Chapter - I

History of Patent System
In India
HISTORY OF PATENT SYSTEM IN INDIA

Of the entire living creature’s only man has been endowed with intellectual mind and the same has been effectively utilized by him in improving his standard of living right from the time immemorial. Intellectual property is the property which has been created by exercise of intellectual faculty. India has a long and creditable record of protection of intellectual property right through a system of well developed substantive laws and established legal and administrative infrastructure for the enforcement of Intellectual Property Rights (IPR).

Intellectual property is a world wide accepted instrument which is created by human brain or scholarly faculty, most of the time which requires fierce study and research. More commonly, Intellectual Property (IP) covers internationally recognized instruments which include concept, protection, exploitation of natural things and novel creation or invention as well as innovation. Intellectual Property Law (IPL) within its scope covers patent, trade secret, copyright, know-how, industrial design, trade marks and so on. This list is not complete rather it is increasing in the concurrent dynamic society with fast changing thoughts and culture.

‘Intellectual Property Legislation’ relates to the acquisition and use of a range of rights covering different types of creations, including creations of an aesthetic character (e.g. artistic works and industrial designs), technologies (e.g. patents) as well as information and signs of a purely commercial value (e.g. trademarks).

The primary object of the IPL is to safeguard intellectual creations which are either in written form or expressed and to define their boundary areas in the interest of society. Every law must have public oriented goals and

on this point IPL is not an exception. It has some objectives to achieve for the promotion of intellectual culture, political and economic expectations. International conventions, treaties, e.g. World Trade Organization (WTO), Agreement on Trade Related Aspect of Intellectual Property Rights (TRIPS), Berne convention, Doha Convention have had great impact on development and protection of IP and in encouraging original and novel creation worldwide. Therefore, United Nations had set up certain guidelines which were to be followed by all the member countries and signatories within certain period by amending and passing their own domestic laws according to their own circumstances.

Ideas and knowledge are ever increasingly important part of trade. Most of the value of new medicines and other high technology products lie in the amount of invention, innovation, research, design and testing involved. Films, music recordings, books, computer software and on-line services are bought and sold for the information and creativity they contain and not for the plastic, metal or paper, used to make them.3

The best known and arguably economically, the most valuable form of protections of rights by the law of intellectual property come in the form of the patent. A patent is in essence, the grant of a monopoly is not absolute; patents are only granted for a limited period and are accompanied by public discloses enabling others in the field to consider and perhaps subsequently improve on it.

The oldest example to grant of exclusive rights, by kings and rulers to private inventors and innovators to practice their new arts and skills goes back to the fourteenth century when Flamish and Brabant the clock makers were induced to settle in England, which at that time was a developing country when compared to continental Europe. The English kings also summoned foreign craftsmen from Belgium, Holland, France and Italy to England. They were

3. Ibid.,
granted the privilege to run their business for limited time for the sole purpose of rapid introduction of their skills to its negative populations.4

The original use of patents had little to do with the present predominant assumption that Patents are effective instruments for stimulating and rewarding inventions and innovations. In the beginning patents referred to letters patent (a literal translation of the Latin Litterae patents). The adjective patent means ‘Open’. Originally Patent referred to the patent letters or open letters which were official documents by which certain privileges/rights, ranks or titles were conferred by sovereign rulers. They were open because they were publicly announced and had a seal of the sovereign grantor. The openness had nothing to do with disclosure of an invention as is commonly assumed in the present day context.5

Litterae patents had their beginning in the sixth century in Europe. For the discovery and conquest of foreign lands Charters and letters were issued by European monarchs. They were used for colonization and for establishing import monopolies. The Charter granted to Christopher Columbus is a crystal example of it. The most frequent phrase used in the Charter was the conjunction of the two verbs ‘discover’ and ‘conquer.’ It was used seven times to assert rights to all islands and main lands before their discovery. Columbus intended to sail to India but landed in America by mistake, it is interesting to think through the fact that what Columbus carried as a piece of parchment was the potential right to own India. It was instead used to ‘conquer and own’ the lands of America’s indigenous people and hence they have been called Red-Indians ever since as a reminder of Columbus mistaken discovery. Thus the history of Patents has been associated with colonization.

It’s evident from the above noted example that the right conferred by a patent is a right to exclude others from making, using or selling the patented

invention during the term of the patent or for a limited period in consideration of the disclosure of the invention to the public. Thus it can be said that a patent is a contract between society as a whole and individual inventor to encourage the disclosure of information to the public by rewarding the inventor for his or her endeavours. In other words, patent is an exclusive right granted to a person who has invented a new and useful article or an improvement of an existing article or a new process of making an article. It consists of an exclusive right to manufacture the new article according to the invented process for a limited period. After the expiry of the donation of patent anybody can make use of the invention.

A patent is not granted for an idea or principle as such but for some article or the process of making some article, applying the idea. On the expiry of the life of the potent the public are enabled to work the invention themselves and in competition with each other.  

**Patent: Position in Different Countries:**

The history of patents and patent laws is believed to have started in Italy with a Venetian Statute of 1474 which was issued by the Republic of Venice. They issued a decree by which new and inventive devices, once they had been put into practice, had to be communicated to the Republic in order to get hold of legal protection against potential infringers. The period of protection was 10 years.

Patents, however, existed before the law. The first Italian patent was actually awarded by the Republic of Florence in 1421 and from the available evidence it can be suggested that something like patents was used among some ancient Greek cities. In 500 BC, in the Greek city of Sybaris (which is now located in southern Italy), people were encouraged to discover any new

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refinement in luxury. Profits arising from this discovery were secured to the inventor by patent for a period of a year.

England

The Crown of England issued letters of patent providing any person with a monopoly to produce particular goods or provide particular services. The first such letter was granted by Henry VI in 1449 to a Flemish man for a 20 year monopoly for his invention.

This was the beginning of a long tradition by the English Crown of awarding patent letters which granted monopolies to favour people or to the people who were prepared to pay for them. This process was used to raise money for the Crown, and was widely abused, as the Crown granted patents in respect of all sorts of common goods (salt, for example). Consequently, the Court interrupted and limited the circumstances in which patents could be granted. After public remonstration, James I of England was compelled to revoke all existing monopolies and it was declared that they were only to be used for ‘projects of new invention’. This was then assimilated into the ‘Statute of Monopolies’ in which Parliament constrained the Crown's power explicitly so that the King could only issue letters patent to the inventors or introducers of original inventions for a fixed number of years.

The lawyers of the English Court during the reign of Queen Anne (1702-1714), developed a new requirement that a written description of the invention must be submitted. These developments, which were in place during the colonial period before independence of the U.S., were the basic foundation of patent law in United States, New Zealand and Australia.

James Puckle’s 1718 patent for a machine gun is considered to be one of the first to be required to provide a ‘specification’- written description. The famous patent of Arkwright for spinning machines became void for the lack
of an adequate specification in 1785, after its existence of 10 years. Extensive litigation on Watt's 1796 patent for steam engine set out the important principle that valid patents could be granted for improvement in a known machine.

However, patent had become extremely in-efficient by the mid of 19th century. The great exhibition of 1851 accelerated demand for patent reform. The patent office was introduced to meet the public concerns over this state of affairs and was established by the Patent Law Amendment Act of 1852. A successive Act in 1883 brought into existence the Office of Controller General of Patents and a staff of Patent Examiners to perform a limited form of examination, but without any investigation into novelty. One of the important milestones in the development of British Patent System was the Act of 1902, which introduced a limited investigation into the novelty of invention before granting a Patent.8

In the United Kingdom, the Patents Act, 1977 synchronized UK patent law with the European Patent Convention. Therefore, UK patent law is no longer based on the Statute of Monopolies, but a combination of UK and European practices. Inadvertently, the current length of UK/EU patents is still 20 years which is similar to the original declaration by Henry VI on the manufacture of stained glass (destined for Eton College).

United States

A few inventors were able to obtain monopolies (i.e. "patents") to produce and sell their inventions during the period of America's Thirteen Colonies. These monopolies were granted by petition to a given colony's legislature.

8. Available at- www.ipo.gov.uk/types/patent/p-about/p-whatis/p-history
For example, the Province of Massachusetts Bay granted inventor Joseph Jenks Sr., in 1646, the exclusive right to set up water mills using a speedier engine which he had developed for making edged tools, such as scythes. His monopoly was to run for 14 years. James Madison and Charles Cotesworth Pinckney proposed The Patent and Copyright Clause of the US Constitution in 1787. In Federalist No. 43, Madison wrote, 'The utility of the clause will scarcely be questioned. The copyright of authors has been solemnly adjudged, in Great Britain, to be a right of common law. The right to useful inventions seems with equal reason to belong to the inventors. The public good fully coincides in both cases with the claims of the individuals.' The Patent Commission of the U.S. was created in 1790. The first three members of this commission were, Secretary of State Thomas Jefferson, Secretary of War Hemy Knox and Attorney General Edmund Randolph.  

Samuel Hopkins of Philadelphia was granted the first patent on July 31, 1790 for a method of producing potash (potassium carbonate), an essential ingredient used in making soap, glass, and gunpowder.

The earliest law required that a working model of each invention be submitted with the application. Patent applications were examined to determine if an inventor was entitled to the grant of a patent but later the requirement for a working model was eventually dropped.

The Patent Law was revised in 1793. The rate of patent grants had grown to about 20 per year and the time burden on the Secretary of State was considered to be too burdensome. Patent applications were no longer examined. Patents were granted simply by submitting a written description of an invention, a model of the invention, if appropriate, and paying a fee of $30 ($1000 in 2006 US dollars). (35 U.S.C. Sec. 112) requires a written description.

9. Available at www.ipo.gov.uk/types/patent/p-about/p-whatis/p-history
The Commissioner of the USPTO may ask for additional information, patent drawings, or diagrams if the description is not clear.

The Patent Board was replaced by a clerk in the Department of State. James Madison, Secretary of State, created a separate Patent Office within the State Department and he appointed Dr. William Thornton as its first superintendent in May 1802. On May 5, 1809 Mary Dixon Kies became the first woman to be awarded a U.S. patent. In that same year a Philadelphia court ruled that all patent holders were "in violation of public rights." The ruling was overturned a short time later. In 1810, the Patent Office moved from the Department of State to Blodgetts Hotel. In the same year, they opened the patent model storage to the general public.

The patent laws were again revised in 1836. The examination of patent applications was reinstituted. The number of patents granted per year had grown to about 700. Also in 1836 the government began construction of what is now called the Old Patent Office Building, where the offices and models were housed from 1840 until 1932. The Patent Office is now housed in its own building in Alexandria, Virginia.

The first 10,000 patents issued by the USPTO from July 1790 to May 1836 were destroyed in a fire in December 1836. About 2800 of them were later recovered, but the majority of them are still missing. The recovered patents are now called X-Patents because their patent numbers end with an "X."

In 1870 Congress passed ‘an Act to revise, consolidate, and amend the Statutes relating to patents and Copyrights’ (16 Stat. 198). This law mainly reorganized and re-enacted existing law, but also made some important changes, such as giving the commissioner of patents the authority to draft rules and regulations for the patents office.
From 2005-2009, three consecutive US congressional sessions have attempted to pass a patent reform act that would shift the US to a first-to-file rule, limit damages for patent violations, and provide patent defendants more methods for defence. The most recent being the Patent Reform Act of 2009.

Evolution of Patent System in India

The base of Indian laws is the Anglo Saxon jurisprudence. However in India a patent has always been the sole creation of statutes, quite unlike Great Britain where the concept of a patent originated from the exercise of the royal prerogative to grant monopolies.

Growth of Patent Law in India till 1950

Origins of India’s patent law of the nineteenth century are sheathed with considerable legal controversy. The Attorney General supported by the Solicitor General-in-Council, in response to a letter of 23 September, 1835 by the Governor General-in-Council, were firmly of the opinion that the existing government of India, if it could be called that, could not confer ‘exclusive privileges’ as that would conflict with the privilege of the Crown. Despite being warned by the Governor General in a minutes of 3 February 1841 that India was much too backward so that it would be cheaper to import rather than manufacture in India, anxious to press for such exclusive privileges, the Court of Directors of the East India Company were interested to proceed for legislation in this area. Parliament's compromise in 1853 (Chapter xxvi of 16 and 17 Victoria) produced a response which was unmanageable and which dealt with the problems of the royal prerogative rather than the specific problems of ‘exclusive privileges’. There were no laws and regulations made by the Governor General in council which could trespass on the royal
prerogative with the previous sanction of the Majesty and counter signed by the President of the Board of Commissioners.¹⁰

To examine the various issues a select committee was appointed which tried to balance the competing rights of the ‘actual inventor’ the manufacturer and importer, giving the actual inventor some limited rights against others. Other than routine questions the other major issue concerned whether the preliminary inquiry as to the novelty of the alleged invention would be limited to India, India and England or the whole world. English patent holders were allowed to register patent in India within six months of Registration in England. Later in July, 1855 was the Bill introduced which received the Governor's consent as an Act for granting exclusives privileges to the inventors.¹¹ This bill was considered as first Act relating to patent of 1856 which granted certain exclusive privileges to inventors for the period of 14 years, which was repealed the very next year by the Act (IX) of 1857 for the strong objection of the Court of Directors of the East India Company that the Act though passed by the legislative council and approved by the Governor General, had not received their consent.

In India the first real patent legislation was the Act (XV of) 1859 -“Act for granting exclusive privileges to inventors”, which required exclusive privileges to have some utility, to not have been published or generally publicly known and not to be enlarged consequently by amendment of specification so as to ensure that English patents holders could acquire a right to Indian markets or manufacture, they could register their patents within 12 months of the registration in England. The general transnational right to priority that was to become such an important part of the use of patents for world market domination under the Paris Convention 1883 was quite similar to this Act. In

¹¹ Ibid.
this case in point it was more limited (in that it applied only to India and England) and one sided as it was an option available only to English patent holders.

Protection of designs was included in ‘The Pattern and Designs Protection Act, 1872’ which was not covered by previous legislation; and the Inventions and Designs Act, 1888 protected inventions disclosed at exhibitions were for their novelty. Both these changes were fuelled by the prevalent ideological belief in scientific and industrial creativity. People were encouraged to bring their creative ideas into the public domain and they were offered protection for the exclusive economic rights for the exploitation of such creativity. Whilst the debate continued to honour the inventor’s creativity, the art of protection was clearly rendered to the industrialist, manufacturer and importer. The existence of such patent legislation in India would also ensure an overall subtle control on important manufacturing, distribution and commodity movements within and into and out of India.

A new consolidating Act was brought in to deal with inventions and designs separately. The untidy encroachments of previous legislation were assimilated into this new Act. According to this Act exclusive privileges could be awarded for seven and in exceptional cases fourteen years by a simplified procedure and relatively modest fees. The inventor would be called upon to elucidate how and in what best possible way the invention or design would be used. But some newly introduced features created a controversial wave of interest at the Pairs Convention in 1883 and they remain important to our national and international discussion about patent law. The first of these concerned the rights of the Government. Though the ‘crown’ was bound by the exclusive privileges, only on the terms which were either mutually agreed or decreed by the Governor General these privileges could be used by the government. The second was the awarding of compulsory licenses where the
'exclusive privileges' was not being worked to best advantage or at all in India or where the reasonable requirements of the public were not being met.

"Exclusive privileges" were replaced by the term "Patent" in the Indian Patents and Designs Act, 1911. For the first time in India, this act established a system of patent administration under the management of the controller of patents. Till the arrival of patents Act 1970, the 1911 legislation determined pre-set time limits for processing application keeping them secret while they were being processed, providing a time boxed framework for objections, better administration arrangements and a clarification of the substantial rules about use and compulsory licensing in the event of insufficient or inadequate use.

The Indian Patent and Designs (Amendment) Act 1920 provided the possibility of reciprocal arrangements as regards the right to priority to file patents in other countries which were part of Britain's Dominion. This emerged because India was not a member of the Paris "International Convention for the Protection of Industrial Property" of 1883. Now, with some tact and diplomacy, a kind of Paris Convention could, in fact be incrementally set up for the Empire.

The Indian Patent and Designs Amendment Act, 1930 extended the period of patents from fourteen to sixteen years, provided for disputes to be settled by the High Court rather than the government, made it possible to grant a patent of addition for the rest of the duration of the patent in respect of any additions improvements and modifications and allowed certain patents relating to defense to be made secret if assigned to government. The Indian Patents and Designs (Amendment) Act, 1945 made it possible to apply for a provisional specification which could be matured into a complete specification within nine months.
Position of Patent Law 1950 Onwards

At this point of time the Government of India appointed the Patent Enquiry Committee to review the working of the patent laws in India. It was presided by Justice Bakshi Tek Chand, a retired judge of the Lahore High Court. Apart from a number of complaints about the working and administration of the system the committee passed somewhat sober verdict that:

"The Indian patent has failed in its main purpose, namely to stimulate invention among Indians and to encourage the development and exploitation of new inventions for industrial purposes in the country so as to secure benefits thereof to the largest selection of the people." 13

To make it sure that the patent system is beneficial to the national interest, the points to be worked upon were:

• to survey and report on the working of the patent system in India;
• to examine the existing patent legislation in India and to make recommendations for improving it, particularly with reference to the provisions concerned with the prevention of abuse of patent rights;
• to consider whether any special restrictions should be imposed on patent regarding food and medicine;
• to suggest steps for ensuring effective publicity to the patent system and to patent literature, particularly as regards patents obtained by Indian inventors;
• to consider the necessity and feasibility of setting up a National Patents Trust;
• to consider the desirability or otherwise of regulating the profession of patent agents
• to examine the working of the Patent Office and the services rendered by

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13. Id. Para 5 p. 2.
it to the public and make suitable recommendations for improvement; and
• to report generally on any improvement that the Committee thinks fit to recommend for enabling the Indian Patent System to be more conducive to national interest by encouraging invention and the commercial development and use of inventions.

The interim report was submitted by the said committee on 4\textsuperscript{th} August, 1949 recommended the prevention of misuse or abuse of patent right in India and suggested amendments to sections 22, 23 and 23A of the Patents and Designs Act, 1911 on the lines of the United Kingdom Acts 1919 and 1949.

It was also observed by the committee that the Patents Act should contain clear indication to ensure that food and medicine and surgical and curative devices are made available to the public at the cheapest price commensurate with giving reasonable compensation to the patentee. On Committee’s recommendation, the 1911 Act was amended in 1950 (Act XXXII of 1950) in relation to working of inventions and compulsory license/revocation. Other provisions were related to endorsement of the patent with the words 'license of right' on an application by the Government so that the Controller could grant licenses. In 1952 (Act LXX of 1952) an amendment was made to provide compulsory license in relation to patents in respect of food and medicines, insecticide, germicide or fungicide and a process for producing substance or any invention relating to surgical or curative devices. The compulsory license was also available on notification by the Central Government. Based on the recommendations of the Committee, a bill was introduced in the Parliament in 1953 (Bill No.59 of 1953). However, the Government did not press for the consideration of the bill and it was allowed to lapse.\textsuperscript{15}
In 1957, the Government of India appointed Justice N. Rajagopala Ayyangar Committee to examine the question of revision of the Patent Law and advise government accordingly. The report of the Committee, which comprised of two parts, was submitted in September, 1959. The first part dealt with general aspects of the Patent Law and the second part gave detailed note on the several clauses of the lapsed bills 1953. The first part also dealt with evils of the patent system and solution with recommendations in regards to the law. The committee recommended retention of the Patent System, despite its shortcomings. This report recommended major changes in the law which formed the basis of the introduction of the Patents Bill, 1965.

Based on these studies, Committees made recommendations for the modification of the Indian Law relating to patents, so as to make the patent system an effective tool for our industrial and economic growth. This Patent Bill of 1965 mainly based on recommendations of the detailed report incorporating a few changes in the light of further examination made particularly with reference to food, drugs and medicines was introduced in the Lok Sabha on 21st September 1965. It was referred to a Joint Committee with the amended Bill was presented to Lok Sabha on 1st November, 1966. The Patent Bill 1965 as reported by the Joint Committee was formally moved in Lok Sabha on 5th December, 1966 but could not be proceeded with for want of time and eventually lapsed with the dissolution of the third Lok Sabha on 3rd March, 1967. Again an amended bill known as Patent Bill, containing comprehensive provisions to amend and consolidate the law relating to patents and also embodying the amendments recommended by the Joint Committee was introduced in the budget session of the fourth Lok Sabha on 12th August, 1967 as a fresh bill of 1967. Then it was referred to another Joint Committee of Parliament. The Joint Committee after considering the various representations written memoranda and oral evidence before them presented
their report with the amended Bill to Lok Sabha on 27th February, 1970. While giving a brief note on the recommendations of the two committees during the discussion the then minister of Commerce and Industry Dr. Dinesh Singh said:

"These two reports contained very valuable information on the origin and development of the patent system, the experience of various countries of the world on the part played by the patent system in their industrial development and its relevance to India in the present context."16

"Historically speaking the concept of patents is based on two main legal and social justifications. One that the patents are private property, that is to say that the inventor has exclusive right in his invention and the other that they are privileges for a limited period granted by Government to encourage research and invention and to induce researchers to disclose their inventions for industrial exploitation thereby providing new avenues for economic growth and development."17

Further the minister said, we have to see how we can make patents serve the needs of our economy, how can we make them a vehicle of rapid growth. As a developing country where a bulk of patents are foreign owned, we have also to see whether on balance, the patent system can play a useful rule in the transfer of technology from the developed countries or whether it will lead to greater exploitation.

Dr Sushila Nayar from opposition in support to Mr. Dinesh Singh observed that, "two committees in their report showed that all of the patents that were applicable in India only 10 per cent were those of Indians. This showed that even after independence it was foreigner who got the benefit out of patent and not the Indians by and large. She further pointed out that the

16. Lok Sabha Debate 20 August 1970
17. Ibid
area of drugs in the whole area of patents given, you find that not more than 5 per cent of those are drugs out of the 10 per cent of those given to Indians."

She further mentioned that some years ago the American Senate had appointed a committee called Kefauver Committee to examine the investment, cost structure and the cartels that have been set up. The committee came to the conclusion that 6 per cent was being spent on research and 25 percent on sale promotion by the drug industry. This shows that money spent on research is just a fraction of what they spend on advertisement and sales promotion.

Dr. Nayar while quoting an example said, "It is for Government to ensure that the generic names are displayed clearly and as prominently as the trade names and secondly that a curb is put on too many products of similar nature. This will reduce expenditure on sale promotion it is necessary to see that patents are only given to genuine new inventions. This Bill has made a provision for that. If that is properly applied, it will be good for our country...... The present bill provides power for the Government to import for the hospitals, dispensaries and other institutions of a non-profit nature. This is a very welcome step and I am sure this will give considerable relief immediately."

With the concluding remarks Mr. Veni Shankar Sharma said, "Inventors in our country are brilliant, they work for self satisfaction which can never be measured in money. Money is required only by capitalists. I want these inventors to be awarded. They should be given national awards. We should give them an award as generous as Nobel Prize, to give them the respect they deserve." 18

After threadbare discussion in the Parliament the Patents Act, 1970 was ultimately passed. This Act repealed and replaced the 1911 Act so far as the patents law was concerned. However, the 1911 Act continued to be applicable

18. Ibid
to designs. Most of the provisions of the 1970 Act were brought into force on 20\textsuperscript{th} April 1972 with publication of the Patent Rules, 1972.

This Act remained in force for about 24 years without any change till December 1994. An ordinance effecting certain changes in the Act was issued on 31\textsuperscript{st} December 1994, which ceased to operate after six months. Subsequently, another ordinance was issued in 1999. This ordinance was subsequently replaced by the Patents (Amendment) Act, 1999 that was brought into force retrospectively from 1\textsuperscript{st} January, 1995. The amended Act provided for filing of applications for product patents in the areas of drugs, pharmaceuticals and agro chemicals though such patents were not allowed. However, such applications were to be examined only after 31-12-2004. Meanwhile, the applicants could be allowed Exclusive Marketing Rights (EMR) to sell or distribute these products in India, subject to fulfillment of certain conditions. The second amendment to the 1970 Act was made through the Patents (Amendment) Act, 2002 (Act 38 of 2002). This Act came into force on 20\textsuperscript{th} May 2003 with the introduction of the new Patents Rules, 2003 by replacing the earlier Patents Rules, 1972.

The third amendment to the Patents Act, 1970 was introduced through the Patents (Amendment) ordinance, 2004 w.e.f. 1\textsuperscript{st} January 2005. This ordinance was later replaced by the Patents (Amendment) Act, 2005 (Act 15 of 2005), on 4 the April, 2005 which was brought into force from 1-1-2005.

**Meaning of the Term Patent**

Patent means a grant of some privilege, property or authority made by the government or the sovereign of the country to one or more individuals. The instrument by which such grant is made is known as Patents.\textsuperscript{19}

According to the statutory meaning in India "Patent" means a patent for any invention granted under this Act.\textsuperscript{20} Patent is a grant by the Government to the inventor for a limited span with a privileged right to make use, exercise and sell his invention. It conveys to the inventor substantive rights and secures to him the valuable monetary right which he can enforce for his own advantage either by using it himself or by conveying the privileges to others.

Thus patent is sole right granted to a person who has invented a new and useful article or an improvement of an existing article or a new process of making an article. It consists of an exclusive right to manufacture the new article according to the invented process for a limited period. After the expiry of the duration of patent anybody can make use of the invention.

**Object of Patent Law**

The main aim or object of patent law is to protect the interest of inventor by rewarding him the monopoly right for that invention it is a legal reward to a person stimulates technology and industrial growth as a tool which to encourage for further invention, it is also a tool to stimulate technology and industrial growth.

In a significant judgments M/s Bishwanath Prasad Radhey Shyam v Hindustan Meta Industries,\textsuperscript{21} has aptly explained the object of patent law in the following words: "The object of patent law is to encourage scientific research, new technology and industrial progress. Grant of exclusive privilege to own use or sell the method or the product patented for a limited period stimulates new inventions of commercial utility. The price of the grant of the monopoly is the disclosure of the invention at the patent office which after expiry of the fixed period of the invention passes into the public domain."\textsuperscript{22}

\textsuperscript{20} The Patents (Amendment) Act, 2005 Sec.2 (1) (m)
\textsuperscript{21} AIR 1982 SC 1444
\textsuperscript{22} Id., para 17 p.1447
The considerations which are said to constitution the *quid pro quo* for the grant of a patent monopoly are.

1. The working of the invention within the country so as to result in the establishment in the country of a new industry or an improvement of an existing industry which would profitably employ the labour and capital of the country and this increases the national wealth.

2. It induces the inventor to disclose the invention rather than keeping it as a trade secret.

3. It also encourages the public to work the invention themselves and in completion with each other significance of patent law in the field of industrial enterprise, research and development are the key factors for economic prosperity of a nation. Monopoly right to the inventor induces him more and more in the field of research and technological developments. In almost all countries some kind of patent protection for invention has been adopted. The ever increasing number of applications for patent received by the patent offices in all industrially advanced countries is an indication of the universal recognition of the value of a patent system. Most of the discoveries and inventions made in technology in all fields are published in the patent specifications field at the patent offices of different countries. A world wide exchange of technical information has been made possible only by the publication of such patent specifications. But of the existence of patent system which enable the inventors to disclose their invention without fear of the benefits of their labour being last to competitors much of the technological innovations would have remained secret. "^23

Superiority and prosperity of USA in all sphere of technological and industrial area can be attributed to its strong and vibrant patent regime.

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History of Patent System in India

Essential requirements of a patent

Not all inventions are patentable. In order to qualify the patent protection an invention must fulfill three requirements:

(1) Novelty
(2) Inventive step
(3) Utility

*In Imperial Chemical Industries v. Controller General of Patents Designs and Trade Marks,*\(^{24}\) it was held that the following propositions are the salient features of a patent.

1. The patent must be in respect of an invention and not a discovery.
2. In respect of one single invention there must be one single patent
3. A patent may be in respect of a substance or in respect of process
4. But it is not possible to bifurcate a patent and state that one relates to the substance
5. In order to have a complete patent the specifications and the claims must be clearly and distinctly mentioned.
6. It is the claims and claims alone which constitute the patent.

Under Section 2 (1) (j) of the Patents (Amendment) Act, 2002 a patent can be obtained only for an invention which is new and useful. An invention is defined as follows: *"Invention means a new product or process involving an inventive step and capable of industrial application."*

A patent can be obtained only for an invention which is new and useful. The invention must relate to a machine article or substance produced by manufacture, or the process of manufacture of an article. A patent may also be obtained for process of manufacture. In regard to medicine or drug and certain

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\(^{24}\) AIR 1978 Cal 77 p. 82.
classes of chemicals no patent is granted for the substance itself even if new but a process of manufacturing the substance is patentable.  

Value of patent system has now been realized at global level. This is evident by the fact that almost in all advanced countries the number of patents granted has shown substantial increase. Now India has also brought its patent legislation modified to bring it in tune with Trade Related Aspect of Intellectual Property Rights (here in after TRIPS) requirements.

Subject Matter of Patents or Patentability Criteria

In Bombay Aggarwal Co. Akola v. Ramchand Deewanchand it was said, in patent cases it must be determined whether 1. There is proper subject matter of the patent 2. There is novelty 3. There is utility. The subject matter of a Patents means the exact advanced upon existing knowledge which the patentee claims. The subject must be of substantial proportions. However, a slight advance may also be acceptable if it conduces to a better result than what had been achieved before hand. Further the date of the knowledge or use by any other person is a date before the invention not before the patent.

It must be new, useful industrial application and non-obvious. The Patent Act, 1970 defines “Patent” as patent for any invention granted under this Act, which means patent is granted for an invention.

The Patent (Amendment) Act, 2002 defined invention as- “invention means a new product or process involving an inventive step and capable of industrial application” meaning thereby patent can be obtained only for an invention which is new and useful.

26. AIR 1953 Nag.154 DB.
27. 20(2) Halsbury Laws of India IPR -II p.185.1427
28. See Sec. 2(1)(m)
29. See, Sec. 2 (1) (j)
The principle is that every simple invention that is claimed, so long as it is something novel or new, is an invention and the claims and the specifications must be read in that light and a new invention may consist of a new combination of all integers so as to produce a new or important result or may consist of altogether new integers. The invention for which a patent is claimed may be a product or an article or a process, and in the case of an article, the patent is in the end product or the article, and in the case of a process, the patent does not lie in the end product but only in the process by which it is arrived at.

In Raj Parkash v Mangat Ram Choudhury,\(^{30}\) case it is stated that an invention means, to find out or discover something not found or discovered by anyone before and it is not necessary that the invention must be complicated the essential thing being that the inventor was the first one to adopt it.

Section 2 (1) (l) defines “new invention” as “new invention means any invention or technology which has not been anticipated by publication in any document or used in the country or else where in the world before the data of filing of patent application with complete specification, i.e. the subject matter has not fallen in public domain or that it does not form part of the state of the art.”\(^{31}\)

Unlike the Patents Act, 1970, the Act of 1911 does not specify the requirement of being useful in the definition of invention. But the courts are always of the view that a patentable invention a part from being a new manufacture must also be useful.

(i) Newness or Novelty

First requirement of a patent is newness i.e novelty in an invention. It depends upon the state of prior art i.e the existing knowledge and similar

\(^{31}\) The Patents(Amendment)Act,2005
inventions already known in the patents field. There would be no novelty if there has been prior publication and prior art of an identical invention. An invention is the act or operation of finding out something new; the process of contriving and producing something not previously known or existing by the exercise of independent investigation and experiment.\textsuperscript{32}

In *Cadila Pharmaceutical Ltd. v. Instance Laboratories Ltd.*\textsuperscript{33} The High Court held that the process which appellant Cadila pharmaceuticals Ltd. claim to be developed after years of research and development is really in use for decades it may be that said process has been first time adopted for making a combination of drug of penicillin and Jactobacilli. But what is patented is the process and not the combination drug itself.\textsuperscript{34} So the defendant instance laboratories Pvt. Ltd. can not be restrained from using the said process for its products and for marketing them. This it can be deduced that novelty is essential for granting patent.

Thus according to this definition of new invention, The Act Talks of absolute novelty, i.e the invention should have neither been used anywhere in the world nor published in any part of the world. However, the later sections of the Act for the purpose of anticipation and opposition proceedings deal with the relative novelty i.e not used in India and not published in any part of the world. Further entire Act refers to the word invention and not new invention. Therefore, for all purpose relative novelty is the criteria.\textsuperscript{35}

\textsuperscript{32} Nichols Smith V, 88 US 22 L Ed. 566; Hollister V Mfg Co, 113 US 28 L Ed 901.
\textsuperscript{33} 2001 PTC 472 (Guj).
\textsuperscript{34} Id.,para 12.p.480
\textsuperscript{35} Press Metal Corp. Ltd. v. Noshri Sorabji AIR 1983 Bom 144-There is no hard and fast rule to consider what is the new and useful method of manufacture obviousness is to be judge by the standard of a man skilled in the art concerned.
Exception of Novelty

Novelty is of core value even then there are few exceptions to the rule of novelty. These exceptional cases are as follows:

(a) Subject matter published without the consent of the inventor
(b) The invention was published in consequence of the display in an exhibition notified by the Government or reading the paper before a learned society. Grace period of 12 months is given in such cases to file this patent application.
(c) Previous communication to Government of India
(d) Public working for reasonable trials.

(ii) Non-obviousness or Inventive step or Inventiveness

Second requirement of a patentable invention is inventive step. More extensions or modifications upon already existing article or thugs can not be considered as a ground for inventive step patent inventive step can be considered as a step which was inventive step not obvious a step which was nation the mind of pubic, a step which comes out of a person's intellect a step which is new to every one.

Section 2(1) (a) of the Act defines inventive step as "Inventive step means a feature of an invention that involves technical advance as compared to the existing knowledge or having economic significance or both and that makes the invention not obvious to a person skilled in the art." Before the amendment Act of 2005, inventive step meant a feature that makes the invention obvious to a person skilled in the Art.

From the above stated definition if the word 'both' is removed the definition of inventive step would not be comprehensive. This definition

contains technical advancement as well as the economic significance adding to it. In absence of the word 'both' to judge the inventive step in presence of one aspect other would be ignored. Inventive step would be consider either on the basis of technical advancement to the existing knowledge or the economic significance it contains. In case of the presence of the two things simultaneously it would be difficult to assess the criteria to grant patent.

3. Industrial application

The third requirement for the grant of patent is industrial applicability. The Patent Act, 1970 under section 2 (j) talks about the usefulness. Utility of an invention means that the invention must be useful for the purpose indicated by the inventor or patentee However; this was amended by the Act of 2002 and substituted by industrial application. But by the Act of 1970 very limited protection was given. Essential elements of invention were new, useful and manner of manufacturer.37

In Dimminaco AG v. Controller of Patents 2002 this practice has been changed by the verdict of Calcutta High Court. Now the definition of invention is interpreted keeping in mind the term industrial applicability in section 2 (1) (j).

Section 2 (1) (ac) also defines "capable of industrial application" in relation to an invention means that the invention is capable of being made or used in an industry.38 Position in England is also that of same, if an invention does not have any industrial applications what so ever it may also have to clearly pass the test of utility and qualify for a patent.

37. The Patent Act, 1970 Sec. 2 (j) "Invention" means any new and useful-
(i) art, process, method or manner of manufacture
(ii) machine apparatus or other article
(iii) substance produce by manufacture
and includes any new and useful improvement of any of them and an alleged invention.

38. The Patent (Amendment) Act, 2005 Sec. 2 (1) (ac)
What is Not Patentable

Law restrict grant of patent to certain categories of invention. Section 3 of the Act, deals with non-patentable inventions.

Section 3 of the Act deals with non patentable inventions

a. Inventions which are frivolous or contrary to well established natural law. For example: inventions relating to perpetual motion alleged to be giving output without any input is not patentable as it is contrary to natural law.\(^{40}\)

Merely making in one piece, articles, previously made in two or more pieces is frivolous. Mere usefulness is not sufficient (Indian Vacuum Brake co. Ltd vs. Laurel),

b. Inventions whose primary or intended use or commercial exploitation could be contrary to public order or morality (such as something against accepted norms of a culture in a society), or which causes serious prejudice to human, animal or plant life or health or to the environment.\(^{41}\)

For example terminator technology which involves inserting a gene sequence in a seed to stop germination or growing recombinant plants leading to disappearance of butterflies.

c. The mere discovery of a scientific principle or the formulation of an abstract theory or discovery of any living thing or non-living substances occurring in nature.\(^{42}\) However isolation of living thing or non-living substances is patentable as it involves human technical intervention.

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40. See, Sec. 3 (a)
41. See, Sec. 3 (b)
42 See Sec. 3 (c)
d. Mere discovery of a new form of a known substance which does not result in the enhancement of the known efficacy of that substance, or mere discovery of any new property, or new use of a known substance, or mere use of known process, machine, or apparatus unless such known process results in a new product or employs at least one new reactant.\(^43\) (As in Cadila Pharmaceutical case).

e. Substances obtained by mere admixture such as physical admixture are not patentable under the Act.\(^44\)

However, compositions consisting of combinations comprising of two or more known active ingredients are patentable if 'synergism' or 'super additive' effect is shown clearly, for example pharmaceutical compositions or any other chemical compositions

f. The mere arrangement or re-arrangement or duplication of known devices each functioning independently of one another in a known way.\(^45\)

g. Omitted by Act 38 of 2002

h. Methods of agriculture or horticulture.\(^46\) For example a method of producing a new form of a known plant even if it involved a modification of the conditions under which natural phenomena would pursue their inevitable course is not patentable.

i. Processes for medical, surgical, curative, prophylactic, diagnostic, therapeutic, or other treatment of human beings or animals that would render them free of disease or to increase their economic value or that of

\(^43\) See Sec. 3 (d)
\(^44\) See Sec. 3 (e)
\(^45\) See Sec. 3 (f).
\(^46\) See, Sec. 3 (h)
their product,\(^{47}\) (e.g. A process of treating malignant tumor cells is not patentable)

j. Plants and animals in whole or any part thereof other than microorganisms but including seeds, varieties and species and essentially biological processes for production or propagation of plants and animals.\(^{48}\) (For example clones and new variety of plants are not patentable. But process/method of preparing genetically modified organisms is patentable subject matter).

k. A mathematical method or a business method or computer program \textit{per se}, or, algorithms.\(^{49}\)

l. Literary, dramatic, musical or artistic work or any other aesthetic creations including cinematographic works and television productions\(^{50}\) are not patentable as they are covered under the copyrights, design and entertainment laws.

m. A mere scheme/rule/method of performing a mental act or method of playing a game,\(^{51}\)

n. Presentation of information.\(^{52}\) Unfortunately neither the Act nor the Rules defines a mathematical method, or a business method or a computer program \textit{per se} or algorithm. Under such circumstances, one has to rely on the practices built tip under Articles 52(1), 52(2) and 52(3) of the EPC, where similar provisions corresponding to the Indian Act under section 3(k), 3(m), and 3(n) exists.

\(^{47}\) See, Sec. 3 (i)
\(^{48}\) See, Sec. 3 (j)
\(^{49}\) See, Sec. 3 (k)
\(^{50}\) See, Sec. 3 (l)
\(^{51}\) See, Sec. 3 (m)
\(^{52}\) See, Sec. 3 (n)
Topography of integrated circuits.  

An invention falling within the scope of traditional knowledge such as the use of herbal medicines, (as of turmeric patent case).

Inventions relating to atomic energy are not patentable. Such applications are referred to the Department of Atomic Energy. The decision of the Department of Atomic Energy is final and no appeal lies to the decisions of the Department of Atomic Energy.

Kinds of Patents

Generally the patents can be classified into two types viz (i) process patents (ii) product patents.

(1) Process Patents: Process patent means that when a substance is invented or produced. A patent is not granted to the substance itself but it is only the method or the process of manufacture of a substance that is granted a patent. So in this kind of patent the patent is granted to the process but not to the product.

(2) Product Patents: In product patents the patent is granted not to the method or process of manufacture of a substance but to the substance itself. Therefore in this kind of patent it is the product that is covered, claims, and may be of a product or an article. In Raj Prakash Mangat Ram Chaudhery case it was held in the case of an article patent is the end product or the article. In case of a process the patent does not lie in the end product but only in the process by which it is carried in Sec. 5 of the Patent Act, 1970.

53. See. Sec. 3 (a)  
54. See. Sec. 3 (p)  
55. See. Sec. 4  
Procedure for Obtaining a Patent

Various stages are involved in acquisition of patent starting from filing of application and ends with the grant and sealing of the patent. The patent right is territorial in nature and inventors, their assignees will have to file separate patent applications in countries of their interest along with necessary fees for obtaining patents in those countries. These stages are:

(i) Filing an application accompanied by provisional or complete specification
(ii) Publication
(iii) Examination of an application
(iv) Acceptance and advertisement in official gazette.
(v) Opposition to grant of patent on any reasonable grounds
   A. Pre-grant opposition
   B. Post grant opposition
(vi) Granting and sealing of patent

(I) Filing an application

An application for a patent in the prescribed form^57 along with the prescribed fee should be filed in the appropriate office of the patent office. The application should be accompanied by a provisional or complete specification. A provisional specification need describe the invention only briefly and need not contain the claims. Where the application is accompanied by a provisional specification a complete specification should be filed within twelve months from the date of filing the application.58 If this is not done the application will be deemed abandoned. The complete specification should fully and particularly describe the invention and the method by which it is to be carried out.59 It should disclose the best method of performing the invention known to the applicant and end with a claim or claims defining the scope of the invention for

58. See Sec. 9.
59. See Sec. 10(4)(a)
which protection is claimed. There shall be an abstract along with complete specification to provide technical information related to the invention. A single invention or a group of inventions can be claimed the specification should be accompanied by drawings. Where appropriate and necessary but the specification should relate to a single inventions. An application for a patent will not be open to public for a period of eighteen months from the date of filing or date of priority which is earlier.

Publication

After the stage of filing of application it comes to publication. Thereafter the application will be published. All the applications are published in Patent Office Journal just after 18 months from the date of filing of application or the date of priority. But those applications which are prejudicial to the defenses of India or abandoned due to non filing of complete specification within 12 months after filing the provisional or withdrawn within 15 months filing the applications are not published. Those applications which are related to-

(1) Secrecy directions imposed under section 35 of the Act
(2) Application has been abandoned under section 9(1)
(3) The applicant has withdrawn his application three months prior to the expiry of said prescribed period of 18 months.

After the publication of the application within the prescribed period a request for examination of applications should be made by the applicant or interested person failing which the application will be treated as withdrawn.

60. See Sec. 10 (4) (b) (c).
61. See Sec. 10 (4) (d)
62. See Sec. 10 (2).
63. The priority date is the date on which the patentee claims his invention. Normally the priority date is the date of filing the provisional specification provided the claims are based on the matters disclosed in provisional specification.
64. The Patent (Amendment) Act, 2005 Sec 11 A (1) to (3).
65. See Sec. 11 B (1) to (4)
(II) Examination of an application

The application is examined by examiners of patents to see whether it complies with the requirements of the Act and the Rules,\(^\text{66}\) whether there is any lawful ground of objection to the grant of the patent\(^\text{67}\) and whether the invention has already been published or claimed by any other person the examiner makes a search in the publications available in the patent applications and patent to see whether the same invention has already been published or claimed or is the subject matter of existing or expired patents. After examination of the application the patent office will communicate to the applicant the objections, if any, to the grant of a patent.\(^\text{68}\) The objections generally relate to the drafting of the specification and claims anticipation of any of the claims in prior publication of any specifications or claims or documents. If the objections are not satisfactorily met the controller of patents after giving an opportunity of hearing to the applicant will refuse the application.\(^\text{69}\)

(III) Acceptance and advertisement in the official gazette

Where the applicant has satisfactorily removed the official objections the controller will accept the complete specification and advertise it in the official Gazette. From the date of acceptance to the date of grant of patent.\(^\text{70}\) The applicant will get the benefits of the grant of the patent except that he will not be entitled to institute infringement proceedings until the patent is granted.\(^\text{71}\)

\(\text{66. See Sec. 12 (1) (a).}\)
\(\text{67. See Sec. 12 (1) (3).}\)
\(\text{68. See Sec. 14.}\)
\(\text{69. See Sec. 15.}\)
\(\text{70. See Sec. 23.}\)
\(\text{71. See Sec. 24.}\)
(iv) Opposition to grant of patent on any reasonable ground

Any person interested may give notice of opposition within three months from the date of publication in the Official Gazette. The controller will forward a copy of the notice of opposition to the applicant who may file a reply statement within one month from the date of receipt of the copy thereafter the parties may file their evidence in support of their respective cases and the matter will be heard and decided.\(^{72}\)

The Indian patent system provides for two opposition proceedings, one before the grant of the patent and one after the grant of the patent. The grounds of opposition are same in both pre-grant and post grant opposition.\(^{73}\)

**Pre-grant Opposition Procedure**

Where an application for a patent has been published but a patent has not been granted, any person may, in writing represent by way of opposition to the Controller against the grant of any Patent. The pre-grant opposition proceeding may be carried out in parallel with the examination proceeding.

The opponent is required to submit statement and evidence, if any, in support of the representation and request for a hearing if he so desires. However, the representation is not considered by the Controller unless a request for examination is filed by the applicant.

On receipt of the request for examination from the applicant, the Controller initiates Examination proceeding and also issues a notice to the applicant along with the copy of the statement and evidence filed by the opponent.

The applicant may file his statement and evidence in support of his application within three months from the date of the notice. Thereafter, after

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\(^{72}\) See Sec. 25.  
\(^{73}\) See Sec. 25.
the Controller has considered the submission and the representations made, the patent is either granted or rejected. The acceptance may be with or without amendment to the specification. The decision is issued ordinarily within one month from the date of the completion of the proceedings. It may be noted that no fee is required to be paid for entering into pre-grant oppositions. An appeal can be filed in the appellate board against such decision.

**Post-grant Opposition Procedure**

The process of post grant opposition initiates with a notice of opposition filed by the opponent (who is an ‘interested person’) within 1 year from the date of publication of grant along with full written statement and evidence to the Controller. The patentee is required to file a reply statement and evidence within two months failing which, the application will be abandoned. This time period is extendible by one month provided the request for extension is filed within the two-month period. Reply evidence filed by opponents is to be strictly confined to patentee’s evidence. Further evidence may however be filed with the leave of the Controller.

All the documents are handed over to the Opposition Board constituted by the Controller for recommendation. Controller takes decision after a hearing along with the members of the Opposition Board. An appeal may be made against the decision before the Appellate Board within three month from date of the order.

**(v) Granting and sealing of patent**

Where the application is accepted either without opposition or after opposition a patent will be granted if a request for sealing is made by the applicant. An inventor if he so desires may make a request for mentioning his name in the patent. The controller if satisfied will cause his name to be

74. See Sec. 43.
mentioned as inventor in the patent granted in the complete specification and in the register of patents. The mention of the inventors name in the patent will not confer or derogate from any right under the patent.75

(vi) Term of Patent

The term of every patent shall be twenty years after the commencement of the Patents (Amendment) Act, 2002. Those patents which have not expired and which have not ceased to have effect on the date of commencement of the Patents (Amendment) Act, 2002 shall be 20 years form the date of filing of an application. A patent can be kept alive only by paying the renewal fee from time to time.

(vii) Patents of Addition

Where an application is made for a patent in respect of any improvement or modification as referred to the main invention, if the patentee request so, the controller may grant the patent and such patent is called as 'patent of addition'. Apart from main invention a patentee is also a patentee in respect to the patent of improvement and modification. On the request of the patentee the controller may revoke the patent for the improvement or modification and grant patent of addition, in respect thereof bearing the same date as the date of the patent so revoked.76

For the grant of ‘patent of addition’ the date should be same or later than the application for patent in respect to the main invention.77

The term of the patent of addition will be equal to that of the patent for the main invention or until the censor of the patent for main invention if the patent for main invention is revoked on request the controller may declare the

75. See Sec. 28.
76. See Sec. 54 (1) (2).
77. See Sec. 54 (3).
patent of addition as independent patent and for the remainder period for the patent for the main invention. No renewal fee shall be paid in case of patent of addition but on becoming an independent patent the required fee as for patent of main invention shall be paid.

Rights of Patentees

A patent is a statutory grant conferring certain monopoly rights on the grantee for a defined period subject to certain conditions. Patent confers the right to exclude others from manufacturing in a particular way and using a particular to the exclusive use of a patented invention during the period of its protection is a right to property. The Patent Act, 1970 contains various provisions in Section 48, 50, 53, 63 and 68 etc rights summarized are

(1) Right to exploit the patent
(2) Right to assign and licence
(3) Right to surrender the patent
(4) Right before sealing

A patent is a kind of limited monopoly granted to the true and first inventor as a regard for the creation of something view and useful which might benefit the public. But no patent is absolute and therefore it can be revoked by the Government or can be surrendered by the patentee under certain circumstances.

Where a patent covers a process, the patentee has the exclusive right to exclude others from performing, without his authorization, the act of using that process, using and offering for sale, selling or importing for those purposes, the product obtained directly by that process in India.

78. See Sec. 48.
79. See Sec. 64 to 66.
In Addition, to this Right to Exploit Patent, different rights covered under the Act are-

1. Right to assign and licence the patent to other for consideration. If he is co-owner of the patent he can assign his share of the patent or grant licences to others to use the patent only with the consent of the co-proprietors or under the directions of the Controller.

2. Right to surrender his patent. But before accepting the offer of surrender a notice of surrender is given to the persons whose name is entered in the register as having an interest in the patent and their objection, if any, considered.

3. Rights before sealing. During the period from the date of advertisement of the acceptance of complete specification and the date of sealing of the patent, the applicant for the patent can exercise all the privileges and the rights of the patentee except filling of the suit for infringement. This provision is now deleted by the Patents (Amendment) Act, 2005.

4. Right to sue for infringement. It can be done by instituting a suit in a court not lower than the District Court in case of any infringement.

5. Right to make a convention application.

6. Right to apply for patents of addition

However, these rights are not absolute and are circumscribed by various conditions and limitations such as-

1. Power of the central government to use the inventions for the purpose of government even without the consent of the patentee, payment of any royalties in case of medicine or drug.

2. Compulsory licenses can be granted if the patent is not worked so as to satisfy the reasonable requirements of the public at the reasonable price.
3. There can be revocation of the patent in case of non-working of it.

4. The inventions relevant for the defense purposes may be subject to certain secrecy provisions.

5. When a patent which has once lapsed has been restored, certain limitations are enforced on the rights of the patentee. For example, the Controller may impose conditions for the protection or compensation of the persons who may have begun to make the use of the inventions avail themselves of the inventions during the period when the patent was not effective due to lapse.

Patent Administration in India-

The Office of the Controller General of Patents and Designs administers of the Patent Act, 1970 and the Rules made there under. Any reference to the "Central Government" in the Act or the Rules refers to the Government of India, typically represented by the Secretary, the Department of Commerce and Industry. The Office of the Controller General of Patents and Designs is also responsible for the administration of Trademarks and Geographical Indications. The Ministry of Industrial Policy & Promotion, through the Joint Secretary, has administrative and supervisory control over the office of the Controller General of Patents, Designs, Trade Marks and Geographical Indications. For the purposes of the Patents Act, 1970 and the Rules, the Controller General acts as the Controller of Patents. Further, the Act also provides for an Appellate Board to entertain and admit appeals arising out of the orders of the Controller of Patents and to exercise jurisdiction with respect to proceedings to revoke a patent other than through a counterclaim in a suit for infringement. An Intellectual Property Appellate Board (IPAB) was established under Section 83 of the Trade Marks Act, 1999 to act as the Appellate Board for the purposes of the Patents Act, 1970.
The Office of Controller of Patents

The Controller of Patents is the principal officer responsible for administering the patent system in India. The Controller is the overall supervisor of the four Patent Offices in Chennai, Delhi, Mumbai and Calcutta. Since the Controller also acts as the Registrar of Trademarks with the Head Office of Trade Marks in Mumbai the Controller of Patents functions from his office in Mumbai. Officially, the Head Office of Patents is in Calcutta. The Examiners of Patents appointed under the Patents Act and other officers of the Patent Office discharge their functions under the direction of the Controller. The hierarchy of the officers at the Patent Office is illustrated below:

Intellectual Property Appellate Board

The Intellectual Property Appellate Board (IPAB) was established on September 15, 2003 by the Central Government under the provisions of section 83 of the Trade Marks Act, 1999. The Patents Act, 1970 (as amended in 2002) provided for designation of IPAB as the Appellate Board for the purposes of the Patents Act, 1970. The Ministry of Commerce and Industry, Government of India recently announced the appointment of a Technical Member on the IPAB effective from April 2, 2007. The IPAB is headquartered in Chennai and also conduct hearings on rotation in Chennai, Delhi, Mumbai, Kolkata regarding the grant of patent.

Powers and Jurisdiction of the Appellate Board

As of April 2, 2007, the Appellate Board is empowered to receive, hear and dispose of all appeals from any order or decision of the Controller and all cases pertaining to the revocation of a patent, other than through a counter claim in a suit for infringement. The Appellate Board may proceed with the matter either de novo or from the stage at which it was transferred on appeal.
The jurisdiction to hear patent infringement cases continues with the High Court.

**Surrender and Revocation of Patent**

**Surrender** - A patentee may at any time offer to surrender his patent, by giving notice in the prescribed manner to the Controller. When such notice is received, the Controller will advertise the offer in the prescribed manner and also notify every person whose name appears in the register as having an interest in the patent. Any person interested may within the time prescribed after advertisement give notice to the Controller of opposition to the surrender. The Controller will notify the patentee of such notice. After hearing the parties if so desired by the parties, the Controller may accept to offer and revoke the patent if he is satisfied that patent may properly be surrendered. The aggrieved party may appeal against the decision of the Controller. The procedure for surrendering a patent is contained in Section 63 and Rule 71. A notice of the offer to surrender the patent must be given on Form 33.

**Revocation of a Patent** - A patent, whether granted before or after the commencement of the Act, may be revoked on a petition of any person interested or of the Central Government by the Appellate Board or on a counter-claim in a suit for infringement of the patent by the High Court on grounds namely patent was granted on an application of person not entitled to apply for the patent or on non-compliance with the requirements for use of an invention or on petition by a person interested on various specified grounds. It
PROCEDURE FOR GRANTING PATENT

FILING

- Early publication permissible
- Pre-grant opposition
- Initiation of proceeding
- Hearing
- Decision
- Appeal/Writ
- Refused
- Post-grant opposition
- GRANTED
- Refused
- APPEAL
- Refused
- GRANTED

Publication

- 48 months from priority date

Request for substantive examination

- 6 months

Issuance of first examination report

- Response submitted
- Further examination report
- Hearing
- GRANTED
- Refused

One year from notification

- Grant notified
- GRANTED
- Refused

Appeal

- GRANTED
- Refused

Source: http://www.managingip.com/images/199/22625/IndiaAnandDiagram.gif
can be done by various modes namely revocation in the public Interest by the Government or relating to atomic energy by Controller. A Patent may also be revoked for non-working.

Infringement of Patents and Remedies

Infringement of a patent is the violation of the exclusive rights of the patentee. Determination of infringement depends on the scope of exclusive rights of the patentee, whether the infringer's acts amount to making, using, selling or distributing a product or using a method and if in fact, the acts amount to an infringement. The burden of proof is on the patent owner for proving infringement. Infringement of a patent can be:

1. Direct i.e. when someone without authority, makes, uses, or sells a patented invention in the country where the patent is valid and is enforceable.

2. Induced i.e. when a person actively and knowingly aids and abets direct infringement of a patent by another person.

3. Contributory i.e. when any person, without authority sell a component of a patented invention, for use in practicing a patented process, or machine constituting a material part of the invention, knowing the same to be especially made or adapted for use in the infringement of such patent, and not a staple article of commerce suitable for substantial non-infringing use.

4. Through Colourable Imitations or Equivalents Sections 104 to 117 of the Act deals with the suits concerning infringement of Patents. An action for infringement of a patent must be instituted by way of a suit in any District Court or High Court having jurisdiction to try the suit. Where a counter-claim for revocation (Section 64) of the patent is made
by the defendant, the suit, along with the counter-claim, will be transferred to the High Court for decision.

**Defences**- The defendant in a suit for infringement may plead one or more defenses. He can claim the patent owner is not entitled to sue for infringement or deny any infringement. Any leave or license express or implied to use the invention does not amount to infringement and where infringement is invalid on certain grounds:

Acts done in connection with government use, experiment, research, education and falling within the scope of innocent infringement or done after failure to pay renewal fee or before the date of amendment of the specification do not amount to infringement. A defendant may also counter claim for revocation of patent.

**Reliefs**- The relief's available to a successful plaintiff in a suit for infringement include:

1. An injunction,

2. Either damages or an account of profits, and

3. An order of seizure, forfeiture or destruction of the materials and impediments used in the creation of the infringing goods.

The granting of these relief's is discretionary. The injunction may be subject to terms as the court may think fit to impose. In all cases it will be limited to the term of the patent. Provisions relating to reliefs in Patents (Amendment) Act, 2005 are not exhaustive. Thus, it would appear that the court is not debarred from ordering delivery-up or destruction of the infringing articles.
SALIENT FEATURES OF THE THREE PATENT ACTS

The Indian Patents Act, 1970:

The features of the Patents Act, 1970 reveals the basic patent policy of India. This Act reflects the concerns of a developing country, balanced with the interest and needs of the inventors. Under the Act, the patents are granted to encourage inventions and secure that the inventions are worked in India on a commercial scale and to the fullest extent reasonably practicable, without undue delay; and patents are not granted merely to enable patentees to enjoy a monopoly for the importation of the patented article. The Act accords special status to patents relating to medicine, food items and chemicals. No product patent can be granted relating to medicines, food items and chemicals, only the process of manufacturing such products can be can be patented .In case of grant of patents for certain substances which are not food items or drugs as such but are capable of being used as food and drugs, the same are deemed to be endorsed with the words “licences of rights”. The significance is that a patent endorsed with these words, does not retain exclusive use is limited only to three years. This is for the use of invention in certain circumstances for general good. But after the implementation of the Patent Act, 1970 certain loopholes and lacunae were still found.

Being the signatory of International Conventions along with TRIPS agreement the differences were observed between Patents Act, 1970 and TRIPS agreement, such as:

1. The Patent Act 1970, only allows the process patenting in food, medicine ad chemicals whereas TRIPS says to implement the process as well as product patent in almost all fields of technology.
2. The Patent Act, 1970 fix the term of patent 14 years and 5-7 years in case of chemicals and drugs whereas TRIPS allows the term of patent for 20 years.
3. The Patent Act, 1970 enact provisions relating to compulsory licensing as well as of licence of rights where as TRIPS talks for limited compulsory licence and for no licence of right.

4. Under Patent Act, 1970 several areas were excluded from patentability such as methods of agriculture, any process for medicinal, surgical or other treatment of animals and plants to render them free of disease or increase economic value of products on the other hand TRIPS says almost all fields of technology is patentable. Only area conclusively excluded from patentability is plant varieties and some areas of agriculture and biotechnology.

5. Patent Act, 1970 do not give complete monopoly to patent holders on certain grounds. Government is allowed to use patented invention to prevent scarcity where as TRIPS give very limited scope for government to use patent inventions.

India's commitment to implement the agreement on TRIPS required about three sets of amendments to its patents law. The first amendment of the Patent Act, 1970 by the Patent (Amendment) Act, 1999 introduced requirements under the transitional arrangements through Section 5 (2) which allowed product patent application to be filed while chapter 1V-A provided for the grants of Exclusive Marketing Rights (EMRs).

On January, 2000 a second Amendment Patent (Amendment) Act, 2002 had to be introduced for bringing the Patents Act in conformity with all the substantive provisions of the TRIPS Agreement barring those related to the production of product patents. The key issues included in the second amendment were redefining patentable subject matter, extension of the term of patent protection to 20 years and amending the compulsory licensing system.

These differences in patent system led to disputes in the GATT negotiations on the inclusion of IPRs in the WTO. The main objection of the
US in the provision of India's patent law that allows for process but not product patents in the area of food drug or medicine. The United States term the activities of India to find alternative processes as piracy. According to the US, Indian firms are copying technology developed by advanced nations. This is leading to large scale losses to the US the pharmaceutical industry in the US has been especially vocal on this issue. "Phrma," the association that represents USA based pharmaceutical companies points out based on the refusal of the Government to provide pharmaceutical patent protection Indian has become a haven for bulk pharmaceutical manufactures who pirate the intellectual property of the world's research base pharmaceutical industry.80

India's patent policy undergone enormous shifts and it revised the patent policy to conform to TRIPS and agreed to include IPR in the WTO. Since India was a developing country it had a 10 years transition period until January 2005 to implement the said provisions of TRIPS. The longer transition period however, came with a set of conditions elaborated in Articles 70.8 and 70.9 of the TRIPS Agreement. Article 70.8 of the TRIPS Agreement required India to provide a means, by which product patent applications can be filed from January 1, 1995. If the products figuring in these applications were granted a patent in any of the WTO member countries and the products had obtained marketing approval in any of these WTO member countries then according to Article 70.9, five years Exclusive Marketing Rights (EMRs) had to be granted by India before granting or rejecting in India. As under TRIPS Agreement of the WTO all member countries were to provide product patents for all segments including Pharmaceuticals and agrochemical from January 1, 1995. But due to transition period under Art 70.8 and 70.9 India has to accept applications (which would be considered after Jan 1, 2005) for patents and provide Exclusive Marketing Rights (EMRs) respectively for Pharmaceuticals and agrochemicals from the date of establishment of the WTO i.e. 1 January 1995 Art 70.9 of the TRIPS agreement India has to give an EMR only if four

conditions are met: (i) That patent application has been filed in another member country after the entry into force of the WTO agreement from January 1, 1995; (ii) that a patent has been granted in that member country after January 1, 1995 (iii) That marketing approval has also been obtained in India, (iv) Applicants for EMRs in India world also has to file the product patent application. Only then they can make applications to the controller of patent for grant of EMRs. India's commitment to implement the TRIPs Agreement required the patents amendment in the patents law.

UThe Patents (Amendment) Act 2002 was introduced and some important changes were made-

(a) The definition of the term "invention" has been modified in consonance with international practices and consistent with TRIPs Agreement.

(b) Section 3 of the present Act has been modified to include exclusions permitted by TRIPs Agreement and also subject matter like discovery of any living or non living substance occurring in nature in the list of exclusions which in general do not constitute patentable inventions and also to specifically exclude inventions which in effect are traditional knowledge.

(c) The rights of patentee had been aligned as per Article 28 of the TRIPs Agreement.

(d) A provision for reversal of bourdon of proof in case of infringement suit on process patent in accordance with Articles 34 of the TRIPs Agreement has been added.

(e) Uniform term of patent protection of 20 years for all categories of invention as per Article 33 of the TRIPs Agreement has been prescribed.
The provision relating to compulsory licensing has been modified to suit the public interest requirements and also to comply with TRIPS agreement.

A provision has been incorporated for enabling parallel import of patented products at lowest international prices.

To ensure smooth transition of a product from the monopoly statues created by the patent to the public domain a provision has been incorporated for obtaining marketing approval from the appropriate regulatory authorities and traditional knowledge.

Several provisions have been incorporated for protecting bio-diversities and traditional knowledge.

Provision relating to national security has been strengthened.

A provision has been incorporated for hearing of appeals which at present lie before high count by the intellectual property appellate board for speedy disposal of such appeals.

Several provisions have been incorporated with a view to simplifying and rationalizing the procedures.

After the amendment of 2002 certain gaps were still there. To fill these gaps again the desire arose to make a new amendment in the existing Act of 2002. Beside this the main objective behind the introduction and passing of The Patents (Amendment) Act, 2005 was to meet India’s deadline 31 Dec. 2004 to comply with the TRIPS Agreement.

1. Extension of product patent protection to all fields of technology (i.e. drugs, food & chemicals).
2. Deletion of the provisions relating to Exclusive Marketing Rights (EMRS) (which would now have become redundant) and introduction of transitional provision for safeguarding EMRS already granted.

3. Introduction of a provision for enabling grant of a compulsory licence for export of medicines to countries which have insufficient or no manufacturing capacity, to meet emergent public health situations (in accordance with the Doha Declaration on TRIPS and Public Health).

4. Modifications in the provisions relating to opposition procedures with a view to streamlining the system by having both pre-grant and post-grant opposition in the patent office.

5. Addition to a new provision in respect of mailbox applications so that patent rights in respect of the mailbox shall be available only from the date of grant of patent and not retrospectively from the date of publication.

6. Strengthening the provisions relating to national security to guard against patenting abroad of dual use technologies.

7. Rationalization of provisions relating to timelines with a view to introducing flexibility and reducing the processing time for patent applications and simplifying and rationalizing procedures.

**TK under WTO and TRIPS**

Most Developing Countries in Asia are signature to the WTO agreements. In order to comply with the WTO commitments, those countries must reform their laws and regulations in several areas. The WTO obligations that require significant reform of the law are those found in TRIPS. Member countries are obliged to substantially eliminate IP infringements and to bring IP laws up to the TRIPS standards. Although TRIPS did not make any specific significant provisions for protecting traditional knowledge and no uniform norms were laid down for the protection of traditional knowledge, even then Article 27.3 (b) of the agreement allows members countries to excludes
patenting of plants, animals, and essentially biological processes but makes it mandatory for them to patent microorganisms and micro biological processes. Moreover, members must patent plant varieties or otherwise protect them through an effective *sui-generis* system. Doha Declaration of 2001 in WTO ministerial conference, says that TRIPS council should examine the relationship between the TRIPS agreement and the UN convention on biodiversity the protection of Traditional Knowledge and folklore, etc. To date, one of the most prominent provisions on traditional knowledge is Article 8(j) of the Biodiversity Convention. Even then, there are certain provisions under TRIPS agreement which protect traditional knowledge. Provisions relating to the obligation to protect geographical indications under the agreement can be used to protect traditional knowledge associated with the goods. Indian being a signatory to the TRIPS agreement and to comply with its requirements for the first time incorporates measures for the protection of biodiversity and traditional knowledge by the Patents (Amendment) Act of 2002. Traditional knowledge was considered non-patentable under Sec 3(p). Further with the Amendment Act of 2005 it is compulsory for patent applicants to disclose source and geographical origin of biological material used in invention. Along with this, failure to disclose source and geographical origin of biological material used in invention would be good ground for opposing patent application. By these amendments traditional knowledge take place in patent law also.

Though IP system is not designed to protect traditional knowledge and may not suit the needs of indigenous and local communities in protecting their traditional knowledge. Because the current IP systems adopt standards of protection that are too high & the criteria for protection are difficult to satisfy by innovations generated at community level. For example, a traditional

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81. A detailed study of Article 8(j) has been done under Chapter -2
82. Sec 3 (p) an invention which is effect is traditional knowledge or which is an aggregation or duplication of known properties of traditionally known components or components. Are not invention and thereby non-patentable.
knowledge based product which generally comprises active substances found in nature rather than a pure form of substance, would not be considered new and inventive and would hence be denied patent protection on the contrary, when researchers and companies take the next step by using the same knowledge in laboratories, such as by isolating, altering or purifying an active chemical of the herbal plants the substance would become a novel and inventive piece of knowledge and thus patentable. And above all the objective of IP protection which aims to protect individual and corporate interests is different from the objective for the protection of traditional knowledge.

Conclusion

Historically the concept of patents is based on legal and social justification. The legal justification is that inventor should have an exclusive right over his invention as a reward and the social justification is that not to grant monopoly right, they are privileges granted by the government to encourage research and inventions to disclose their inventions for industrial exploitation thereby providing new avenues for economic growth and development. The Indian Patent Act, 1970 was also enacted with a view to make patents serve the needs of economy as well as to make them a vehicle of rapid growth. The enactment of the Patents Act, 1970 was proved a boon for Indian pharmaceutical industry (especially the generic pharma segment). Several changes has been made in the Patents Act, 1970 through amendments, bringing it, in present shape of Patents (Amendment) Act, 2005. The Patents Act, of 1970 was not in conformity with the TRIPS agreement; the need was to bring the Act, 1970 in conformity of TRIPS agreement though TRIPS agreement does not specifically talks about traditional knowledge in patent regime. Moreover patents cover invention and traditional knowledge is not an invention which can be protected under patent Act, though the Amendment Act of 2002 gave protection to traditional knowledge considering it as a non-patentable thing. But now there is a need for an alternative approach which will bring a balance between formal intellectual property system covering patents, copy rights, trade marks and several aspects of traditional knowledge filing of complete specification require to mention the origin of biological resources.
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<th>1970</th>
<th>2002</th>
<th>2005</th>
<th>TRIPS</th>
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<td><strong>Invention</strong></td>
<td>Sec. 2 (j) Means any new and useful-(1) art process method or manner of manufacture, (2) machine, apparatus a other article, (3) substance produced by manufacture, and includes any new and useful improvement of any of them and an alleged invention</td>
<td>Sec 2 (J) Means a new product or process involving an inventive step and capable of industrial application</td>
<td>Same</td>
<td>Article 27 (1) Provides that patent shall be available for any invention whether product or processes in all fields of technology provided they are new involve an inventive step and are capable of industrial application. TRIPS only sets the minimum patentability standards.</td>
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<td><strong>Inventive step</strong></td>
<td>Did not talk about it</td>
<td>Did not talk about it</td>
<td>Sec. 2 (ja) means a feature of an invention that involves technical advance as compared to the existing knowledge or having economic significance or both and that makes that invention not obvious to a person skilled in the art.</td>
<td>Article 27 (1) It says inventive step may be deemed to be synonymous with the term non-obvious</td>
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<td><strong>Capable of industrial Application</strong></td>
<td>Did not talk about it</td>
<td>Under Sec 2(ac) means in relation to an invention means that the invention is capable of being made or used in an industry</td>
<td>Same</td>
<td>Article 27 (1) the word capable of industrial application refers to the utility of that invention or it must be considered as useful</td>
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<td>Process Patent &amp; Product Patent</td>
<td>Sec 5 says Inventions are only method or processes of manufacture</td>
<td>Same</td>
<td>Sec. 5 which talked about process patent was omitted by Amendment Act of 2005 enforcement of product patent regime and transition phase completed &amp; 3, patent shall be available for any invention whether product or processes in all fields of technology, provided they are new involve an inventive step and are capable of industrial application.</td>
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<td>patentable- In case of inventions (a) those substances which are intended to be used as or capable of being used as medicine or drug. Or (b) relating to substances prepared or produced by chemical processes (including alloys, optical glass, semi conductors and inter metallic compounds) no patent shall be granted in respect of claim for the substance themselves but claims for the methods or processes of manufacture shall be patentable, meaning thereby that this Act only allow the process patent and not for product patent</td>
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<td>Examination of Application</td>
<td>U/S 12 mentions clause (1) after the complete specification in respect of an application for patent</td>
<td>Sec. 12 (j) When a request for examination has been made in respect of an application for a patent in</td>
<td>Sec. 12 (1) Subs for under sub section (1) or sub-section (2) or sub-section (3) of section 1</td>
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<td>TRIPS do not specifies the manner to protect the intellectual property Rights. It Just only gives</td>
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<td>that specification and application shall be referred to an examiner by the controller for making a report in respect of following matters namely: (a) whether application and specification are in accordance to the requirements of this Act, (b) whether there is any lawful ground of objection to the grant of the patent, (c) the result of investigation made under section 13 and (d) any other matter which may be prescribed. (2) The examiner referred under sub-section (1) shall make report to the controllers with in a period of eighteen months from the application and the specification and other documents relating thereto are referred under sub-section (1) shall make the report to the controller.</td>
<td>IB, the application and specification and other documents relating thereto shall be referred by the controller; further in sub-section (2) for the words a period of eighteen months from the date of such reference the words the grant of a patent has been substituted.</td>
<td>the basic guidelines upon which every individual country is free to Article 41 (2) says procedures concerning the enforcement of IPRs shall be fair and equitable they shall not be unnecessarily complicated or costly or entail unreasonable time limits or warranted delays.</td>
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<td><strong>Reverse engineering:</strong></td>
<td>This act allowed for process patent for Pharmaceuticals patent but not the end product itself. Sec 5 only allows process patent it encourages the process of reverse engineering.</td>
<td>India came under the transition phase (5+5-10year) from 1995 to 2005. So there was the continuation of process patent regime as mentioned under section 5 of the principal act the 1970 which allows only the patentability of processes or methods.</td>
<td>Sec. 5 was omitted which says about inventions where only methods or processes of manufacture patentable. The product patent regime started after the completion of transition phase.</td>
<td>TRIPS do not prohibit the reverse engineering but after the completion of transition phase it prohibits it by implementation of product patent regime. In this phase the end product is patented which can not be infringed by adopting any other process to reach the end product which has been patented for a specified term.</td>
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<td><strong>Bolar Provision</strong></td>
<td>Do not talk about it. Sec, 107 under this Act only talks about the defence available in suit for infringement</td>
<td>Sec. 107 A this exemption was introduced under the heading 'Certain acts not to be considered as infringement.'</td>
<td>Sec. 107 A In This Section Of The Principal Act. In clause (a)-(i) for the words using or selling the words using selling or importing shall be substituted, (ii) for the word use or sell the words use sale or import shall be substitute clause (b) the</td>
<td>Article 30- 'Exceptions to Rights Conferred' says 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</td>
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<td>Words, which are duly authorized by the patentee to sell or distribute the product the words who is duly</td>
<td>Patent owner, taking account of the legitimate interest of third parties.</td>
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<td>Generic drugs.</td>
<td>The Act of 1970 indirectly encourages the manufacturing &amp; trade of generic drugs by way of compulsory licensing reverse engineering. The generic version of patented branded drugs was in bloom during the process patent regime. This can also be considered the major factor boosting the growth of Indian pharmaceutical industry. Under sec. 84 the compulsory licenses and its ground have been mentioned.</td>
<td>India's compulsory licensing provision is now more important than ever since India passed the revised Act. Indian generic drug industry has grown due to lack of patent protection in India for products patented in other countries. Now India needs to encourage the continued success of the generic drug industry by allowing compulsory licensing.</td>
<td>authorized under the law to produce and sell or distribute the product shall be substituted.</td>
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<td>Compulsory licensing</td>
<td>Application can be made at any time after the expiry of three years from the date of sealing of a patent</td>
<td>Application for compulsory Licensing can be made at any time after the expiration of three years from the date of grant of a patent</td>
<td>Art.31 clearly provides for use of patented products to meet government requirements. According to it, there will be no need to consult the patent holder and only...</td>
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1970 Act takes the grounds for compulsory licensing that- with (a) the reasonable requirement of the public with respect to the patented invention have not been satisfied (b) The patented invention is not available to the public at a reasonable price and praying for the grant of a compulsory licensing to work the patented invention.

(a) The reasonable requirements of the public with respect to the patented invention have not been satisfied or (b) that the patented invention is not available to the public at a reasonable affordable price or (c) that the patented invention is not worked in the tertiary of India.
Addition of clause (iv) in SS 6 of Section 84 has been their (iv) as to whether the applicant ahs made efforts to obtain a license from the patentee on reasonable terms and conditions and such efforts have not been successful within a reasonable period as the controller may deem fit, provided that this clause shall not applicable in case of national emergency or other circumstances of

2005 Act For the purpose of clause IV reasonable period shall be construed as period not exceeding 6 months.
New Section 92 A was inserted dealing with compulsory licence for export of patented pharmaceutical products in certain exceptional circumstances. Its says compulsory licence can be available to manufacture and export of patented pharmaceutical products to a country which is having insufficient or no manufacturing capacity in pharmaceutical sector
For the purposes of this section, pharmaceutical products means any patented product or product manufactured through a patented requirement would be to inform the patent holder.
Art.31 (b) provides for a compulsory license on reasonable commercial terms by an enterprise if it fails to obtain a voluntary license by the patent holder.
Art. 31(b) deals with situation of national emergency or other circumstances of extreme urgency or in cases of public non-commercial use. When contingencies like health or environmental emergencies arise, the concerned government may resort to compulsory licencing provisions.
TRIPS agreement, 1994, art. 31(1) provides that if an important technical advancement of considerable economic significance over the first patent has been justified by interested
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<th>extreme urgency or in case of public non-commercial use or on establishment of a ground of anti-competitive practices adopted by the patentee</th>
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<td>Reasonable requirements have been mentioned under SS 7 of section 84</td>
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<td>process, of the pharmaceutical sector needed to address public health problems and shall be inclusive of ingredients necessary for their manufacture and diagnostic kits required for their use.</td>
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<td>enterprises to the satisfaction of the controller of patent, a compulsory license may be granted to that enterprise in consultation with the first patent holder on such terms and conditions as determined by the controller of patent.</td>
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