applicability of Article 5A of the Paris Convention (Lisbon Act) that the enforceability of the revocation provided for by the national law, on the grounds that Article 5A of the Convention was not self-executing and that compulsory licences had not been regulated in the country. This interpretation was later confirmed in 1980 by the Supreme Court in the case of Re Gabrielloni (1980),

146 Section 64(4) and (5), ibid.
147 Section 66, ibid.
148 Section 65, ibid.
149 Quoted in TD/B/C.6/AC.5/3, n. 18, p. 10.
thus stressing revocation as a primary sanction against non-working, of foreign as well as of nationally-owned patents.

The Mexican Law on Inventions and Trademarks of 1970 provides that when compulsory licences or licences of utility are granted the patent holder has to supply the licencees with the information necessary for the exploitation of the patent. The non-fulfilment of this obligation entailed the revocation of the patent. Under the current law, the failure to prove that a patent has been worked within three years from the date of grant will make the patent available for compulsory licensing and the patent will lapse two years after the grant of the first compulsory licence. In Philippines, a patent is liable to cancellation on the ground that the invention is not new or useful in accordance with Sections 7, 8, 9 or the specification of an application for an invention patent does not comply with the requirements of Section 14 and the person to whom the patent was issued was not the first, original, true and actual inventor. In Sri Lanka a patent may be declared null and void if the person interested may prove that the patented invention is not an invention within the meaning of Section 59(1) or is excluded from the protection under Section

151 Ibid.
152 Article 57.
59(3) or Section 76(3) or is not patentable because it does not comply with the requirements of Sections 60 to 63, or the description or the claims do not comply with the requirements of Section 68(3) and (4).

Under Article 48 of Chinese law, after the grant of patent right any entity or individual considers that the grant of the said patent right is not in conformity with the provisions of this law, it or he may request Patent Re-examination Board to declare a particular patent invalid on the ground of non-compliance with the provisions of the law. Even in Malaysia any person may institute court proceedings against the owner of the patent for the invalidation of the patent. The court shall invalidate the patent if the person aggrieved proves that what is claimed as an invention in the patent is not an invention within the meaning of Section 12 or is excluded from protection under Section 13 or Sub-section (1) of Section 31 or is not patentable because it does not comply with the requirements of Sections 11, 14, 15 and 16 or the right to the patent does not belong to the person to whom the patent was granted.

In Germany under Section 21, it is provided that

(1) The patent shall be revoked (Section 61) if it turns out that

1. the subject matter of the patent is not patentable under Sections 1 to 5,

157 Section 56 of the Malaysian Patents Act, 1983.
2. the patent does not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art,

3. the essential content of the patent has been taken from the description, drawing models, instrumentalities or devices of a third party or from a process used by said patent,

4. the subject matter of the patent extends beyond the content of the application as originally filed with the authority competent for the filing of the application; this shall also apply, if the patent is based on a divisional application or on a new application filed according to Section 7, Subsection 2, and if the subject matter of the patent extends beyond the content of the previous application as originally filed with the authority competent for the filing of the previous application.

(2) If the grounds for revocation affect the patent only partially, it shall be maintained in an accordingly restricted form. The restriction may be effected in the form of an amendment to the patent claims, the description, or the drawings.

(3) Upon revocation the effect of the patent and of the application shall be deemed to be void ab initio. This provision shall apply mutatis mutandis, if the patent is maintained in a restricted form; if in this case the only reason why the patent is not maintained is a division (Section 60), the effect of the application shall not be impaired.158

Moreover, "the patent shall be declared null and void upon respective motion (Section 81), if it turns out that one of the grounds specified in Section 21, Subsection 1 exists or that the scope of protection of the patent has been broadened. Section 21, Subsections 2 and 3, sentence 1 and the first part of sentence 2, shall apply mutatis mutandis." Under German law, "in the absence


159 Section 22(1) and (2), ibid.
of international treaties with contrary provisions, the patent shall be cancelled, if the invention is practiced exclusively or mainly outside of Germany. Cancellation of the patent can only be demanded when two years have expired since the coming into force of a decision granting a compulsory licence and only if the public interest can further not be satisfied by the grant of compulsory licences. However, these limitations shall not apply in the case of subjects of a foreign country which does not provide reciprocity in this respect. Assignment of the patent to a third party shall be without effect if its only purpose is to avoid cancellation.

It may be noted that in those countries in which it can be used as a measure supplementary to and later than compulsory licensing, revocation probably exerts little additional pressure on the patentee. In any case where revocation can be used independently of compulsory licences, it is of value either in clearing the way for production in the country where the necessary know-how can be supplied without the help of the patentee or in putting the patentee's control of imports at risk and thus encouraging him to find a national licence.

160 Section 24(2), ibid. The element of public interest has been construed very narrowly by the courts. Compulsory licences have been granted, for example for increase in the safety of mine workers, for uninterrupted supply of electric energy, for supply of urgently needed raw materials or avoiding the closing of plants or for improvement of the trade plans. Jhala, n. 10, p. 65.

(iii) **Use and Expropriation by the State**

Most national laws provide for either use of patented inventions by the state or expropriation of patents by the state. Compensation is normally payable to the patentee in either event, the basis of the assessment of compensation and the legal or administrative procedures required are provided for in national laws. An example of wide powers provided for the state in the matter of use of patented invention and expropriation of patents is found in the patent law of Australia, where both measures are available. With regard to use of inventions, the state or a person authorized in writing by the State may manufacture, use or sell the invention for the purposes of the State at any time after an application for a patent has been filed. The conditions, including compensation, for the use of the invention are fixed in the absence of agreement, by the court. A patent or a patent application may also be compulsorily expropriated by the State, which is obliged to pay to interested parties an amount of compensation fixed, in the absence of agreement by the court. These provisions are similar to those contained in the patent law of India which gives to the State the right both to use patented inventions and to acquire patents in the public interest, subject to payment of compensation.

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162 Ibid, p. 11 and p. 26 respectively.
In Canada, the Federal Government may, at any time, use any patented invention paying the patentee reasonable compensation as determined by the Commissioner. Under the new Russian Patent Law of Inventions of 1991, one finds provisions for the obligatory licensing to authorise use of patented invention without the patent holder's consent. Such a licensing is to be invoked in the interests of the defence of the State and public order. The patent holder will receive financial compensation in an amount comparable with the market price of the licence. The Russian patent courts have been given jurisdiction over obligatory licensing disputes.

The WIPO Model Law for Developing Countries on Inventions, 1979, devoting its chapter IX to the question of non-voluntary licences contained in Section 156 specific provisions for the exploitation by a government agency or by third parties authorised by the government of the patented invention where the public interest in particular, national security, nutrition, health or the development of other vital sectors of the national economy so required.

Although many legislations in force recognise different forms of non-voluntary licences as well as other related measures, changes in the recent past in some developing countries stressed


165 Article 25(1). For details see Litman, n. 22, pp. 211-15.
the need for a new and wider application of such licences in order to satisfy economic and other objectives of national policies. The changes attempted to encourage the granting of compulsory or non-voluntary licences, the conferring upon the state more extensive powers with regard to use of patented inventions and expropriation of patents, in general, and to make greater use of revocation. In other words, the aim was to strengthen the various remedies provided for against non-working and to limit the grounds of justification for non-working. It may be pointed out that the patent non-use or their use as import monopolies were considered as grounds for nullification under the patent laws of many industrialised countries until a few decade ago.

TRIPS TEXT POSITION

Emphasis on "Right to Import" as a "Right of the Patentee"

A study of the legal reforms of the recent past has already indicated an express or implied exclusion of importation as a means of working of patents. As regards importation, however, the position of the developed countries has been contrary to the trends of the recent past introduced by the developing countries as becomes evident from the emphasis they have put on importation as

166 Doc. TD/B/C.6/146, n. 125, p. 23. The 1885 Patent Monopoly Ordinance of Japan subjected patents to cancellation if the patentee suspended working of the invention for more than two years without justifiable cause, or imported products covered by the patent from foreign countries. Mackley, n. 23, p. 160.
working of patent in the latest Uruguay Round of Negotiations on TRIPS. This becomes clear from Article 27(1) of the Agreement on TRIPS as contained in the Final Act embodying the results of the Uruguay Round of Multilateral Trade Negotiations. It states that "... patents shall be available and patent rights enjoyable without discrimination as to the place of invention, the field of technology and whether products are imported or locally produced."

The scope of 'exclusive rights conferred' on the patent owner has been mentioned in Article 29(1) and is directed towards use of patents as a means of ensuring an import monopoly in the country of grant. Thus under Article 28:

1. A patent shall confer on its owner the following exclusive rights:

(a) where the subject matter of a patent is a product, to prevent third parties not having his consent from the acts of making, using, offering for sale, selling, or importing for these purposes that product.

(b) where the subject matter of a patent is a process, to prevent third parties not having his consent from the act of using the process, and from the acts of: using, offering for sale, selling or importing for these purposes at least the product obtained directly by that process.

This provision again confers exclusive right on the patent owner to import, sell, produce and use the product in case of product patents. When related to processes, it has conferred the exclusive right to use the process and protection has been extended

to the use, sale or import the product obtained directly by that
process. This can result again in the use of patents as a
means of ensuring an import monopoly in the country where the
patent has been granted. As regards these measures which can
be taken by the governments against failure to work, it may be
pointed out that the provision of Article 27(1) would imply
that the governments would be debarred completely from making
in their laws any provision for revocation or forfeiture of
patent merely on the ground that the product is being imported.
The provision of Article 28 instead puts emphasis on the exclusive
right of preventing 'third parties from acts of making, using,
offering for sale, selling or importing'.

All this is in contrast to the position of developing
countries whose attempts have been towards taking away the
right of the patent holder to prevent third parties from
importing the product covered by the products or a product
manufactured by means of a patented process so as to subject the
patent owner to competition by suppliers from abroad and avoid
the adverse consequences of import monopoly in their economic
advancement.

In this provision one finds an expansion of the rights of
the patent holder to include the right to importation of the
patented product. This is for the first time that right to

import has been included expressly as a right of the patentee.

Negation of the Obligations of the Patentee to Work

The TRIPS Agreement further seeks to reduce the restrictions on the use of rights conferred. Article 31 defines the requirements of 'working'. The title of this provision is curious, underlying the spirit of the Agreement:

Article 31: Other Use Without Authorization of the Right Holder

Where the law of a Member allows for other use of the subject matter of a patent without the authorization of the right holder, including use by the government or third parties authorized by the government, the following provisions shall be respected.

"Other use" refers to use other than that allowed under Article 30. Exceptions to rights conferred have been mentioned under Article 30 in the following way:

Members may provide limited exceptions to the exclusive rights conferred by a patent, provided that such exceptions do not unreasonably conflict with a normal exploitation of the patent and do not unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties.

The requirements of working in the Agreement on TRIPS, therefore, tantamount to an "unauthorized" use of the patent and the spirit of the Agreement rules out the possibility of measures against abuse of patent rights such as compulsory licence or to ensure working of the patent in the patent granting country for which it has been used before as there is no specific mention of the grounds under which a compulsory licence
can be issued. A further dilution of the requirements of 'working' are provided by Article 31(b) which does not provide concrete grounds under which the use of a patent 'without authorization of the right holder' can take place. It reads as follows:

(b) such use may only be permitted if, prior to such use, the proposed user has made efforts to obtain authorization from the right holder on reasonable commercial terms and conditions and that such efforts have not been successful within a reasonable period of time. This requirement may be waived by a Member in the case of a national emergency or other circumstances of extreme urgency or in cases of public non-commercial use. In situations of national emergency or other circumstances of extreme urgency, the right holder shall, nevertheless, be notified as soon as reasonably practicable. In the case of public non-commercial use, where the government or contractor, without making a patent search, knows or has demonstrable grounds to know that a valid patent is or will be used by or for the government the right holder shall be informed promptly.

By providing grounds for revocation of any licence that is provided for 'working', Article 31(g) adds further to the rights of the patent holder when it states:

(g) authorization for such use shall be liable, subject to adequate protection of the legitimate interest of the persons so authorized, to be terminated if and when the circumstances which led to it cease to exist and are unlikely to recur. The competent authority shall have the authority to review, upon motivated request, the continued existence of these circumstances.

The working of 'if and when the circumstances which led to it cease to exist and are unlikely to recur' as has been stated

169 Dhar and Rao, n. 59, p. 278.
make the provision very fragile to be used by anybody who wants a compulsory licence. No manufacturer will come forward to take such a licence and to take the risk of working the patent when he does not know if the circumstances under which the compulsory licence was issued will continue or not.

The patent holder has been allowed to impose restrictive clauses to the licence that he may provide for the use of his patent under Article 31(f) according to which "any such use shall be authorized predominantly for the supply of the domestic market of the Member authorizing such use." In this way, the provision thus gives substance to the tendency of the multinational corporations to provide technology in the developing countries only for the exploitation of their local markets and to prevent export of products manufactured through the licence by imposing clauses of restrictive nature.

The above discussion indicates the negation of the obligations to work on the part of patentees from developed countries and focusing more on their monopoly rights.

One also finds the use of the term 'right holder' in Article 31(h) and 8(2) of the TriPS Agreement instead of the conventional patentee or patent holder which puts emphasis on the rights of the patentee at the expense of his obligations. Article 8 dealing with principles provides in paragraph 2 that "appropriate measures, provided that they are consistent with the provisions of this Agreement, may be needed to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or adversely
affect the international transfer of technology." Under Article 31(h) "the right holder shall be paid adequate remuneration in the circumstances of each case, taking into account the economic value of the authorization." Some other provisions of the TRIPS Agreement add more to the rights of the patent holder. Other use without authorization of the right holder "shall be non-exclusive" \[\text{Article 31(d)}\]; "such use shall be non-assignable, except with that part of the enterprise or goodwill which enjoys such use" \[\text{Article 31(e)}\]; "any such use shall be authorized predominantly for the supply of the domestic market of the Member authorizing such use" \[\text{Article 31(f)}\] and "authorization for such use shall be liable to be terminated if and when the circumstances which led to it cease to exist and are unlikely to recur" \[\text{Article 31(g)}\].

These have been discussed earlier in this chapter.

Trade Based Approach: Virtual Elimination of Compulsory Licences for Failure to Work

The discussion of the revision of Article 5A of the Paris Convention in the diplomatic conferences held under WIPO clearly shows the resistance on the part of the developed countries to make any changes in the system of compulsory licences on account of its being more favourable to them. Recently, their response towards this issue hardened in the Uruguay Round Negotiations as a result of the trade based approach. It was their argument that compulsory licences distorted trade. Table 7.1 lists United States complaints against countries regarding compulsory licences as a trade barrier.
## TABLE 7.1

**UNITED STATES COMPLAINTS AGAINST COUNTRIES RELATING TO COMPULSORY LICENCES AS A TRADE BARRIER**

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>- permissive compulsory licencing.</td>
</tr>
<tr>
<td>Brazil</td>
<td>- patents must be worked, restrictive licencing requirements.</td>
</tr>
<tr>
<td>Canada</td>
<td>- permissive compulsory licencing.</td>
</tr>
<tr>
<td>Colombia</td>
<td>- working requirements; compulsory licencing provisions and licence restrictions</td>
</tr>
<tr>
<td>Egypt</td>
<td>- Inadequate compulsory licence requirements, patents forfeited if not worked</td>
</tr>
<tr>
<td>India</td>
<td>- deficiencies in compulsory licencing and royalty restrictions.</td>
</tr>
<tr>
<td>Malaysia</td>
<td>- excessively broad copyright compulsory licencing rights.</td>
</tr>
<tr>
<td>Mexico</td>
<td>- compulsory licencing burdens.</td>
</tr>
<tr>
<td>Pakistan</td>
<td>- overly accessible compulsory licencing.</td>
</tr>
<tr>
<td>Philippines</td>
<td>- excessive patent working requirements, compulsory licencing, technology transfer laws include royalty caps and may not prohibit exports.</td>
</tr>
<tr>
<td>Taiwan, Province of China</td>
<td>- Excessive compulsory licencing provisions, patent law favours infringers.</td>
</tr>
<tr>
<td>Thailand</td>
<td>- overly broad compulsory licencing provisions, patent must be worked.</td>
</tr>
<tr>
<td>Venezuela</td>
<td>- patent working requirements, restrictions on licences.</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>- compulsory licensing provisions.</td>
</tr>
</tbody>
</table>

However, the argument of the developed countries that compulsory licences by taking away a part of the market caused trade distortion and hence should be done away with completely ignored the importance of working of the patents for developing countries. It needs to be pointed out that there is a distinction between the working of the patent and the "legitimate" trade of the patentee. As has been stated "the basic objective of the patent system is to ensure the local working of the patent. If in accordance with this a compulsory licence is issued and a part of the monopoly market of the patentee is reduced it cannot be helped. The patentee will not have a right over the market in the patent granting country, just because he has taken a patent there". Moreover, to regard compulsory licencing as trade distorting would mean that every country has to regard imports as working which in turn will have important effects on the working of patents in developing countries. In the absence of any working requirements, the decision as regards working of the patent and importing the products will rest solely with the patentee and the host country will not have any say in the use of the technology. As the mechanism of compulsory licences is used to guard against such abuses, it, therefore, does not cause distortion to legitimate trade.

The Agreement on TRIPS does not provide for any specific provision on compulsory licences. There is a change of nomenclature compulsory licence to non-voluntary licence indicating

unauthorised use of the patent as can be seen from Article 31 which deals with 'Other use without authorization of the right holder'. No grounds for grant of compulsory licence have been proposed leaving governments somewhat free to make provisions in their law on such licencing. However, there are strict conditions for such authorisation. Each case will have to be considered on its individual merit (Article 31(a)) and compulsory licence shall be granted only if the proposed user has made efforts to obtain authorisation from the right holder on reasonable commercial terms and conditions and such efforts have not been successful within a reasonable period of time. This requirement may be waived by a party in the case of a national emergency or other circumstances of extreme urgency or in cases of public non-commercial use. In situations of national emergency or other circumstances of extreme urgency, the right holder shall, nevertheless be notified (Art. 31(b)). This provision thus, allows the use of a patent without authorisation of the patent holder in three situations; national emergency, or other circumstances of extreme urgency, or in cases of public non-commercial use. However, these grounds are not concrete and thus differ also from Paris Convention which provides for expiry of a specified time for the grant of compulsory licence. Even the requirement in Article 31(b) that efforts be made by a firm to obtain a voluntary licence from the patentee on reasonable terms and conditions, would certainly render its use a little more difficult.
A non-voluntary licence can also be allowed under Article 31(1), where such use is authorized to permit the exploitation of a patent ("the second patent") which cannot be exploited, without infringing another patent ("the first patent"). However, the following additional conditions have been made applicable, making such a use very restrictive:

i) the invention claimed in the second patent shall involve an important technical advance of considerable economic significance in relation to the invention claimed in the first patent;

ii) the owner of the first patent shall be entitled to a cross-licence on reasonable terms to use the invention claimed in the first patent; and

iii) the use authorized in respect of the first patent shall be non-assignable except with the assignment of the second patent.

Under Article 31(h) in the case of non-voluntary licence "the right holder shall be paid adequate remuneration in the circumstances of each case, taking into account the economic value of the authorization." As has been argued this goes against fixed royalty linked to turnover and implies a substantial financial burden for the developing countries firms seeking non-voluntary licences from the foreign patentees and a heavy drain on foreign exchange. Moreover, this condition in conjunction with others may practically eliminate any non-voluntary use of patents. The provision is silent about the meaning of the 'economic value of the authorisation' and manner in which such an

171 NWGPL, n. 168, p. 68.
economic value of the licence is to be determined. Should it include the recovery of research and development costs from a single market; or what kind of profits or royalty over the costs would have to be offered, are some of the issues which can be raised in this regard.

Other provisions of the TRIPS Agreement which have already been discussed also restrict non-voluntary use include: provision only for non-exclusive nature of non-voluntary use \[\text{Article 31(d)},\] authorisation of such use for the supply of the domestic market of the member authorising such use \[\text{Article 31(f)},\] termination of authorisation of use in the circumstances mentioned under Article 31(g).

A compulsory licence issued on the ground that the product is being imported, will be treated to be in conflict with the legitimate interests of the patent-holder as defined in Article 8 and 30 of the text. Wherever the TRIPS Agreement is silent or ambiguous by virtue of Article 2 the provisions of the Paris Convention 1967 (Articles 1-12 and 19) shall apply. The Paris Convention as discussed earlier in essence treats importation as the working of a patent and treating importation as working of the patent will make the host country dependent on imports in a big way. There will be unacceptable delay in the indigenisation of production

\[172\] Chimni, "TRIPS for Self-reliance: Problems with the TRIPS Text", n. 34, p. 62.
and products would be sold at exorbitant prices on account of monopolistic regime that will get created.

The legal validity of any decision relating to the authorisation of such use shall be subject to judicial review or other independent review by a distinct higher authority in that Member [Article 31(i)]. Further, any decision relating to the remuneration provided in respect of compulsory licence shall be also subject to similar review [Article 31(j)].

The grant of non-voluntary licences for other use provided in the TRIPS Agreement is specially allowed only on the grounds of anti-competitive use of patent rights. Thus Article 31(k) in this regard states:

Members are not obliged to apply the conditions set forth in sub-paragraphs (b) and (f) above where such use is permitted to remedy a practice determined after judicial or administrative process to be anti-competitive. The need to correct anti-competitive practices may be taken into account in determining the amount of remuneration in such cases. Competent authorities shall have the authority to refuse termination of authorization if and when the conditions which led to such authorization are likely to recur.

This means that the matters relating to competition policy are generally outside the scope of the Agreement on TRIPS. There are, moreover, less stringent conditions attached to compulsory licences granted to remedy anti-competitive practices, with the result that the flexibility necessary to mitigate the effects of patenting which is taken away by the provisions of the Agreement on TRIPS could be achieved through the competition law route. Several Latin American countries are contemplating
the same approach so as to reduce the costs of the stricter patent regime embodied in the TRIPS Agreement.

Even at the international level, there are no international standards limiting the use of abusive practices in the area of technology transfer and the various attempts towards the finalisation of International Code of Conduct on the Transfer of Technology and the UNCTAD Code of Conduct on Multinational Corporations have been blocked by the developed countries. Thus it is quite clear that there is a drastic curtailment of the discretion of the governments to lay down the terms of the patent rights and the conditions under which they should be exercised but without any countervailing limitation on the discretion of patent owners as to how they may use or abuse such rights in the territory of the granting state.

Other implications Concerning Forfeiture/Revocation and Working of Patents

Although Article 32 of the TRIPS Agreement provides that an opportunity for judicial review of any decision to revoke or forfeit a patent shall be available, the inclusion of Article 27(1) takes away the right of the governments from making in their


laws any provision for revocation of patent merely on the ground that the product is being imported. There are clear implications for forfeiture/revocation and working of patent in respect of Article 27(1) according to which patents shall be available and patent rights enjoyed without discrimination as to the place of invention, the field of technology and whether products are imported or locally produced. It also implies that a compulsory licence cannot be issued on the ground that a patent holder is not working the patent within the country. As mentioned earlier, a compulsory licence issued on the ground that the product is being imported will be treated as in conflict with the legitimate interests of the patent holder. In this regard one can note the consequences already discussed of applying vide Article 2 of the TRIPS Agreement the provisions of the Paris Convention to Parts II, III and IV of this Agreement.

Article 31 alongwith the provisions relating to rights conferred on the patent holder (Article 28), exceptions to rights conferred (Article 30), and Accession to Paris Convention (Article 2) debars the governments for formulating virtually any grounds for grant of compulsory licence. Only Article 31(k) leaves some scope for the governments to allow for other use through a non-voluntary licence on the grounds that a particular practice of the patent holder has been determined on judicial or administrative process to be anti-competitive. In such use, however, the remuneration paid will have to be adequate. The determination of adequate remuneration has been made subject to
judicial review. And the practice of review in turn has to be consistent with the jurisprudence of the Paris Convention which can be open to arbitration through the GATT panels. These provisions will have grave implications for developing countries to delete provisions dealing with working and revocation of patents.

Moreover, the restriction laid down in Article 31(f) that the other use without authorization of the right holder (non-voluntary licence) shall be authorized predominantly for the supply of the domestic market of the member authorizing such use clearly indicates that no non-voluntary licence shall be issued for the purpose of exportation which in turn would decrease the value of the patent to the potential licencee and to the state. This is in contrast to the provision contained in developing countries legislations whereby a market for the export of the patented article manufactured over there is not being supplied or developed is considered as not meeting the reasonable requirements of the public and which thus allows for a compulsory licence.

Article 31 also takes away the right of governments to provide for licence of right. As noted earlier in the fields of pharmaceuticals, medicines and food articles some countries like India provide for licences of rights and also for the endorsement of licence of right for any field of patentable technology considered important by the government. Again such provisions have to be deleted as a consequence of provisions contained in Article 31.
SUMMATION

It becomes apparent from the above discussion that the legitimate concern for non-working in developing countries has arisen from fears that nationals of more advanced countries may, using their superior research and development resources, and under the protection of equality of treatment to nationals and foreigners, take out patents merely to secure markets for their exports. Such an action not only frustrates national inventive activities but also imposes severe burdens through higher prices for imported products on the foreign exchange balance of the developing countries. Its encouragement of inventive activity solely in a few industrialised countries can hardly be a sufficient justification for allowing non-working of patents in developing countries. As "working" has neither been defined in the revised drafts of the diplomatic conferences for the revision of the Paris Convention nor in the TRIPS Text, it is suggested that any future international treaty on patents should provide for a clear concept of working providing for use of patents on a commercial scale in the patent granting country; where the patent has been granted in respect of a product, the making of the product in the country of grant, and where the patent has been granted in respect of a process, the use of that process.

As regards compulsory licensing, it is an undeniable fact that provisions concerning it are rarely invoked in countries like Japan, Great Britain, Germany and India. Further, when enforced these provisions almost never reduce subsequent investment
in innovation. As a consequence, it has been argued that the
duration of the compulsory licensing provisions is of little
practical significance. It needs to be mentioned that in this
regard it was pointed out as early as 1964 that although in every
country surveyed, compulsory licensing for non-working is rarely
or has never been sought, it certainly stimulates licensing
activities of foreign patentees. As the UNCTAD Trade and Development
Report, 1991 notes: "statistics tending to demonstrate the
inefficacy of the compulsory licensing system remain unpersuasive,
because the very existence of those licences serve to induce
patent owners to grant voluntary licences where they would not
otherwise have considered doing so." In this regard it is submitted
that the value of the non-voluntary licence system should not
necessarily be assessed according to the frequency with which use is
made of it. While considering the effectiveness of the system,
the dissuasive aspect of non-voluntary licences must be taken into
account. As has been stated both the non-voluntary licence under

175 F.M. Sherer, Industrial Market Structure and Economic
Performance (Chicago, 1980), edn. 2, pp. 454-7. See also
OECD, Competition Policy and Intellectual Property Rights

There had been no reported case of compulsory licensing
under Article 83 of the Japanese Patent Act, although some
requests for arbitration by the Patent Office were dropped
after settlement by the parties. In any case, the threat of
compulsory licensing probably stimulated licensing activities.
See Meckley, n. 23, p. 161. Even in India, only two compulsory
licences were issued during the period 1972-1987. For a
detailed picture in India, see Chapter VIII of this study.

176 Report of the Secretary General, The Role of Patents in the
Transfer of Technology to Developing Countries (New York,


178 Jhala, n. 10, p. 68.
Section 148 of Model Law for Developing Countries and that provided for in its Section 149, as well as compulsory licence allowed by statutes have an important dissuasive function:

The knowledge that the owner of the patent may be unable to prevent the grant of a licence is an incentive for him to enter into a licence contract. The grant of a contractual licence is, for all those concerned, preferable to the grant of a non-voluntary licence. The owner of the patent may avoid the embarrassing publicity of a procedure in which he must justify the non-working or insufficient working or his refusal to conclude a licence contract on reasonable terms; moreover, he will be able to negotiate the terms of the licence contract rather than having the conditions of a non-voluntary licence imposed upon him by a government authority. The contractual licencee may benefit from the co-operation of the owner of the patent, who is more likely to agree to communicate know-how related to the patented invention as it developed, this being an important factor for successful working. Finally, the public will be provided with products which may be of better quality, more advanced and even less expensive if the owner of the patent assists the contractual licencee in the production of the products, which is not likely in the case of a non-voluntary licence, furthermore, these products may be put on the market rapidly, taking into account the inevitable delays of the procedure for the grant of non-voluntary licences.

In this regard even the experience of industrialised countries evidences that the mere existence of the legal institution in most cases induces the patentee to grant a contractual licence and the threat of compulsory licensing has stimulated licensing activities. The compulsory licence is thus an instrument to force the patentee to exploit patented invention in the country concerned, and this is one of the surest ways to ensure that.
As some of the procedural difficulties can be overcome through the system of "licences of right", therefore, it becomes necessary for the developing countries to provide for such a measure as legislative policy. The requirement of this policy measure becomes more important in crucial areas of chemicals, pharmaceuticals, food etc. Further, there should be automatic grant of non-voluntary licences not subject to any administrative or judicial review. However, compensation or royalty to be paid should be in accordance with the law of the country of grant.

Keeping in mind the facts of technological backwardness and the existence of majority of foreign owned patents of developing countries, it becomes the necessity of time for these countries to implement the whole range of various kinds of licensing systems, automatic lapse, revocation and other action so to have control over failure to work i.e. non-fulfilment of patentee's obligations. Use of any one of these policy options should be independent of each other. In other words, it should not be conditional upon the prior or simultaneous use of any of the other remedies available as provided under the Paris Convention, where compulsory licensing is used as the initial sanction, while revocation is used as the ultimate sanction. Rather it is submitted that automatic lapse and revocation should be the initial and final sanctions. Moreover, there should be no limitation of expiry of any time to invoke these remedies. Emphasis on compulsory licensing as a primary measure should be avoided and focus should
be on alternative remedies so as to avoid protracted and costly delays for the promotion of direct industrial use of patent information.

The concept of "legitimate reasons" which is wide, should be rather limited as the effectiveness of various remedies against non-working can be determined through the grounds on which the patentee may be legally exempted from the obligation to work the patent. Even in the light of various legislative trends in the recent past in this regard, it is submitted to give it a more precise meaning. In other words, the grounds for exemption should be limited to cover only extraordinary situations like force majeure as justification for non-working as has been the practice in Brazil and Argentina.

For the national development of developing countries it also becomes pertinent to take all necessary measures so as to deal with the cases where the patent is not in fact used for local production. In this regard, it is submitted that the focus should be on deletion of any of the provisions which regard imports as constituting working of the patent. It should be made a fundamental obligation of the patent owner to work the patented invention in the country of grant. It should also be clearly stipulated that the patents are granted so as to secure that the inventions are worked in the country of grant on a commercial scale and to the fullest extent that is reasonably practicable without delay. The term "working" should be clearly defined so as to cover, the making of the product, in case of product patents, and the use of the process in case of process patents in the granting country.