Original Article


L. P. Kothari*¹, H. V. Shahare¹, S. S. Gedam²
¹SNJB’s SSDJ College of Pharmacy, Chandwad, Nashik, Maharashtra-423101, ²SIPS Mahiravani, Nashik, Maharashtra, India.
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Abstract

Intellectual Property Rights (IPR) is legal rights which are granted to a person for creations of the mind or intellect which have commercial value. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time. IPR is a body of law developed to protect the creative people who have disclosed their inventions for the benefit of mankind. It protects the inventions from having it copied or imitated without their consent. This review focus on types of IPR, various acts and laws. It concludes with the current scenario of IPR in world.

Keywords: Intellectual Property Rights, IPR law, legal rights.

Introduction

Intellectual property rights are the rights given to persons over the creations of their minds. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time. Intellectual property rights are themselves a form of property, called intangible property. Although many of the legal principles governing IP and IPR have evolved over centuries, it was not until the 19th century that the term intellectual property began to be used, and not until the late 20th century that it became commonplace in the majority of the world. The Statute of Monopolies (1624) and the British Statute of Anne (1710) are now seen as the origins of patent law and copyright respectively. [¹, ²] firmly establishing the concept of intellectual property. Intellectual property is divided into two categories:

Industrial Property includes patents for inventions, trademarks, industrial designs and geographical indications.

Copyright covers literary works (such as novels, poems and plays), films, music, artistic works (e.g., drawings, paintings, photographs and sculptures) and architectural design. Rights related to copyright include those of performing artists in their performances, producers of phonograms in their recordings, and broadcasters in their radio and television programs. [³] These rights are outlined in Article 27 of the Universal Declaration of Human Rights, which provides for the right to benefit from the protection of moral and material interests resulting from authorship of scientific, literary or artistic productions. The importance of intellectual property was first recognized in the Paris Convention for the Protection of Industrial Property (1883) and the Berne Convention for the Protection of Literary and Artistic Works (1886). Both treaties are administered by the World Intellectual Property Organization (WIPO). [⁴, ⁵]

World Intellectual Property Organization (WIPO)

It is established in 1970, the World Intellectual Property Organization (WIPO) is an international organization to ensure that the rights of creators and owners of intellectual property are protected worldwide, and that inventors and authors are therefore recognized
and rewarded for their ingenuity. This international protection acts as a spur to human creativity, pushing back the limits of science and technology and enriching the world of literature and the arts. By providing a stable environment for marketing products protected by intellectual property, it also oils the wheels of international trade. WIPO works closely with its Member States and other constituents to ensure the intellectual property system remains a supple and adaptable tool for prosperity and well-being, crafted to help realize the full potential of created works for present and future generations.\footnote{6}

1.1. Objectives of intellectual property law:
The stated objective of most intellectual property law (with the exception of trademarks) is to "Promote progress." By exchanging limited exclusive rights for disclosure of inventions and creative works, society and the patentee/copyright owner mutually benefit, and an incentive is created for inventors and authors to create and disclose their work. Some commentators have noted that the objective of intellectual property legislators and those who support its implementation appears to be "absolute protection". "If some intellectual property is desirable because it encourages innovation, they reason, more is better. The thinking is that creators will not have sufficient incentive to invent unless they are legally entitled to capture the full social value of their inventions".\footnote{7, 8} Other recent developments in intellectual property law, such as the America Invents Act, stress international harmonization.

1.1.1. Financial incentive
These exclusive rights allow owners of intellectual property to benefit from the property they have created, providing a financial incentive for the creation of an investment in intellectual property, and, in case of patents, pay associated research and development costs.\footnote{9}

1.1.2. Economic growth
The World Intellectual Property Organization (WIPO) treaty and several related international agreements underline that the protection of intellectual property rights is essential to maintaining economic growth. The WIPO gives two reasons for intellectual property laws:

1) To give statutory expression to the moral and economic rights of creators in their creations and the rights of the public in access to those creations.

2) To promote, as a deliberate act of Government policy, creativity and the dissemination and application of its results and to encourage fair trading which would contribute to economic and social development.\footnote{10}

1.1.3. Morality
"Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author."\footnote{11} Various moral justifications for private property can be used to argue in favor of the morality of intellectual property, such as:

- Natural Rights/Justice Argument: This argument is based on Locke's idea that a person has a natural right over the labour and/or products which is produced by his/her body.

- Utilitarian-Pragmatic Argument: According to this rationale, a society that protects private property is more effective and prosperous than societies that do not. Innovation and invention in 19th century America has been said to be attributed to the development of the patent system.\footnote{12, 13}

- "Personality" Argument: This argument is based on a quote from Hegel: "Every man has the right to turn his will upon a thing or make the thing an object of his will, that is to say, to set aside the mere thing and recreate it as his own".\footnote{14, 15}

1.2. Importance of IPR in Developing Countries:
There has been at times considerable debate on the impact on developing countries of tightening Intellectual Property Rights (IPR). The potential significance of IPR in developing countries is according to the relative intensity of their technological activity. Developing countries went along with the TRIPS agreement for a variety of reasons ranging from the hope of additional access to
agriculture and apparel markets in rich nations, to an expectation that stronger IPR would encourage additional technology transfer and innovation.\textsuperscript{[16]}

1.3. Impact of stronger IPR in Developing Countries:
Society reaps the following four benefits from granting such monopoly rights to innovations:\textsuperscript{[17]}

- The stimulation of innovations by private agents, the primary social benefits of IPR.
- The use of new knowledge in productive activity.
- The greater dissemination of new knowledge to other agents.
- The stimulation of innovations by other enterprises.

2. Types of IPR
Various types of IPR in different regions are given below:\textsuperscript{[18-22]}

1. Patents
2. Copyright and Related Rights
3. Trademark
4. Industrial Designs
5. Layout Designs of Integrated Circuits
6. Geographical Indications
7. Registration of Plant Varieties
8. Trade Secrets

1.1. Patent:
A patent is an exclusive right granted by the government to the original inventor/developer or researcher of an invention, which prohibits others from making, using or selling that invention.

Benefits:
- The grant of exclusive rights encourages people to come up with new inventions and innovations for the benefit of society.
- The grant of patent, apart from profitability is also associated with considerable peer respect and recognition which can be a strong motivation factor for many a researcher.

Precautions:
A patent is granted after submission of an application of an application fulfilling Patents are usually granted for a specified period only and must be kept alive by payment of fee on regular basis, failing which they lapse and ownership rights granted to the ownership rights granted to the owner come to an end.

Term:
20 Years

Registration
Patent in India are granted by the controller of patents, having Head Office at Calcutta and Branches at New Delhi, Madras and Mumbai.

1.2. Copyrights:
Copyright are a set of exclusive rights granted by law to the creators and producers of forms of creative expressions such as literally, musical and cinematographic works. The best forms of copyrights are authored and edited book, or audio & video Cassettes, which cannot be reproduced without the permission of the person (author, editor, publisher) who holds the copyright. In case of patents & trade secrets, protection of basic ideas is granted in case of copyright, protection is possible only on the expressed material (printed, painted, tape recorded, video recorded or expressed in any other form e.g. computer software). Copyright is to the holder are legally rights for invention of inventor as legally bounded rights for their ownership.

Benefits:
- Confers protection from copyright to a piece of work which is neither patentable nor can be kept as a trade secret.
- Imparts commercial value to a work.
- Ensures rewards in form of recognition.
- Financial benefits in terms of royalty payments, which can be transferred to legal heirs also, depending upon terms and conditions of licensing.

Precautions:
- Due to application must be made to registrar of copyright, before any attempt commercialization or licensing or permission.
- Copyright rules may be modified from time to time as has been done to allow protections rights in case of computer software, update yourself.
- Be aware of the loopholes. In biotechnology, copyright may cover DNA sequence data which may be published.
Know what is covered and what is not. Computer databases and photomicrographs of DNA instructions manual related to Biotechnology can also be covered under copyright protection.

Term:
Entire lifetime of an author and 50 years after his death.

Registration:
Copyright protection in India is obtained from registrar of copyright, New Delhi.

Trademark:
A trademark is a word or symbol adopted and used by a manufacturer or a merchant to identify his goods and distinguish them from those manufactured or sold by others.

Benefits:
- Trademarks are a vital & quickly recognized symbol of a corporation and its products and services.
- They have lot of goodwill associated with them, which enhances market values of products bearing the trademark.
- Basic purpose is to identify goods as belonging to a particular manufacture so that he gets the benefits of maintaining a particular level of excellence.
- Hence trademarks have a significant commercial value and must be a protected defended, throughout the local markets or those parts of world where the company or product may be recognized or found.

Precautions:
- Followed by the noun describing the product e.g. Xerox Photostat machine.
- The improper use of a trademark can result in its loss as an exclusive proprietary term e.g., aspirin was once the trademark of Bayer; Xerox had to spend lot of money to Use of a trademark must be proper in the sense that it must be used as an objective educate consumers that Xerox is its trademark and the term Xerox should not be used in place of Photostat.

The duration of a trademark and other such intellectual property matters vary from country to country. There is no central world body for trademarks, so they must be registered on a country-by-country basis.

Term:
Initial registration is for a period of 10 years, but can be renewed indefinitely.

Registration:
Trademark registration in India is governed by the Trademarks Registry having its head office at Mumbai.

1.3. Industrial Designs:
Industrial designs to specific shape, configuration, surface, pattern or color or combination thereof which produces an aesthetic impression of article. The important purpose of design registration is to see that the artisan, creator, originator of a design having principle of beauty look is not deprived of his bonafide reward by others applying it to their goods. Under WTO obligations, protection must be provided by the member countries, to new or original industrial designs. Member countries however have been given the option to exclude from protection, designs which are dictated by functional or technical consideration rather than aesthetics. To make Indian law compliant with WTO obligations in this respect, a new act, The Industrial Designs Act, 2000 was enacted by Indian Parliament replacing the designs act, 1911. The act came into force w.e.f.11.5.2001.

Benefits:
- Prevents unauthorized copying of an original design. On account of better aesthetics, the design may lead to enhanced commercial of a product.
- Protection period is sufficiently long 10 years and can be renewed for another 5 years by payment of fee.

Precautions:
Ensure registration before disclosure in any form.

Term:
Maximum term is 15 years.

Registration:
By making an application to registrar of designs, having head office at Kolkata.
1.4 Layout of Integrated Circuits:
Layout designs of integrated circuits refer to the specific manner in which transistors and other circuitry elements of integrated circuits are laid out in a semiconductor IC and include lead wire connecting such elements. Semiconductor IC is a product having transistors and other circuitry elements which are inseparably formed on a semi-conductor material or an insulating material or inside the semiconductor material and designed to perform an electronic circuitry function. The act for the protection for the layout of design of integrated circuits came into force on 4th September 2000 and is called the SICLD (Semiconductor integrated circuit layout design) Act, 2000. The act provide for exclusive rights to the registered proprietor of a layout design and also to the registered users. Application for registration of layout designs must be filed with the Registrar. Appeals against the order of registrar could be filed with the Appellate board. The act also provides for criminal prosecution for infringement of layout designs.

Benefits:
- Protection of effort and investments in designs and improvement of circuits.
- Recognition of original effort.

Precautions:
- Term of registration also includes period during which design is not commercially exploited for more than 2 years from date of registration of application shall be treated as commercially exploited for the purpose of act.
- Know what is registrable and what is not because not all circuit designs can be registered. Layout designs which are:
  a) Not original or already commercially exploited.
  b) Not distinctive.
  c) Not capable of being distinguishable from any other registered layout design are not registrable.

Term:
10 years from date of filling or unknown date of commercialization, whichever is earlier.

Registration:
By making an application to Registrar, SICLD New Delhi, India.

1.5 Geographical Indications:
Geographical indications of goods are defined as that of intellectual property which relate to goods of products originating from a particular geographical region situated in a particular country. They are used to identify only three categories of goods – agriculture, natural or manufactured. The manufactured goods should be produced or processed or prepared in that territory and must have a special quality or reputation. Typically, such a name convey an assurance of quality and distinctiveness which is essentially attributable to the fact of its origin in that defined geographical locality, region or country e.g. Darjeeling Tea, Nagpur Oranges, Bikaneri Bhujia (an Indian snack Resembling stiff salted noodles) Agra Petha, Matthura Peda (Indian sweets), Basmati Rice and so on.

Benefits:
- It confers legal protection to goods produced in a particular region.
- Enhances commercial value and increases market visibility for the produce.
- Prevents unauthorized use of registered geographical indications by others.
- Boost export by providing legal protection to goods covered under Geographical Indications.
- Promotes economic prosperity of producers of goods from a particular geographical territory.

Precautions:
- Applicable only to goods which are agriculture, natural or manufactured in a specific territory.
- Specific only for goods for a particular geographical region which is registered as a GI.
- Registration is not one time and regular fee has to be paid to keep the registration valid.
- Registration cannot be licensed but can be transferred to successors, if original person dies.
Term:
One-time registration is valid for 10 years.

Registration:
Registration of GI in India can be made by duly recognized body by making an application in writing to register of geographical indications, along with prescribed fee.

2.7. Registrations of Plant Variety:
These are legal rights granted by the government for protection of plant varieties, rights of farmers and plant breeders. In most of the industrialized and developed countries, crop varieties can be protected as IP since certain rights are granted to the persons producing them. These rights are called Plant Breeder’s Rights. However, the present IPR systems were not designed to promote the protection of diversity of whole ecosystems or unmodified plant. Still, inventors do not lose the benefit of honest effort e.g. in identifying medicinal value of plant extracts, since the evaluation, use and maintenance of plants is encouraged indirectly by the patent system.

Benefits:
- Promotion of biodiversity-If scope of PBR is broadened, it might help in extending breeding work to more crops, which in turn will promote greater biodiversity.
- By assuring financial return on new varieties developed, better and mission-oriented research is encouraged.

Precaution:
- Registration is forfeited if annual fee is not paid.

Term:
Period of protection quite long 15 years for annual crops and 18 years for trees and vines. One time renewal at the end of 6 years in case of annual crops and 9 years in case of trees and vines on payment of prescribed fees.

Registration:
Registration of PV in India can be made by a duly recognized body by making an application in writing to Registrar of Plant Varieties, along with prescribed fee.

2.8. Trade Secret:
Trade secrets refer to proprietary information having commercial application and value. It include formulations, mixture and ingredient are trade secrets of that property which have commercial value. A classical example of trade secret is the formula for the soft drink ‘coca-cola’ which has been preserved as a family secret, passed from one generation to another. It is true that specific information may have value but how to protect it as a trade secret? How to ensure that your employee does not cheat you by taking away information which you may have generated after years of hard work? Some of the highest selling products in pharmaceutical area, especially which are based on microbial technologies are protected as a trade secrets or undisclosed information.

Benefits:
- Minimal documentation.
- No fee.
- No expiry.
- Monopoly for almost unlimited period.
- No territorial limits.

Precautions:
- Ensure adequate protection through legal measures. Do not be careless in communication in writing, oral or otherwise.
- Ensure backup by proper documentation. Death/disease resulting in memory can result in loss of technology, unless it is documented and kept in a safe place or shared with a trustworthy person.

Registration:
India at present does not have any law to protect undisclosed information. However, WTO regulations require member countries to protect trade secrets. The WTO obligations require that proprietary information be protected to prevent from using it without the consent of owner, in a manner which is contrary to honest commercial practice. In India though no exclusive legislation exists but the matter would be generally covered under the contract act, 1872 [23-30]

3. Indian Scenario of IPR:
3.1. History of IPR in India:
The concept of intellectual property started seeping in India during the British rule when enactments like the Trade Mark Act of 1940, the Copy Right Act of 1709, which was later amended by the Acts of 1775, 1814, 1842, 1914 and the 1957 Act, the Designs Act of 1911 came into being.
The first Patent Act was enacted in 1856, which was reenacted by another act in 1859. In India, the Parliament alone is empowered to make laws dealing with Patents, Inventions, Designs, Copyrights, and Trade Marks under Entry 49 List 1 of the Seventh Schedule and Under Article 246 of the Constitution of India.

3.2. India’s Stance in the new IPR regime:
India signed the TRIPS agreement in 1996. TRIPS is the part and parcel of WTO. TRIPS incorporated all the important operative provisions of the Paris Convention of 1967 and sought to harmonize national laws of member countries. The Main objective was to introduce uniformity in the fields of IPR all over the world. TRIPS agreement would come into force for India with effect from 2001. The recent amendments to the various IPR legislations in India is a bold step forward by our law makers to cater to the needs of WTO and at the same time place itself globally. Apart from the various amendments new bills and Acts like the Integrated Circuit Layout designs Bills, 2000 and the Geographical Indications of Goods (registration and protection) Act, 1999 would be enforced.

3.3. Implications of TRIPS in India
- All IPR legislations in India to be amended to bring them in conformity with the provisions of the TRIPs.
- Indian Patent law needs a substantial amendment and this has been a cause of concern for India and International community.

3.4. The main apprehensions of these amendments are:
- Drugs become expensive
- Heavy royalties may be charged by the patent holders of these drugs.
- Farmers may have to pay for improved varieties of seeds.
- Provisions under Sec 88 and Sec 89 relating to License of Right may get diluted.
- Once Patent law is amended to include product patent in pharmaceutical industry Indian Industry necessarily needs to develop a new product to remain in the competition.
- Development of new products would mean surplus finances for R & D which is an additional finance burden.
- Danger of Unani and Ayurvedic medicines being patented by persons abroad.

Conclusion
Intellectual Property and Human Developments is a thorough account of the international interaction between intellectual property legal infrastructure and a myriad of broader concerns related to human welfare, going well beyond traditional economic indicators, gross domestic product, and industrial output. This review focus on the IPR, types of IPR, various acts and laws in detail for a general awareness in society.

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Table 1. Observation Table of some Acts under the Types.

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<th>Types</th>
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<td>• The Patents Bill, 1953</td>
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<td>• The Patents Bill, 1965</td>
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<td>• The Repealing and amending Act, 1974 (56 of 1974)</td>
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<td>• The Patents (Amendment) Act, 1999.</td>
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<td>• The Trade Marks Act, 1999 (47 of 1999)</td>
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<td>Copy</td>
<td>• The Copy Right Act of 1842</td>
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<td>Rights</td>
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<td>• Indian Copy Right Act, 1957 (the 1957 Act)</td>
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<td>• The Copy Right (amendment) Act, 1999.</td>
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<td>Designs</td>
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