

Intellectual Property Rights and The Digital World

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I. WHAT IS INTELLECTUAL PROPERTY?

Intellectual property is the creative work of the human intellect. The main motivation of its protection is to promote the progress of its science and technology, arts, literature and other creative works and to encourage and reward creativity. Nations give statutory expression to the economic rights of creators in their creations and to the rights of the public in accessing those creations. This is instrumental in promoting creativity and dissemination and application of its results. The economic and technological development of a nation will come to a halt if no protection is given to intellectual property rights. Therefore, the contribution of intellectual property is sine qua non for the industrial and economic development of a nation. The prosperity achieved by developed nations is, to a large extent, the result of exploitation of their intellectual property.

II. INTELLECTUAL PROPERTY AT CENTRAL LEVEL

Intellectual property has assumed central importance throughout the world in the recent past. The intellectual property, which was mainly the subject matter of the World Intellectual Property Organization (WIPO) has also become a part of the World Trade Organization (WTO) regime in 1995².

According to the World Intellectual Property Organizations, there are certain categories of Intellectual Property Rights³ and some of them are discussed below-

1) Copyright

In India, copyright subsists in (i) original literary, dramatic, musical and artistic works; (ii) cinematograph films; and (iii) sound recording. Literary work includes computer programme including databases. The subject-matter of copyright includes e.g. poems, novels, music, school textbooks; question papers set for examination; law reports; catalogues; consignment note; directories; mathematical tables; railway timetables; road books; guide books; book of scientific questions and answers etc.

2) Patents

Patent means monopoly right granted to a person by the Patent Office to exploit his invention for a limited

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² VKAHUJA, 2d ed, law relating to intellectual property rights 3-4, (2013).

³ World Intellectual Property Organization (WIPO) (Sep 9, 2019, 5:45 pm) <http://www.wipo.info>.

period of time. In India, a patent is granted for a period of 20 years. During this period the inventor is entitled to exclude anyone else from commercially exploiting his invention. The person to whom a patent is granted is known as the patentee.

3) Trademarks

According to section 2(1)(z)(b) of the Trade Marks Act, 1929, a trade mark should be capable of being represented graphically and should also be capable of distinguishing the goods or services of one person from those of others. The trade mark law serves two important purposes (1) it protects the public from confusion and deception by identifying the source or origin of particular products as distinguished from other similar products; and (2) it protects the trade mark owner's trade and business as well as the goodwill which is attached to his trade mark.⁴

4) Layout designs of Integrated circuits -The creation of a new layout design of an integrated circuit involves enormous investment, both in terms of money and the time of highly qualified experts. Semiconductor integrated circuit means a product having transistors or other circuitry elements which are inseparably formed on a semiconductor material or an insulating material or inside the semiconductor material and designed to perform an electric circuitry function⁵. Layout design means a layout of transistors, and other circuitry elements and includes lead wires connecting such elements and expressed in any manner in a semiconductor integrated circuit.⁶

5) Geographical indications- It indicates that particular goods originate from a country, region or locality and has some special characteristics, qualities or reputation, which are attributable to its place of origin. These special characteristics, qualities or reputation may be due to various factors, e.g. natural factors such as raw materials, soil, regional climate, temperature, moisture etc.; or the method of manufacture or preparation of the product such as traditional production methods; or other human factors such as concentration of similar businesses in the same region, specialization in the production or preparation of certain products and the maintaining of certain quality standards.⁷

III. IPR AND DIGITAL RIGHTS:

In the digital age the issue of privacy is an important subject where unauthorized data sharing, data integration, unethical data utilization and unauthorized public disclosure are the major areas of concern. The major issues

⁴VK AHUJA, 2d ed, law relating to intellectual property rights 3-4, (2013).

⁵ Section 2(r), Layout Designs Act, 2000.

⁶ Section 2(h), id.

⁷SUREKHA VASISHTA & AMAR RAJ LALL, "Geographical Indications of Goods (Registration and Protection) Act, 1999" in A.K. Koul & V.K. Ahuja, (ed.), The Law of Intellectual Property Rights: In Prospect and Retrospect, Faculty of law, Delhi, 2001, p. 248.

are as follows:

- a. Is digitization to be considered as similar to reproduction, for example using Xerox machine?
- b. Is digitization a creative activity such as translation from one language to another?
- c. Can transmission of digitized documents through Internet be considered as commercial distribution or public communication similar to broadcasting?
- d. Can we consider database as a special collected work that should be protected by the copyright law?
- e. What can be considered as fair use in the Internet environment?
- f. What are the concerns of the library community?
- g. In the digital context if access restricted by the copyright owner, how could the public exercise fair use with those work?

The libraries have allowed their users to read a document, to browse through the whole collection; to search through the library catalogue; to supply Xerox copy for research and education purpose; to procure photocopies of articles from other libraries or clearing centers; to widely distribute the re-produced copies of documents for public awareness and to provide inter library loan service. Whether all these activities will continue in the digital age? If digitization is considered as reproduction, it is clear that in digitization the initial work is merely changed into the digital form and the process of changing is accomplished by a machine, without any creativity. If it is considered as a translation from one language to another, the digitization is also a change from natural human language into machine language. However, in digitization, there is no creativity involved and it could be considered as a similar activity to reprography. The copyright document cannot be considered as creative. The transmission of information on Internet can be considered similar to broadcasting; hence copyright law cannot be applied⁸.

IV. WAYS FOR PROTECTION OF DIGITAL/INTELLECTUAL PROPERTY:

Digital Rights Management (DRM) technologies ensure copyright through identifying and protecting the content, controlling access of the work, protecting the integrity of the work and ensuring payment for the access. DRM technologies prevent illegal users in accessing the content. Access is protected through user ID and password, licensing agreements. Another way to protect digital content is through Technical Protection Measures (TPM). These technologies allow publishing companies in securing and protecting content such as music, text and video from unauthorized use. The TPM and DRM technologies are increasingly employed to sell and distribute content over the Internet.

⁸S. S. PAUL, (A) Basic understanding of intellectual property. Kolkata: Diamond, 2003. Wherry, Timothy Lee. Intellectual property: everything the digital-age librarian needs to know. New Delhi: Indiana Publishing House, 2009.

- **Cryptography:**

Cryptography is the oldest mechanism employed to ensure security and privacy of information over networks. This involves scrambling (or encryption) of the information to render it unreadable or not understandable language, which only the legitimate user can unscramble (decrypt).

- **Digital Watermark Technology:**

A digital watermark is a digital signal or pattern inserted into a digital document. It is similar to the electronic on-screen logo used by TV channels. A unique identifier is used to identify the work. The message might contain information regarding ownership, sender, recipient etc. or information about copyright permission. The system consists of a watermark generator, embedder and a watermark detector decoder. The legal user can remove these watermarks with a predetermined algorithm.

- **Digital Signature Technology:**

Digital signature includes identity of the sender and/or receiver, date, time, any unique code etc. This information can be added to digital products. This digitally marks and binds a software product for transferring to a specified customer. Digitally signed fingerprints guarantee document authenticity and prevent illegal copying.

- **Electronic Marking:**

In this technique, the system automatically generates a unique mark that is tagged to each of the document copies. This technique is used to protect copyright as well as in electronic publishing where documents are printed, copied or faxed.⁹

V. CONCLUSION

A number of issues are associated with the usage of digital information i.e. issue of single articles versus full issues of e-journals, user-friendliness, incompatible hardware and software, formatting, graphics, scholarly recognition and obsolescence. While it is important to protect the copyright of the publishers, it is equally important to protect interest of the libraries and the user. In digital environment it is difficult to draw a boundary line between what is permissible, to what extent and what is infringement. Small – scale violations which do not conflict with owner’s rights may be accepted as a part of fair use. In the context of digital information, it is difficult to judge, comprehend fair use, access and control the infringement of copyright law. It is almost impossible for a copyright owner to know which person used his/her work. In this context it is necessary to modify the copyright law. The librarians in the digital environment have some responsibility to

⁹WHERRY, TIMOTHY LEE, Intellectual property: everything the digital – age librarian needs to know. New Delhi: Indiana Publishing House, 2009.

collect information and help the readers by giving it even if it is an electronic form. The copyright protection should be encouraging the creativity and not for creating hurdles in the use of information. The Librarians should work as a catalyst for the free flow of information between the owners of copyright and the users of the information¹⁰.

¹⁰SOUGATA CHATTOPADHYA, Intellectual property rights in digital environment, March 2013.