8.1 Conclusions

The current debate over patent protection tends to concentrate on the role of patent as an instrument of economic policy and development. The economical, social and cultural development of nations and societies now depend more on intellectual resources rather than materials or natural resources. It appears that today economic development and social progress are built around control over intellectual property rather than material wealth. The result was more and more emphasis on legal protection to intellectual property and the consequence was the competition among individuals and the nations to acquire more and more intellectual properties.

The patent, one among the several intellectual properties recognised worldwide, form the most important element of economic development of individuals’ as well as States’. Since time immemorial, some form of protection legal or otherwise, has been recognised in respect of inventions made by individuals on the basis of the utility or usefulness to the society at large. Now, the basic idea underlying legal protection of patent for inventions is the fact that with the help of such inventions it is possible to produce goods and services that are useful to the society and its economic development. During the course of time, various justifications for legal protection have emerged. Thus, individual and public justifications have played prominent roles in the arguments in favour of patent for inventions and other kinds of intellectual property rights.

At various periods, the idea of patent as an instrument of justice to the inventor has been advanced and rewarding inventive ingenuity seems to underlie the legal protection of patents. However, every inventor may not benefited, but the protection in the form of a monopoly over an invention enable the inventor to get the economic benefits. As against market monopoly, it has been argued that there are other methods of rewarding inventive ingenuity.

At times, patents are justified on the ground that it acts as an information system whereby an invention can be used by the society for economic development as it encourages industrial growth in the economic system.
The patent law to develop from royal grants in the form of exclusive privileges to a regular system of law took several years. It evolved in England as a form of royal grant in the form of letters patent conferring rights on individuals to practice trade and in 1311 a Flemish weaver was granted rights through letters patent to practice his trade in England.\textsuperscript{1} Thereafter, patents emerged as an exception to the rule against monopoly since the court question the grant of monopoly. Thus, Section 6 of the Statute of Monopolies, 1624 allowed the grant of monopolies “for the term of 14 years or under, hereafter to be made of the sole working or making of any manner of new manufactures within this realm to the true and first inventor and inventors of such manufacturers”.\textsuperscript{2}

Despite the Statute of Monopolies, the Crown continued to grant objectionable monopolies, which was discontinued after 1689. The Industrial Revolution in Britain brought significant changes in the law relating to patents. The need to provide every inventor with an incentive to continue expanding his creative energies in producing inventions suddenly gained centre stage and every invention, however insignificant was given due recognition.

The industrial revolution enhanced the scope of patent protection throughout the Europe. Italy for the first time, accorded statutory patent protection for “new and ingenious devices” for a period of 10 years depending upon the usefulness, but failed to accord property rights over such devices. In France, King Louis the XIV started granting patent protections under edict of Nantes.\textsuperscript{3} It was in 1762, statutory protection for a period of 16 years was granted to the inventions and by 1791, a simple registration rights was introduced. The same system prevailed throughout the Europe till 1883 Paris Convention on Industrial Property.

Till the time of independence, US followed the common law principles in respect of patent protection and while enacting the constitution, James Medicine, advocated for constitution protection for patents and other intellectual properties. The US constitution is the foundation of federal patent law and Article 1, Section 8(8) of the constitution provides “the congress shall have power to make laws to promote the progress of science and useful arts by securing for limited time to authors and inventors, the exclusive right

\textsuperscript{1} \textit{Supra}, p.23.  
\textsuperscript{2} \textit{Supra}, p.25.  
\textsuperscript{3} \textit{Supra}, p.31.
to their respective writings and discoveries”.

This provision created an encouragement wherein patents and other intellectual property rights can get adequate protection to promote industrial revolution.

Thus, in 1790, US Patents Act was passed wherein the Secretary of State was empowered to grant patents for a term of 14 years for inventions that are “sufficiently useful and important”, provided an inventor submits his specification describing the inventions.

In ancient India, knowledge was considered to be the product of the society rather than of individual creativity. However, individuals have claimed monopoly over what they have invented. For example, the medicines and other things constituting what is now called the traditional knowledge. The advent of British rule and the impact of industrial revolution led the British Government to introduce patent protection in the form of statutory privileges. Accordingly, in 1856, granting certain exclusive privileges to the inventor of new manufacture by filing a specification and privileges were confined to making, selling and using the inventions in India for a term of 14 years.

Further, certain changes were introduced to patent law in 1883 and in 1888 however, no system of patent administration was established. It was the Patents and Designs Act 1911, which replaced all the earlier Acts and established for the first time a system of patent administration by creating the offices of the Controller of Patents. It was alleged that the patent law before independence was primarily concerned with promoting the interests of foreign manufacturers than promoting innovations and industrialisation in India.

After the independence, it was thought that the intellectual property rights in general and the patent law in particular must be reviewed and in this regard, in 1948, a committee headed by Dr. Bhakshi Tekchand, a retired Judge of the High Court of Lahore appointed by the Government of India. The committee in its report revealed that the Indian patent system has failed in its purpose, namely, to stimulate inventions among

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4 Supra, p.33.
5 Supra, p.40.
6 Supra, p.41.
7 Supra, p.42.
Indians and to encourage development and exploitation of new inventions for industrial prosperity in the country.\(^8\)

On the basis of the recommendation of the committee a bill amending 1911 patents Act was introduced in the Parliament in 1953. However, the bill could not be passed and it was allowed to lapse. Subsequently, in 1957, N. Rajagopal Ayyangar committee was appointed by the Government of India to review the patent laws. The committee submitted its report in 1969, keeping in mind the factors of economic development and public interests. The committee in its report stressed the need for patent system which encourages inventors and rewards them. The committee further observed that patents were not interested in economic development of the country and therefore the patent law has to be thoroughly amended. The recommendations were enacted into law only in the year 1970, after the lapse of more than a decade and the Act in fact came into force only in the year 1972.\(^9\)

By the end of 19th century, all most all countries have recognised patent protection to new inventions subject to certain conditions. Generally, patents are a set of exclusive rights granted by a State to an inventor or to his assignee for a fixed period of time in exchange for the disclosure of an invention. An invention is the creation of intellect to produce something new and useful. Such creations become the exclusive property of an inventor on the grant of patent. Not all inventions are granted patents and every State statutorily determines the conditions for the grant of patents, the procedure for the grant of patents and the duration of the patent rights. Further, some inventions that are more useful to the society such as pharmaceuticals and other patents in the field of technology have to be regulated by the States and therefore certain stringent conditions may be imposed on their use and patent rights may be denied in respect of such inventions. Therefore every State has its own patent statutes regulating the use of patents by the patentees.

Generally a patentee has a negative right which prevents or exclude others from using, selling, offering to sell or importing the inventions. The patent law recognises the exclusive right of patentee to gain commercial advantage out of his invention.

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\(^8\) Supra, p.42.
\(^9\) Supra, p.43.
Normally, patent statutes recognise certain conditions of patentability and the inventions satisfy those conditions are granted patents. Patent law invariably recognises three conditions namely, novelty, inventive step or non-obviousness and industrial application for patent protection.

Novelty refers to a characteristic of the invention of being new, that is the invention does not form a part of the state of the art. The absence of novelty as on the priority date of claim can be a ground for revocation of the patent which may be exercised any time during the life of a patent. Thus, novelty remains an essential feature of an invention throughout the life of the patent.

Non-obviousness/inventive step measures the technical accomplishment reflected in an invention. It attempts to measure an even more abstract quality than novelty and utility. Non-obviousness asks whether an invention is an adequate technical advancement to merit the award of a patent. Even if an invention is new and useful, it does not deserve a patent if it represents merely a trivial step forward in the art. The objective of the patent system is the advancement of science. It aims to protect those, which would not be obvious to anyone skilled in the art if they had put their mind to it. It is regarded as the final gatekeeper of the patent system.

Utility of a patent is a vital requirement that should be continuously maintained for a patent to remain active. An invention “capable of industrial application” means that the invention is capable of being made or used in an industry.

The patent law may exclude inventions satisfying the above requirements on the ground of public order and morality. Therefore Section 3 of Indian Patents Act excludes certain inventions and discoveries such as frivolous inventions and inventions contrary to natural laws, inventions contrary to public order or morality, discovery not an invention, inventions pertaining to known substances etc., invention pertaining to mere admixture or arrangement, method of testing, method of agriculture or horticulture, methods of medical treatment of human and animals, plants and animal varieties, business method, computer program etc., literary, dramatic, musical or artistic work etc., scheme or Rule, presentation of information, topography of integrated circuits, traditional knowledge, inventions relating to atomic energy from patentability.
The law prescribes procedures for the grant of patents including who should apply, how to apply, examination of application, verification of claims, specification, so that only inventions satisfying the substantial requirements are granted patents. Further, the law also prescribes how a patent should be utilised for the benefit of the public and if it is not properly used, law provides for revocation for patent also. Thus, patent law is exclusively the domestic law of a country and every State has exclusive authority to prescribe rules regarding grant of patents and therefore the laws varied considerably in its cogent content from country to country.

The increase in the volume of international trade and the need to acquire foreign technology enhanced the international character of patents. The result was the increasing number of patent applications from foreigners to get patent protection in a particular country, so that infringement of patent rights in another country can be minimised. The conflicting rules domestic laws and protectionist policies by some countries led to the infringement of patent rights in foreign countries. There was the need for harmonization of patent laws so that an inventor can acquire global intellectual property rights over his invention. In this regard, international law plays an important role both in providing procedures and modalities for negotiating the norms and standards of domestically enforceable intellectual property rights and in the harmonization of national and regional intellectual property norms.

Now, international intellectual property laws play an important role in harmonising national substantive and procedural rules. However, the notion of national sovereignty and policies of protectionism pursued by nations States delayed the process of harmonization.

The harmonization process began with the Paris Convention for protection of industrial property. The Convention was primarily concerned with securing temporary protection to foreigners and to provide for a single priority date to determine the term of patents. Another important purpose of the Convention was to liberalise procedure for submitting applications for patent protection in different countries. The Paris Convention contains provisions of national treatment, right of priority, independence of patent, mention of inventor in the patent, compulsory licences and other provisions relating to revision and extension of membership. The Convention is the global intellectual property
treaty allowed investors from any signatory nation to claim priority in other nation to claim priority in other nations based on the filing of its first application. However, the Paris Convention did not provide standards relating to substantive patent laws and may be because of the opposition from major industrialised countries.

The expansion in international trade compelled even the major industrialized countries to accept certain international standards to prevent international piracy. Further increasing industrialisation in certain countries such as India, Brazil, Korea and others increased the need for international protection. This led to the conclusion of the Patent Cooperation Treaty (PCT) in 1970. The PCT, an agreement for international cooperation with regard to the filing, searching a preliminary examination of patent applications and dissemination of technical information contained in patent applications. The principal objective of PCT was to provide an effective and more economical means for applying for patent protection in several countries and an inventor has to file separate applications for each country where he seek protection for his invention.

The PCT harmonised the form and content of patent applications and established an international framework under which a unique, common procedure is established for the grant of patents. Article 27(1) provides that no national law shall require compliance requirements relating to the form or content of the international application different from or additional to those which are provided by this treaty. But the PCT provides explicitly the freedom of contracting states to prescribe substantive conditions of patentability and thus is incapable of tackling the issues relating to substantive patent law, such as definition of prior art, novelty and inventive step. Consequently the result of international search and preliminary examination do not have a binding effect on the determination of patentability at the national phase in each contracting state. The terms “form and contents of patent applications” and “substantive conditions of patentability” are not defined in the treaty, thus leaving uncertainty as to the rights and obligations of the contracting parties. Yet, PCT is considered as the most successful mechanism for international cooperation and it was believed that the inventors were going to be benefited by the treaty.

An unsuccessful attempt has been made to harmonise patent law through Draft Patent Harmonization Treaty during diplomatic conference held in Hague in 1991 to resolve certain issues relating to “first-to–file”, examination procedures, rights and
remedies granted by patent and post-grant procedures. At the same time, parallel negotiations was taking place under the auspicious of General Agreement on Trade and Tariff (GATT), which culminated in the adoption of TRIPs under WTO regime. But at the same time, harmonization of patent laws through Patent law Treaty, Substantive Patent Law Treaty continuous to take place parallel to the TRIPs. However, the TRIPs is the most significant international treaty concerning harmonization of patent laws.

The TRIPs agreement is an unprecedented international agreement in terms of its coverage, scope, specificities and enforceability. The agreement formally recognises the need to promote effective and appropriate means for the enforcement of intellectual property rights and its effect has been the harmonization of worlds’ patent law. The TRIPs requires that all signatories enact domestic legislation to implement the minimum levels of patent protection provided by the agreement. The Article 27 provides that a patent shall be available for any invention in all fields of technology provided that they are new, involve an inventive step and are capable of industrial application. Thus, TRIPs requires a patent to be made available for any invention, product or process, regardless of its field of technology. The Article 27 also sets forth clear guidelines for subject matter that may not be patentable. These exceptions include inventions necessary to protect public order or morality, diagnostic, therapeutic and surgical methods for the treatment of humans and animals and naturally existing animals, plants and essentially biological processes for the production of plants or animals.

The TRIPs agreement is binding on all WTO members and compliance with its provisions is a pre-condition of joining WTO which deals with regulation of trade at global level. The TRIPs agreement established the standards concerning the availability, scope and use of patent rights. They include: (i) basic standards for patentability and a limited list of exceptions to patentable subject matter; (ii) in terms of the availability of patents and the enjoyment of rights, no discrimination as to the field of technology, the place of invention and whether products are imported or locally produced; (iii) rights conferred by a patent and exceptions to the rights; (iv) conditions concerning the disclosure of the invention in a patent application; (v) compulsory licenses; (vi) availability of judicial review process for any decision to revoke or forfeit a patent; (vii) the term of protection and (viii) the burden of proof in deciding whether a product was
obtained by a patented process. Setting international standards on a number of issues is an extraordinary result achieved by the TRIPs agreement.

Since the beginning of the negotiations to establish WTO, the TRIPs has been widely debated and its propriety has been questioned by several countries including India. It appears that there are good reasons for such criticisms because some have raised the issue of suitability of TRIPs being part of international trade regulations. Apart from the above, firstly, it has been pointed out that the TRIPs provisions require member states to modify their patent law to suit the TRIPs agreement which may affect their ability to regulate health, agriculture, research etc. Secondly, TRIPs agreement has an adverse impact on liberal patent regime that exists in India since 1970. Thirdly, the adverse impact appears to lie in the fact that India has to amend its patent laws in such a way that such amendments may promote the interests of multinational companies. Lastly, it has been observed that the TRIPs agreement may allow some industrialized countries to reap more benefits than they deserve with the help of new patent regime.

The major consequences of TRIPs agreement was the amendments to the Indian Patents Act 1970 which differed in many respects from that of TRIPs agreement. The 1970 Act drastically restricted the rights of patent holders through careful consideration of the socio, economic impact of the patents in certain fields such as health and food. Now after becoming member of WTO, India introduced a series of amendments to the Patents Act 1970 to make it TRIPs compliant.

The first two amendments took place in 1999 and 2002 mainly to accommodate issues like exclusive marketing rights and to extend patent protection for a term of 20 years. The introduction of third amendment during 2005 for establishing product patents in the field of pharmaceuticals and food initiated intense debate on the ground of possible adverse impact on pharmaceutical sector, public health and food security.

The most prominent and controversial change has been the deletion of Section 5 of the Patents Act 1970, thereby paving the way for product patents in the area of pharmaceutical and other chemical inventions in order to fulfil TRIPs Article 27.1 requirement. Thereby India moved from a process patent system to a product patent system in 2005.
Section 3(k) of the Patents (Amendment) Act 2005 excluded ‘a computer program per se’ from the scope of patentability. The 2004 Ordinance qualified this exclusion by stating that software with a ‘technical application’ to industry or when ‘combined with hardware’ would be patentable. Owing to vigorous opposition from the free software movement, this provision was removed from the 2005 Act. The earlier portion under the Patents Act 1970 that a computer program per se is not patentable now prevails.

The Patents (Amendment) Act 2005 has defined ‘new invention’, made a critical change to the definition of ‘non-obviousness’ or ‘inventive step’, introduced a new definition for ‘pharmaceutical substance’ and expanded the exception ‘new use for a known substance’.

The 2005 Act introduced a post-grant opposition mechanism for the first time. Within a year of the patent being granted, a ‘person interested’ can challenge the issued patent on grounds that are identical to the grounds available at the pre-grant opposition stage. India is one of the few systems to provide pre-grant as well as post-grant opposition proceedings.

India’s compulsory licencing provisions are the broadest and most comprehensive of all the worlds’ patent systems. Section 92 of the Indian Patents Act allows the grant of compulsory licences on notification of the Indian Government “in circumstances of national emergency or extreme urgency or in case of public non-commercial use”. This is one area where there have been major changes, both substantive and procedural like automatic compulsory licences for Mailbox applications and compulsory licences for exports.

Indian patent law provides for a mechanism allowing the Government to use the patented inventions under certain circumstances. The 2005 Act expands the scope of ‘Government use’ provisions in some respects and reduces it in others. Government use is another effective means to curb abuse of patents. The Patents Act provides three types of Government use. Firstly, a patent is granted in India with a condition that government can import the medicines for the distribution of drugs in public sector hospitals or any other hospitals to be notified in the gazette. Secondly, Government or authorized persons can use a patent against a royalty payment. Thirdly, the Central Government can acquire a patent after paying compensation.
The 2005 Patents Act expanded the provisions of “Bolar exemption” and “Parallel imports”. Section 107-A (a) of the Patent Act excluded from infringement “the act of making, using or selling a patented invention” for the purpose of obtaining information to be submitted to a regulatory authority. The 2005 Act expanded this provision to bring even the act of “importing” within its ambit.

Section 107-A (b) provided that it was not an infringement to import a patented product provided such import was from an exporter who was “duly authorized by the patentee to sell or distribute the product”. The 2005 Act now makes such import easier by dispensing with the authorization required from the patentee. It only requires that the exporter of such patented product be “duly authorised under the law to produce and sell or distribute the product”.

India is the biggest producer of generic drugs and its companies make not only the finished tablets forms of drug, they also make generic version of raw ingredients and chemicals used in the drugs manufacture. Many of these actually export to global pharmaceutical companies to produce their brand name versions. Indian generic manufacturers are currently the world’s lowest cost producers of many of the new approximately 15 widely used drugs for HIV/AIDS. They are also the lowest cost producer of certain combinations of these drugs. India exports two third of the pharmaceutical output to developing countries, according to the WHO. In the absence of product patent protection prior to 2005, the Indian pharmaceutical industry was able to introduce new medicines in the Indian market and abroad within a short period of time at a fraction of the originator's price. Further, competition was generated among Indian pharmaceutical manufacturers because, with no product patents, many companies introduced the same products in the market. This competition, coupled with price control on essential medicines up to the mid-1990s resulted in the availability of medicines at low prices.

But India now has passed patents (Amendment) Act 2005 that eliminated 35 years of national exemption of medicines from product patent protection. The changed rules could adversely affect generic production of widely used combination tablets. The amendment Act will also prevent the production of newer medicines for any other public health needs. The reintroduction of product patentability takes away the freedom of
Indian pharmaceutical companies to introduce generic versions of new chemical entities (NCEs) in the normal course because NCEs often come with product patent protection. Under the product patent regime, a generic version of a patented NCE can be introduced in the market only by having recourse to flexibilities in the patent law, viz., patent opposition, compulsory licensing or parallel importation.

By increasing the duration of all patents to 20 years, broadening the scope of patentability and the introduction of product patents for medicines, been feared that these legislative modifications will eventually lead to higher prices in India and the product patent regime mandated by TRIPs will make even life saving drugs, particularly for diseases of the developing world, unaffordable to its vast population. The patent system would have a ‘grave impact’ on drug prices and based the danger that the indigenous drug industry would be ‘bobbed up by the foreign multinationals’. This will naturally frustrate the governmental attempt to maintain public health care system that would satisfy the needs of the poor.

Since India has been major supplier of generics including low cost antiretrovirals and is the one of the very few developing countries with a sophisticated pharmaceutical industry capable of producing generic versions of new drugs, it also matters for rest of the developing world. India has stopped producing affordable generic versions of new medicines. This means that vital medicines for treating AIDS and other diseases will be more expensive throughout the developing world. The threat of high priced new medicines matters for health care in India, which has more people living in absolute poverty.

The importance of the agricultural sector in developing countries cannot be overstated. Agriculture provides food and jobs and is often the basis of community life. A resilient agricultural sector requires a highly diverse range of plants and animals in order to keep breeding varieties that can cope with disease, changes in climate and other challenges that farmers, fishers and herders face.

IPRs jeopardize agricultural diversity essential to present and future food supplies– yet they are becoming increasingly prevalent in agricultural sectors for several reasons. IPRs are a useful way to maximize profits, essential to the private sector who increasingly dominates all aspects of agriculture. In parallel, the rapid development of
biotechnology and genetic engineering has multiplied the potential value of genetic resources and thus the desire of companies to have legal means – via IPRs – to benefit from that potential. Furthermore, the World Trade Organization (WTO) Agreement on Trade-Related Intellectual Property Rights (TRIPS) has made minimum IP standards in agriculture a requirement for all its Members, thus serving, since the mid-1990s, as a vehicle for raising IP standards all over the world.

Since the beginning of the 20th century, food production has been increasingly monetized, making farmers throughout the world more dependent on suppliers of inputs (such as chemicals, credit and machinery) on intermediaries (for transport and processing) and on buyers of farm produce (retailers). What food is produced, how and at what price it is sold is, in many places, determined by a handful of private companies who provide agriculture-related goods and services.

In most of the developing world, seed breeding continues to be carried out by farmers. However, scientific and technological advances in the early 20th century opened the way for private companies to become major players in industrialized country seed markets. A significant contributing factor to the gradual corporate dominance of seed breeding was the development of hybrids. Hybrids offer farmers uniform crops (well-suited to mechanized, industrial agriculture) and – often – higher yields. Crucially, as hybrids only produce true hybrid crops once, a farmer wanting to continue producing those crops has to buy new seeds each year – thus ensuring a relatively stable market for commercial hybrid producers.

The seed industry is now developing new technologies to limit plant reproduction, the most contentious being seeds genetically modified to produce sterile offspring or to propagate only if applied with a certain chemical. These technologies have not yet been mainstreamed and much of the industry’s efforts are focused on promoting legal means, via intellectual property rights, to control seeds. Farmers cultivating patented seeds do not have any rights over the seeds they plant; they are merely licensees of a patented product. When buying patented seeds, farmers are often obliged to sign contracts agreeing not to save, re-sow or exchange the seeds.

Patents will reduce access to seeds and genetic resources to farmers and breeders. It could also make seeds more expensive for the small farmers because of royalty
payments, restrictive contracts and increased commercialisation. Once the seed is planted companies can insist that farmers purchase new seed every year. This compromises farmers’ rights to save, grow, exchange and sell (protected) seed.

The stronger patent protection provided by the Patents (Amendment) Act 2005 would have impact across all the technological sectors. In complex technology areas that have multiple applications (such as information and communication technology, biotechnology), patented technologies would increasingly dominate the market. A substantial amount would have to be spent by Indian firms towards royalties and license fees.

There has been a lot of controversy on the role of intellectual property protection regime especially the patent system in fostering innovation, technology and industrial development of a country. Intellectual property protection is expected to encourage innovation by rewarding the inventor with the grant of monopoly rights over the commercial exploitation of their inventions for a specified period. On the other hand, strong Intellectual Property regime may inhibit diffusion of knowledge and even technology development in the countries that are technology followers. Against this backdrop, the ongoing attempt to harmonize and strengthen intellectual property regimes world wide as a part of the TRIPs agreement, appears to be adversely affecting the technological activity in developing countries by choking the knowledge spillovers from industrialised countries to developing countries.

Notwithstanding the controversy relating to TRIPs, it is often claimed that the patent regime will help innovation, transfer of technology, attract Foreign Direct Investment which resulting overall economic development and the prosperity of the world. However, it is claimed that these rules of international law relating to intellectual property will be used by industrialized countries to promote their interest at the cost of others.

Despite several amendments introduced into the patent law to make it TRIPs compliant, it is argued that the Indian patent law is still not completely in conformity with TRIPs agreement. This is because the Section 3(d) of the Act narrowly defines ‘new use’ doctrine and excludes from patentability the new use of an old substance with intention of preventing ‘ever-greening of patents’. The Supreme Court of India rightly upheld the
provisions and in *Novartis AG v. Union of India* case asserted that every State has the power to determining what should be patented. However some pharmaceutical companies have reacted to the decision.

Despite such criticisms, the Indian Patent Law is TRIPs compliant and certain deviations from TRIPs standards are necessary to protect the legitimate interests of India and its population.

### 8.2 Suggestions

The patent regime in India is now almost TRIPs compliant. As has been pointed out TRIPs compliant patent regime under certain circumstances adversely affect the interests of the developing country like India and its poor population. For the purpose of strengthening the Indian economy, of promoting welfare of the poor population and to develop native technology, it is believed that certain changes have to be incorporated into the patent regime on the basis of following suggestions:

1. The provisions of the TRIPs relating to the subject matter of patents must be liberally interpreted and thereby provide the member states certain amount of liberty in respect of inventions for which patents may be granted. This is because to promote and protect certain other obligations arising out of other provisions of international law such as international human rights.

2. TRIPs agreement allows certain industrialised countries to take undue advantages of the rules of international law, it is necessary to give powers to the members of WTO to modify the scope of patent rights on certain grounds like public emergency.

3. To meet certain emergencies like public health, spread of epidemics, patented drugs and medicines must be made available by the international community or enable contracting parties to restrict or regulate monopoly enjoyed by the patent holder.

4. The TRIPs agreement directly or indirectly allows non-state entities especially multinational companies to control the production, supply, distribution of food and medicines which may adversely affect the interests of the developing and least developed countries. To enable such countries certain exceptions to monopolies have to be introduced in respect of scope and content of patent rights.
5. Often the TRIPs agreement was justified on the ground that it encourages economic development through technology transfer, but in reality it has become an impediment and therefore some special provisions have to be introduced to facilitate smooth transfer of technology from developed countries to the developing and to least developed countries.

6. It is often claimed that multinational companies engaged in food and agricultural sector and also the pharmaceutical sector, are not concerned with developing food and medicines useful to the poor population. However, they were indulging in research in such areas like teeth whitener vitamin food and the like. Hence, it is suggested that the countries must have liberal access to patented food and medicine. For example, certain life saving drugs and drugs used for treatment of deceases like AIDS, Dengue, Malaria, etc.

7. One reason attributed to the ever increasing patent rights is the economic benefit associated with patent monopoly which may often involve third world countries to spend their resources in acquiring foreign patents. To curb this tendency domestic regulations have to be made, which may appear to be in conflict with TRIPs.

8. It is alleged that the granting of patents to biological subject matter would increase multinational companies’ control over natural resources and to prevent this it is suggested that biological and natural substances even though modified by invented biotechnological processes shall not be patented.

9. In order to protect the interests of the formers, it is suggested that biological products like seeds shall not be patented unless they are produced only through novel biotechnological process.

10. There is a tendency to claim patent rights to certain products by slightly modifying their natural content like vitamin enriched rice, wheat etc., only to have market monopoly and to exploit gullible consumers. To discourage such practices the products with high natural content shall not be patented even though the process by virtue of which their content was modified may be given.

11. It is observed that the ever increasing patent claims to modified natural products led to bio-piracy and therefore, it is suggested that the modified biological substances should not be patented.
12. Patenting of modified natural products adversely affects innovations by the formers and ordinary people and therefore the patent should not affect knowledge generated by common man. This involves according greater protection to the traditional knowledge of the people.

It is believed that the ongoing process of harmonization of patent law having its virtues in developing uniform standards of patentability and patent procedures throughout the world. Yet, it has its own limitations particularly in protecting the interests of the developing and least developed countries. To mitigate hardships that may be caused to such countries including India, it is asserted that the above suggestions if incorporated would be of some benefit.