# Intellectual Property Rights: Issues and Challenges in Digital Environment

### **Kaushal Chauhan**

Librarian, MDSD Girls College, Ambala City

#### ABSTRACT

Every human being is endowed with certain, but varying degrees of intellect. Each individual is uniquely gifted. The advent of knowledge society replacing agriculture and industrial societies has resulted in the emergence of new forms of property which is the result of human intellect and Endeavour. Revolutionary innovations of Information and communication technologies have changed the ways in which people think. communicate and share knowledge. Copyright protects the labor, skill and judgment of some author, artist or creator in creation of original piece of work. It is unique kind of Intellectual property and its importance is growing day by day. This paper mainly focuses on the IPR, Issues and challenges of IPR, General Principles, Need and Necessity of IPR, Components of IPR, Protection of IPR, Digital Millennium Copyright Act (DMCA), Copyright Violation, Copyrights in India, Copyright Issues in Libraries, Role of Librarian towards IPR.

### Introduction

It's the Human being who have the capacity of creativity, they have exclusive bundle of rights over their work for a limited period of time. In ancient days creative persons like artist, musicians and writers made, composed or wrote for fame and recognition rather than to earn a living, the question of IPRs never arose. The importance of Intellectual Property Rights was recognized only after the invention of printing press which made possible the reproduction of book in large quantities. The IPR law plays a vital role in deriving the socio-economic, political, technological, environmental, cultural benefits of a developing nation. It refers to creations of mind, such as inventions, literacy and artistic works, designs, and symbols, name and images used in commerce. Intellectual

property is a series of legal rights which give rise to, in most cases, temporary protection for different types of invention, design, brand name or original creation. Intellectual Property refers to a number of distinct types of legal monopolies over creations of mind, both artistic and commercial and the corresponding field of law. Intellectual property is a means to disseminate Information Besides protecting the right owners from illegal infringements and right violations. The original creators of works protected by copyright and their heirs, have certain basic rights. They hold the exclusive right to use or authorize others to use the work on agreed terms. The creator of works can be prohibit or authorize:

- Its reproduction in various forms, such as printed publication or sound recordings;
- Its public performance as in a play or musical work;
- Its translation into other language or its adaptation such as a novel into a screenplay.

# Need and Necessity of IPR

- To make available incentives to the individual for new invention or creation
- Providing recognition to the creators and inventors
- Ensure remuneration for intellectual property. Without protection of ideas, business and individuals would not reap full benefits of their inventions.
- Ensuring the availability of genuine and original products.
- To protect the right of individual to enjoy their creations and inventions.
- To ensure protection against unfair trade practices.
- To assure the world a flow of useful, informative and intellectual works
- To encourage the continuing innovativeness and creativity of owner of IPR
- IPR is needed for to create value for R&D.

It is very important for India to defend its IPR system. This will help in building a strong resolve to encourage and maintain an effective innovation strategy for India's manufacturing and business environment.

# Protection of IPR

Protection of IPR allows the innovator, brand owner, patent holder and copyright holder to benefit from his/her work, labour and investment, which does not mean monopoly of the intellect. Such rights are set out in the international declaration of human rights, which provides for the right to benefit from the protection of the moral and physical interests resulting

from right holder's work; literal or artistic product.

### **Components of IPR**

- **Patents:** A patent is an inclusive right granted by a country to the owner of an invention to make, use, manufacture, provided the invention satisfies certain conditions stipulated in the laws. A patent grants an inventor the right to exclude others from making, selling, offering to sell and importing an invention for a limited period of time, in exchange for the public disclosure of the invention. An invention is a solution to a specific technological problem, which may be a product or a process.
- **Trademark:** A trademark is recognizable sign, design, or expression which distinguishes product or services from the similar product or services of the traders.
- **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 that signs the source of product to consumers.
- **Design:** It is process of design applied to products that are to be manufactures through technique of mass production.
- **Copyright**: A copy right gives the creator of original work exclusive rights to it, usually to a limited time. It provides legal rights exclusively given for a definite period to the creators of an intellectual work e.g. Literary works, artistic works, musical works, films, computer programs.
- **Trade Secret:** A trade secret is a formula, practice, process, design, instrument, pattern, commercial method, on compilation of Information.
- **Supplementary Protection Certificate:** is an IPR that extends the duration of certain rights associated with a patent.
- **Geographical Indications:** A geographical indication is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin.
- **Mask Works:** Mask works are defined as a series of related images, however fixed or encoded, having or representing the predetermined three dimensional pattern of metallic insulating or semi conductor material.
- **Tangible Research Property:** Tangible research property includes all tangible items produced in the course of research or other projects supported by the universities or external sponsors.
- **Database Rights:** Database rights are granted to a person who funds select and arrange the content into a database.
- Industrial Design Rights: An industrial Design Rights protects

the visual designs of objects that are not purely utilitarian. It consist the creation of a shape, configuration, or composition of patterns or colour or combination of pattern and colour in three dimensional forms containing aesthetic value.

- **Financial Incentive:** These exclusive rights allow the owner 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.
- **Economic Growth:** The WIPO treaty and several related international agreements are premised on the notion that the protection of intellectual property rights is essential to maintaining economic growth.
- **Morality:** According to article 27 of the Universal Declaration of Human Rights, "everyone has the right to the protection of the moral and material interests resulting from any scientific, literary, or artistic protection of which he is the author". Although the relationship between intellectual property and human rights is a complex one, there are moral arguments for intellectual property.

So any research, innovations, or inventions leading to a product, process, design, methods, literacy and artistic work etc, which may result in financial gains is registered under intellectual property rights acts.

# **Objectives of Copyright**

The object of copyright is to promote progress along with to encourage authors, composers and artists to create original works by rewarding them with the exclusive right for a limited period to reproduce the works for the benefit of the public. On the expiry of the term copyright the works belong to the public domain and any one may reproduce them without permission. Initially copyright law applied to only to copying of books. Over time other uses such as translations and derivative works were made subject to copyright. Copyright now covers a wide range of works, including maps, music, dramatic works, paintings, architectural drawings, photographs, sound recordings, motion pictures, and computer programs.

# **General Principles of Copyrights**

- Printing of copies
- Audio, Image and Audio visual copies
- Multimedia products
- Archiving
- Digital Libraries

- Electronic copies
  - Electro copying and networking

# **Copyright Violation**

- Hacking
- Virus Attack
- Spreading misinformation
- Cutting of Communication
- Violation of privacy
- Cracking
- Data fiddling
- E-Mail security destruction
- Alteration of Information

# **Copyrights in India**

The journey of copyright in India may be traced back in the year 1847, when first copyright act was enacted. A modified version of same was enacted in 1914. In India, the development of copyright law has been closely aligned to the British Copyright law. A number of amendments to this act were affected in 1983 to avail benefits arising from the revision of Berne Convention and universal copyright convention to which India is an adherent. Amendments of 1992 extended the term of copyright protection from the life time of the authorship plus 50 years to the lifetime of authorship plus 60 years. Indian copyright Act of 1957 replaces the act of 1914. Act 1957 came into force on 21<sup>st</sup> January 1958. The copyright Act of 1957 further became amended five times in the years 1983, 1984. 1992, 1994, and 1999. With these amendments offence of infringement of copyright has been declared as an economic offence. The copyright act 1957 provides copyright protection in India. Now the new copyright bill 2010 passed by the parliament on 17<sup>th</sup> May 2012 will be known as copyright (Amended) act 2012. The 2012 amendments make Indian Copyright Law compliant with the Internet Treaties – the WIPO Copyright Treaty (WCT) and WIPO Performances and Phonograms Treaty (WPPT). The amendments introduced through Copyright (Amendment) Act 2012 can be categorized into:

- Amendments to rights in artistic works, cinematograph films and sound recordings.
- WCT and WPPT related amendment to rights
- Author-friendly amendments on mode of Assignment and Licenses
- Amendments facilitating Access to Works

- Strengthening enforcement and protecting against Internet piracy
- Reform of Copyright Board and other minor amendments

**Digital Millennium Copyright Act (DMCA):** In 1998 Congress passé and the president signed the digital millennium copyright act, which it claims updates copyright laws to address the realities of digital technology. Among other things it criminalizes the creation, sharing or selling of any technology that can be used to defeat copy protection technology. The DMCA's principal innovation in the field of copyright is the exemption from direct and indirect liability of Internet service providers and other intermediaries. This exemption was adopted by the European Union in the Electronic Commerce Directive 2000. The Information Society Directive 2001 implemented the 1996 WIPO Copyright Treaty in the European Union.

# **Copyright Issues in Libraries**

- **Print copies:** often libraries have to make their own copies of the documents for their wider use, when their reprints are not available. The permission of authors desired.
- **Electronic Copies:** Sometimes users are requesting e copes of information; here also is chance of infringement.
- **Archiving:** this right is designed to allow librarian to allow libraries to make copies of printed books and out of print books, manuscripts and periodicals.
- **Digital Libraries:** Present copyright lows inhibit the complete realization of the idea of digital libraries.
- **Multimedia Products:** Sometime multimedia have been bundle together to a single product, so there are some provisions for protection of the rights of multimedia products but no clear cut policy have been designed yet.

### **Role of Librarian towards Copyrights**

The time in which we live is referred to an Information Age. In this age information is considered as a resource that has no value until extracted, processed and utilized. Library professionals and Information scientist are the information providers to information seekers or information user community. In doing do they have various sources of information. They often download required information from online sources. Copyright laws do not provide clear cut solutions relation to their piracy, unauthorized users etc. Lot of debate has ensued whether a database of abstracts infringes copyright of original authors. The issues are of extreme concern to all the libraries specially the professional information centres. This is because the digital data is easy to capture, store, process and download. It is Just impossible to keep a track of the copyright infringement in the digital environment because of the facilities like structuring, mixing,

remixing of Information with the sound waves etc. Librarian and Information Scientist should be aware of the IPR provisions in the existing laws in their countries and be prepared to make contributions when the laws are revised to ensure that the interests of the users are adequately protected in the digital Information environment.

Fair use of print material by allowing reproduction in reasonable way of private study, research or education is well understood. But in context of Digital Information because it distributed to a larger community, 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. It is also impossible for copyright owner to give permission to the use and receive remuneration. In this context it is necessary to modify the copyright law. The librarians in the digital environments have the same responsibility to collect information and help the readers by giving it even in the form e-information. The role of librarian is to be protected and enhanced.

### Suggestions

- National institutions dealing with IP rights need to have a continuous service-oriented approach with developing new and specialized services to facilitate the needs of societies which tend to base their competitiveness on the strength of knowledge they possess.
- Copyright laws have to be modified to suit the digital and networked environment in the face of current technological development in information management and to safe guard the intellectual property rights at the national and International level.
- Considering the issues related to the librarianship, copyrights, it must be concluded that the library authorities should permit minimum photocopying works. This should be done only after judicious thinking on the demand of the user. Further it should be borne in mind that the circulars issued by the association or UGC will not overrule the provisions in the copyright Act.
- Some orientation programmes can also be organized by the libraries so that the users become more conscious about the use of e-resources much more carefully and lawfully. Librarians should continue work as a catalyst for the free flow of Information between the owners of copyright and the users of the Information.
- IPRs in digital Age are acquiring an inspirable status and there is an urgent need to study the laws related to printing other media at different levels. Therefore libraries and Librarians should be allowed limited copying by appropriate changes in the copyright act.

• The strict laws of copyright, with a limited set of exceptions, just do not fit the digital era where everything digital transaction results in a bytes being copied. We need to take a much more thoughtful approach to rationalizing copyright, Introduction of general fair dealing guidelines, reduction of copyright term, Decriminalization of non commercial infringement and other such measures. If we don't take such measures soon, we will all have to be prepared to be treated as criminals for all our lives. Breaking copyright law should not be as easy breathing.

# Conclusion

Emergence of information super highway has wider implications on intellectual property. Digital technology has created very serious problems to intellectual property. An actually intellectual property right is one of the most important barriers to digital library development. IPR are essential human creativity, by creators incentives in the form of recognition and fair economic rewards under the system of rights, creators are assured that their works can be disseminated without fear of unauthorized copying or piracy. As more as Information becomes available in digital format, case must be taken by the library to ensure that the public can enjoy the same access right as with printed information but with utmost care about intellectual property right. Copyrights in digital age are of major concern and we have to emphasize more on the practicality of there to get additional benefit and prosper. Now we can say that the development of ICT have triggered unprecedented changes in corporate activities IPRs is a need for checking the piracy of computer software and other IT products. Copyright protection should be encouraging the use of information for creativity and not for creating hurdles in use of Information.

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