

**THE INTELLECTUAL PROPERTY RIGHTS SYSTEM AND
IT'S ROLE IN PUBLIC HEALTH****Dr. D.K. Sanghi and *Rakesh Tiwle**Shri Laxmanrao Mankar Institute of Pharmacy, Amgoan, Gondia, Maharashtra,
India- 441902.Article Received on
28 February 2014,Revised on 23 March 2014,
Accepted on 13 April 2014***Correspondence for
Author****Rakesh Tiwle**Shri Laxmanrao Mankar
Institute of Pharmacy,
Amgoan, Gondia, Maharashtra.
India.**ABSTRACT**

Intellectual property rights (IPR) have become an important in the face of changing trade environment which is characterized by high innovation risks, short product cycle, global competition, need for rapid changes in technology, high investments in research and development (R&D), production and marketing and need for highly skilled human resources. It provides an incentive for innovation because the owner of the rights can exploit and retain these rights to gain commercial remuneration from third parties who wish to use their work. Intellectual Property Rights are patents, copyrights, trademarks, and geographical indicators, protection of undisclosed information, and layout designs of integrated circuits, industrial designs and traditional

knowledge which can be recognized by WTO (World Trading Organization) and the Trade Related Intellectual Property Rights agreement (TRIPS). In the article, are focus on the development of Intellectual Property Law in India, Evaluation of an International Intellectual Property Regime, Medicines, and food products are not simply commercial commodities, but basic human needs, fundamental human rights entitlements, and critical components of health care systems.

Key Words: Patents, Copyrights, Trade secrets, and Trademarks.**INTRODUCTION**

The term Intellectual Property (IP) covers a range of legal protections for creations of the human mind. IP provides an incentive for innovation because the owner of the rights can exploit and retain these rights to gain commercial remuneration from third parties who wish to use their work. Higher and further education establishments will be users of third party

materials subject to IP, but also potentially generators and owners of their own IP, and this will extend to their use of next generation technologies, virtual environments as well as digital content and technology. The use of third party IP without authorization entitles the rights holder to sue for damages and under some circumstances can lead to the destruction of the offending item(s). high investments in research and development (R&D), production and marketing and need for highly skilled human resources¹. Many products and technologies are simultaneously marketed and utilized in many countries. With the opening up of trade in goods and services intellectual property rights (IPR) have become more susceptible to infringement leading to inadequate return to the creators of knowledge.

HISTORY OF IPR IN INDIA

George Alfred DePenning is supposed to have made the first application for a patent in India in the year 1856. On February 28, 1856, the Government of India promulgated legislation to grant what was then termed as "exclusive privileges for the encouragement of inventions of new manufactures" i.e the Patents Act. On 3rd March, 1856, a civil engineer², George Alfred DePenning of, Grant's Lane, and Calcutta petitioned the Government of India for grant of exclusive privileges for his invention - "An Efficient Punkah Pulling Machine". On 2nd September, DePenning, submitted the Specifications for his invention along with drawings to illustrate it's working. These were accepted and the invention was granted the first ever Intellectual Property protection in India.

INTELLECTUAL PROPERTY RIGHTS

TYPES

Intellectual property rights include patents, copyright, industrial design rights, trademarks, trade dress, and in some jurisdictions trade secrets.³ There are also more specialized varieties of *sui generis* exclusive rights, such as circuit design rights (called mask work rights in U.S. law, protected under the Integrated Circuit Topography Act in Canadian law, and in European Union law by Directive 87/54/EEC of 16 December 1986.

1. Patent
2. Copyright
3. Industrial design rights
4. Trademarks
5. Trade dress
6. Trade secret

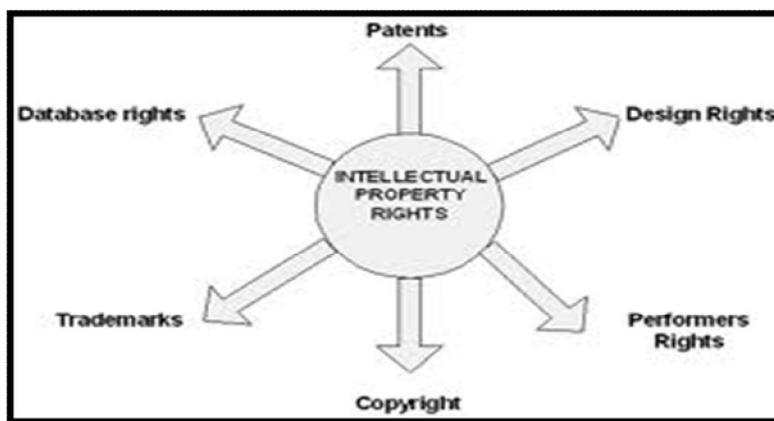


Figure No.1 Flow Chart of Intellectual Property Rights

PATENT

A patent grants an inventor the right to exclude others from making, using, selling, offering to sell, and importing an invention for a limited period of time, in exchange for the public disclosure of the invention⁴. Their maximum lifetime is 20 years from the date from when the patent was first applied. Patents can be registered for software and technological processes created outside the EU and the UK, although their applicability will extend to the UK⁵.



Figure No.2. Patent

COPYRIGHT

Copyright may apply to a wide range of creative, intellectual, or artistic forms, or "works". Copyright does not cover ideas and information themselves, only the form or manner in which they are expressed. Copyright gives the creator of an original work exclusive rights to it, usually for a limited time⁶. In most cases though, registration is not necessary to maintain a copyright infringement claim in India. Registration is made, in person or via a representative, with the Copyright Office. Internet piracy of films, music, books and software is an issue in India⁷. The duration of copyright in content will vary according to a number of factors such as what it is, when it was created and if it has been published.



Figure No.3. Copyright

INDUSTRIAL DESIGN RIGHTS

An industrial design consists of the creation of a shape, configuration or composition of pattern or color, or combination of pattern and color in three-dimensional form containing aesthetic value⁸. An industrial design can be a two- or three-dimensional pattern used to produce a product, industrial commodity or handicraft. India's Patents Act of 1970 and 2003 Patent Rules set out the law concerning patents. As in the UK, there is no provision for utility model patents. India's patent law operates under the 'first to file' principle - that is, if two people apply for a patent on an identical invention, the first one to file the application will be awarded the patent⁹.

TRADEMARKS

Trade mark is a recognizable sign, design which distinguish product /service from a particular trader or the similar product or services of other trader¹⁰. The law governing designs are come3s under the designs act 200 and rule 2001 and it is maximum valid from the time period ten year and renewable for a further five year trade mark is associated typically an image symbol etc.



Figure No.4. Trademarks

DESIGN RIGHTS

Design rights protect the form, rather than the function of an object¹¹. Different requirements must be met in order to register a design. However, since amendments to comply with a recent European Directive, the definition of designs that can be registered is broader than previously, some spare parts may be registered if they are 'complex products', provided they are visible in use (eg, hub caps, car doors).

DATABASE RIGHT

A database is defined as 'a collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means' Examples of databases relevant to the deployment of Web 2.0 technologies would include a collection of audio recordings¹²; a collection of digital stories; content in an institutional repository; a collection of social bookmarking tools; or a collection of educational materials.

PERFORMERS' RIGHTS

Performers' rights issues may arise in any type of performance (theatrical, musical, oral, dance or even simply a lecture)¹³. In these cases, it is important that permission from individuals is sought if a performance is reproduced in whole or in part in a Web 2.0 application, such as a podcast etc.

TRADE DRESS

Trade dress is a legal term of art that generally refers to characteristics of the visual appearance of a product or its packaging (or even the design of a building) that signify the source of the product to consumers.



Figure No.5. Trade Dress for working in the industry

INNOVATION IN PHARMACEUTICALS

This separation of clinical trials from sponsorship could attenuate the conflict of interest problem. Another effect attributable to the decline in innovative capacity is the proliferation of secondary patents (such as on polymorphs, isomers, formulations, new uses, etc.) relating to existing drugs which are strategically used to keep competitors out of the market through administrative measures or costly litigation (Federal Trade Commission [FTC], Through the acquisition of such patents- in some cases fraudulently 9-companies are often able to significantly delay the entry of generic competition and maintain high profits on old drugs, to the detriment of consumers and governments¹⁴. In sum, there are important changes in the innovation path and in the R&D model for pharmaceutical products. Such changes do not affect the industry's significant reliance on patents for funding R&D and setting limits to generic competitors. On the contrary, they have increased the value of patents, including those on minor developments, as income generating tools¹⁵.

PROTECTION OF UNDISCLOSED INFORMATION

The protection must apply to information that is secret, which enhance the commercial value because it is a secret and that has been subject to reasonable steps to keep it a secret¹⁶. That does not require undisclosed information to be treated as a form of property, but it does require that a person lawfully in control of such information must have the possibility of preventing it from being disclosed to, acquired by, or used by others without his/her consent in a manner contrary to honest commercial practices¹⁷.

INTELLECTUAL PROPERTY TERMS

APPELLATION OF ORIGIN

A term that refers to both a product's geographic origin and to its distinctive product characteristics caused by particular geographic conditions or methods of production¹⁸. Some distinguish an appellation of origin from an "Indication of Source."

ASSIGNMENT

A transfer of rights in intellectual property¹⁹. An assignment of a patent, for example, is a transfer of sufficient rights so that the recipient has title to the patent. Assignment can be a transfer of all rights of exclusivity in the patent, of an undivided portion (for example, a 50 percent interest), or of all rights within a specified location (for example, a certain area of the United States). Transfer of anything less is considered to be a "license."

AUDIOVISUAL WORK

A copyrightable work consisting of images that are related, presented in a series, and intended to be shown by the use of a machine, as well as any sound accompanying the work²⁰. A common example of an audiovisual work is a slide show, such as that used in a sales presentation, a lecture, or an introduction to a museum.

AUTHOR²¹

The real person who creates a copyrightable work or the employer, corporate or individual, of a person who creates a copyrightable work within the scope of employment, or, in some circumstances, the commissioning party of certain specified types of works. “Author”

BEST MODE

A condition for the grant of a valid patent²². An inventor must describe the best method he or she knows for carrying out the invention.

COMMUNITY TRADE MARK²³

A trademark registration granted by the European Union’s Office for Harmonization in the Internal Market and enforceable throughout EU member nations.

COMPILATION

A copyrightable work consisting of a collection and assembly of preexisting material²⁴. Assembly must exhibit at least minimal originality in the selection, organization, and arrangement of the material without making any internal changes in it.

COPIES²⁵

As a noun, “copies” means the material objects that store or fix copyrightable information other than sounds; as a verb, the act of copying.

COPYING

In copyright law, “copying” denotes two separate but interrelated concepts²⁶. To constitute an infringement of copyright, a work must be a “copy” in the sense that it is substantially similar to a copyrighted work; it must have been “copied” from the copyrighted work as opposed to being the result of coincidental, independent production or from being taken from the same source as the copyrighted work.

COPYRIGHT

An exclusive right granted or conferred by the government on the creator of a work to exclude others from reproducing it, adapting it, distributing it to the public, performing it in public, or displaying it in public²⁷. Copyright does not protect an abstract idea; it protects only the concrete form of expression in a work. To be valid, a copyrighted work must have originality and possess a modicum of creativity.

DEPENDENT

A claim in a patent that refers back to a previous claim and defines an invention that is narrower in scope than that in the previous claim²⁸. A dependent claim must be written so as to be more restricted than the technology defined in the previous claim.

DERIVATIVE WORK

A work based on a preexisting work that is changed, condensed, recast, or embellished in some way.

DESIGN PATENT

A government grant of exclusive rights in a novel, no obvious, and ornamental industrial design. A design patent confers the right to exclude others from making, using,²⁹ or selling designs that closely resemble the patented design. A design patent covers ornamental aspects of a design; its functional aspects are covered by a utility patent. A design patent and a utility patent can cover different aspects of the same article, such as an automobile or a table lamp.

DIGITAL MILLENNIUM COPYRIGHT ACT

A major piece of U.S. legislation adopted in 1998 that extensively amended the copyright laws, in part to conform U.S. law to various treaty obligations, and in part to modernize the law to take into account various new digital technologies³⁰.

ECONOMIC ESPIONAGE ACT

A U.S. Statute, adopted in 1996, which provides criminal penalties for the theft of trade secrets. An EEA makes it illegal to steal or fraudulently obtain trade secrets for the benefit of a foreign government, instrumentality, or agent and steal trade secrets that benefit “anyone other than the owner.”

FIELD OF USE RESTRICTION

A provision in an intellectual property license restricting the licensee to use of the licensed property only in a defined product or service market.

FIRST TO FILE

For patents, a rule under which patent priority, and thus entitlement to a patent, is determined by which inventor was the first to file a patent application, rather than who was first to actually invent. It is the rule followed by almost every nation in the world except the United States. For trademarks, priority among conflicting applications to register trademarks is handled by publishing the application with the earliest filing date for possible opposition by the applicant with the later filing date.

GENERIC NAME

A word used by most people to name a class or category of product or service, such as “cellular phone.” No one person may have trademark rights to a generic name.

INTENT-TO-USE APPLICATION

Since 1989 in the United States, an optional method of applying for federal registration of a mark on the Principal Register based upon a declared good-faith intention to use a mark on defined goods or services.

JOINT INVENTORS

Two or more inventors of a single invention who collaborate in the inventive process.

KNOCK-OFF

An identical copy of a work or product protected by patent, trademark, trade dress, or copyright. When used as a verb, the act of producing such a copy.

LOGO

A graphic representation or symbol of a company name or trademark, usually designed for ready recognition. The term has no legal significance in the law of trademark.

MORAL RIGHTS

Some European and other nations' legal systems expressly recognize certain rights of authors beyond those strictly recognized in copyright law. Moral rights generally fall into three categories: the right of an author to receive credit as the author of a work, to prevent others

from falsely being named author, and to prevent use of the author's name in connection with works the author did not create; the right of an author to prevent mutilation of a work; and the right to withdraw a work from distribution if it no longer represents the views of the author.

NOTICE

A formal sign or notification attached to physical objects that embody or reproduce an intellectual property right -for example, the use of the word "patent" or its abbreviation, "pat.," together with the patent number, on a patented article made by a patent holder or his/her licensees.

ON SALE

An inventor cannot obtain a valid patent if he or she waits for more than the one-year grace period to file a patent application after a product embodying the invention has been placed "on sale."

PATENT

In the United States, a grant by the federal government to an inventor of the right to exclude others from making, using, or selling the invention. There are three very different kinds of patents in the United States: a utility patent on the functional aspects of products and processes; a design patent on the ornamental design of useful objects; and a plant patent on a new variety of living plant. Patents do not protect "ideas," only structures and methods that apply technological concepts.

PUBLIC DOMAIN

The status of an invention, creative work, and commercial symbol that is not protected by any form of intellectual property law. Items in the public domain are available for free copying and use by anyone copying of items that are in the public domain is not only tolerated but encouraged as a vital part of the competitive process³¹.

RENEWAL

Extension of a registration of a trademark or the extension of a copyright.

SECONDARY MEANING

A meaning for a trademark or service mark that customers associate with a particular brand of products or services. For trade symbols that are not inherently distinctive, distinctiveness must be acquired in order to be protected by a trademark or service mark³² is acquired

distinctiveness is known as “secondary meaning” because it is acquired second in time to the primary meaning of a word.

SERVICE MARK

A word, slogan, design, picture, or any other symbol used to identify and distinguish services (retail sales services, airlines services, insurance, investment services, and the like) as opposed to a product.

TRADEMARK

(1) A word, slogan, design, picture, or any other symbol used to identify and distinguish goods. (2) Any identifying symbol, including a word, design, or shape of a product or container, that qualifies for legal status as a trademark, service mark, collective mark, certification mark, trade name, or trade dress.

UTILITY

The usefulness of a patented invention. To be patentable, an invention must operate and be capable of use, and it must perform some “useful” function for society.

WORLD TRADE ORGANIZATION (WTO)³³

WTO is the only global international organization dealing with the rules of trade between nations. Located in Geneva, Switzerland, it was created at the end of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) negotiations in December 1993 to oversee the operation of GATT.

CONCLUSIONS

The intellectual property system has undergone a gradual but steady process of internationalization. A web of international treaties today supports global R&D, production, and trade. In the case of pharmaceuticals, such treaties, in particular the Patent Cooperation Treaty (PCT) and the TRIPS Agreement, provide large companies procedural means and substantive rights to exploit their innovations practically worldwide. Patents have played an important role in encouraging investment in pharmaceutical R&D. However, the innovative productivity of the industry is drastically declining, despite new scientific and technological tools available for drug development. In addition, patents only work as incentives where profitable markets exist. Other mechanisms need to be established and initiatives supported (such as “open-access” models) to encourage more R&D in diseases disproportionately

affecting developing countries. Likewise, policy interventions are needed to mitigate the negative impact of IPRs on access to medicines by the poor. A growing number of developing countries have made use of these licenses, particularly to increase access to HIV/AIDS drugs, but there is nothing in the compulsory licenses system limiting its use to one category of medicines or diseases. In the future, governments may face difficult challenges to provide access to patented drugs. This is because all WTO member states are now bound to confer product patent protection, and the mechanism set up by the WTO Decision is overburdened by conditions unlikely to encourage the supply of cheap products under patent protection in possible exporting countries. Finally, despite the moral and political weight of the Doha Declaration, the United States and other developed countries have continued to seek a further expansion of IPRs to the benefit of pharmaceutical companies and other patent holders. The enhanced standards of protection create a disproportionate cost to developing countries that are parties to such agreements. In sum, the IPRs system does promote research into more effective and efficient treatments.

ACKNOWLEDGEMENT

The authors would like to acknowledge the assistance provided by kind cooperation of Secretary Shri Keshavrao Mankar Bhavabhuti Shikshan Sanstha “Shri Laxmanrao Mankar Institute of Pharmacy” Amagoan, Gondia Maharashtra, INDIA.

REFFERNCE

1. Ropper AH. The Guillain–Barré Syndrome. *New England Journal of Medicine* 1992; 326:1130-1136
2. <http://www.dcmsme.gov.in/schemes/Guidelines-UK.pdf>
3. The Trademarks Act 1999 along with trade Marks Rules 2002; Commercial Law Publisher (India) Private Ltd., 2004
4. R&D Statistics Department of Science and Technology, Government of India, May, 2002.
5. Science and Technology Policy 2003, Department of Science and Technology
6. IPR Bulletin, Vol.5, No 8, August 1999; Technology Information, Forecasting and Assessment Council
7. IPR Bulletin, Vol. 9, No. 10, October 2003; Technology Information, Forecasting and Assessment Council.

8. Aghion, P. and P. Howitt (1992), A model of growth through creative destruction. *Econometrica*, Volume 60(2), pp. 323-351. <http://www.jstor.org/stable/2951599>
9. Backus, David K., Patrick J. Kehoe and Timothy J. Kehoe (1992), In search of scale effects in trade and growth. *Journal of Economic Theory*, Volume 58(2), pp. 377-409. [http://dx.doi.org/10.1016/0022-0531\(92\)90060-U](http://dx.doi.org/10.1016/0022-0531(92)90060-U)
10. Barro, Robert J. (1991), Economic growth in a cross section of countries. *The Quarterly Journal of Economics*, Volume 106(2), pp. 407-443. <http://dx.doi.org/10.2307/2937943>
7. 10. Barro, Robert J. and Xavier Sala i Martin (1990), Economic growth and convergence across the United States. National Bureau of Economic Research Working Paper 3419.
8. Benhabib, J. and M. M. Spiegel (1994), The role of human capital in economic development: Evidence from aggregate cross-country data. *Journal of Monetary Economics*, Volume 34(2), pp. 143-173. [http://dx.doi.org/10.1016/0304-3932\(94\)90047-7](http://dx.doi.org/10.1016/0304-3932(94)90047-7)
9. Branstetter, L. G., R. Fisman and C. F. Foley (2004), Do stronger intellectual property rights increase international technology transfer? Empirical evidence from U.S. firm-level panel data. *World Bank Policy Research Working Paper No. 3305*. Washington, DC: The World Bank.
10. Chen, Y. and T. Puttitanun (2005), Intellectual property rights and innovation in developing countries. *Journal of Development Economics*, Volume 78(2), pp. 474-493. <http://dx.doi.org/10.1016/j.jdeveco.2004.11.005>
11. Chin, J. C. and G. M. Grossman (1990), Intellectual property rights and north-south trade. In R. W. Jones and A. O. Krueger (eds.), *The Political Economy of International Trade*, pp. 90-107. Cambridge, MA: Basil Blackwell.
12. Cohen, W. M. and D. A. Levinthal (1989), Innovation and learning: The two faces of R&D. *The Economic Journal*, Volume 99(397), pp. 569-596. <http://www.jstor.org/stable/2233763>
13. Thompson, M. A. and F. W. Rushing (1996), An empirical analysis of the impact of patent protection on economic growth. *Journal of Economic Development*, Volume 21(2), pp. 61-79.
14. Xu, B. and E. P. Chiang (2005), Trade, patents and international technology diffusion. *Journal of International Trade and Economic Development*, Volume 14(1), pp. 115-135. <http://dx.doi.org/10.1080/0963819042000333270>.
15. Richard T. De George, "14. Intellectual Property Rights," in *The Oxford Handbook of Business Ethics*, by George G. Brenkert and Tom L. Beauchamp, vol. 1, 1st ed. (Oxford, England: Oxford University Press, n.d.), 415-416.

16. The Law of Intellectual Property, Part 1 Chapter 1 Section 9 - Lysander Spooner.
17. Doctorow, Cory (2008-02-21). "'Intellectual property' is a silly euphemism". *The Guardian*. Retrieved 2008-02-23.
18. Shapiro, Robert and Nam Pham. "Economic Effects of Intellectual Property-Intensive Manufacturing in the United States". July 2007.
19. Hahn, Robert W., *Intellectual Property Rights in Frontier Industries: Software and Biotechnology*, AEI Press, March 2005.
20. Farah, Paolo and Cima, Elena. "China's Participation in the World Trade Organization: Trade in Goods, Services, Intellectual Property Rights and Transparency Issues" in Aurelio Lopez-Tarruella Martinez (ed.), *El comercio con China. Oportunidades empresariales, incertidumbres jurídicas*, Tirant lo Blanch, Valencia (Spain) 2010, pp. 85–121. ISBN 978-84-8456-981-7.
21. Arai, Hisamitsu. "Intellectual Property Policies for the Twenty-First Century: The Japanese Experience in Wealth Creation", WIPO Publication Number 834 (E). 2000.
22. Lai, Edwin. "The Economics of Intellectual Property Protection in the Global Economy". Princeton University. April 2001
23. Lindberg, Van. *Intellectual Property and Open Source: A Practical Guide to Protecting Code*. O'Reilly Books, 2008. ISBN 0-596-51796-3 | ISBN 978-0-596-51796-0
24. Schechter, Roger E., and John R. Thomas. *Intellectual Property: The Law of Copyrights, Patents and Trademarks*. New York: West/Wadsworth, 2003, ISBN 0-314-06599-7.
25. Burk, Dan L. and Mark A. Lemley (2009). *The Patent Crisis and How the Courts Can Solve It*. University of Chicago Press. ISBN 978-0-226-08061-1.
26. Ganguli P. Indian Path towards TRIPS compliance. *World Patent Information*, 2003; 25: 143.
27. Lall S. Indicators of the relative importance of IPRs in developing countries., *Research Policy*, 2003; 32: 1657.
28. Narayananan P. In: *Patent Law*, 2nd ed, Eastern Law House, 1997.
29. *The Patents Act 1970*, Universal Law Publishing Co. Pvt. Ltd, 2005. p. 6-31, 42-45.
30. Ramakrishna T. In: *Basic Principles and Acquisition of IPR*. CIPRA, NLSIU, Bangalore, 2005.