



## **COPYRIGHT PROTECTION IN CYBERSPACE: CHALLENGES AND CONCERN**

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### **ABSTRACT**

*With the emergence of Intellectual Property Rights the human achievements have received an all new heights. The transformation of the mankind from scripts to screen has been achieved with the advent of technology in this digitalized world. And such invention in works has demanded protection under a legal framework. This has been protected under the Copyright Law, 1957.*

*Most of the countries seek to protect the database under the Copyright Laws. This paper mainly focuses on the question of intellectual skills in the creation of databases pertaining to the protection of it under the Copyright laws, 1957. This paper tries to explain the problem of the infringement of the copyright in the cyberspace and also aims to provide ideal solution for the same in the Indian context.*

**Keywords-** Intellectual Property Rights, Copyright, Database, Infringement, Open access, etc.

### **INTRODUCTION**

“The Works of founders of States, law givers tyrant destroyers and heroes cover but narrow spaces, and endure but for a little time, while the work of the inventor though of less pomp is felt everywhere and lasts forever.<sup>1</sup>”

This eloquent tribute speaks a lot about the immense services, rendered to the humanity by the ingenuity of the human mind. Since the inception of mankind, the man with the superior intellect has always dominated the overall living and non-living things on the earth. In all fields human activity including politics, administration, economy, statecraft, culture, medicine etc, the man with his superior intellect, is calling the shots and is bringing glory to himself and his nation<sup>1</sup>. This holds a great place in the intellectual property rights as well.

The concept of Intellectual Property has, during very recent times, transformed from its theoretical foundations as a juridical concept, into a pragmatic aspect of the law relating to International Trade. IPR is a branch of law which protects some of the finer manifestations of human achievements.<sup>1</sup> An Intellectual property system which effectively protects innovation and creative expression, to a great extent invisible, is a condition precedent for any creation and application of new technology. The protection boosts and accelerates the process of economic growth and development and renders an opportunity to the inventors to disclose their inventions and the publications of patent specifications, paves the way for worldwide exchange of technical information. Protection and regulation of intellectual property has the



potential not only enriching the economic prosperity and skill of the individual owner or user but also enhances the living standard of the people at large throughout the world<sup>1</sup>. For instance, the grant of patent<sup>1</sup> is recognition and also a reward of the human mind or human intellect and the basic rationale of the patent system are to provide an incentive for the creation of new technology. So, in this present digital world, Internet is the most suitable medium for global trade and exchange of services. The services available in the Internet include software entertainment, information products and professional services, which has elevated mankind to another level in respect of commercial services and thus brought a great variation in the history of mankind. Commerce, specifically on Internet involves the sale licensing of Intellectual Property. Moreover, the present day realization and appreciation of the compulsions of privatization, liberalization as a part of the emerging “New World Economic Order” has further enhanced the growing need for the application and perfection of the intellectual property rights and hence the urgent need for its protection<sup>1</sup>.

The term “intellectual property” broadly includes the reward of the creativity of the mental faculty of the man in various fields and ideas<sup>1</sup>. For instance, trademarks are protected against imitation so long at least as they continued to be employed in trade, etc. Thus, the subject matter of Intellectual Property is very wide and includes literary and artistic works, films, computer programming, inventions, designs and marks used by traders for their goods and services and so on. Intellectual property in its literal sense means the things which emanate from

the exercise of the human brain<sup>1</sup>. There are several different forms of rights that give rise to rights that together make up intellectual property. They may include: copyrights, rights in performance, the law of confidence, patents, registered designs, trademarks, passing off, trade libel, etc. However, with the advancement in modern world and technology, “Intellectual Property” has acquired a brief concept that includes all rights enumerated in Article 1(2) of the Paris Convention as well. But, this expanded meaning is discernable from Article 2(viii) of the Convention Establishing the World Intellectual Property Organization 1970<sup>1</sup>, which defines “intellectual property” as including the rights relating to basically literary, scientific discoveries, different designs which includes industrial designs as well and commercial designations. In consonance with the same idea, the World Trade Organization (WTO) has offered its own definition that “Intellectual property rights are right given to people over the creation of their minds.” But these rights do not include the most basic product of the mind, ideas, which are not generally protected as intellectual property.

Thus, Intellectual Property can be regarded as a single generic term that protect ideas, special symbols, design, information and their applications that are of commercial value. Intellectual property rights are increasingly gaining importance as compared to the physical assets of any enterprise, which normally comprise land, plant, machinery, intellectually static manpower, as they are negligible in contrast to intangible assets in various forms of IPR’s. In India, intellectual property falls in



the Union List of the Seventh Schedule under Article 246 of the Constitution, which has itemized same as “patents inventions and designs, copyrights, trademarks and merchandise marks.”

### **CONCEPT OF IPR : COPYRIGHT AND CYBERSPACE**

The term Industrial Property had its origin in Paris Convention for the protection of Industrial Property. Article 1(2) of the Paris Convention for the protection of Industrial property 1833 stated:

“The protection of industrial property has as its object patents, utility models, industrial designs, trademarks, service marks, trade names, indication of services or appellation of origin and the repression of unfair competitions<sup>1</sup>.”

Intellectual Property is a vague concept has its many aspects. The object of intellectual property, are the creation of human intellect or human mind. Being a creation of human intellect it is protected as intellectual property and possesses similar proprietor rights by certain limitations, as limited duration. In a broader sense, Intellectual Property Rights includes basically two aspects. On one side it considers ideas, concept, know-how, and other creative abstractions<sup>1</sup>, and on the other it takes into account the literary, artistic, or mechanical expressions that embody such abstractions<sup>1</sup>. Intellectual Property usually consists of two branches: “industrial property” and “copyright”. Mainly inventions, trademarks, and industrial designs are generally called industrial property and literary, musical, artistic, photographic and audiovisual works are

called copyright. The Internet matrix comprising both the hardware and software infrastructure date remains non-proprietary; No one owns it, no one licenses its use, and no one restricts access to it.<sup>1</sup> It can be termed as *sui generis* i.e., a class by itself apart from the traditional classification as moveable and immovable. Normally speaking, the law relating to intellectual property is value free or value neutral. It is a grant of privilege of monopoly and quid pro quo (consideration of price) is full disclosure of new inventions. Intellectual property is related to pieces of information or ideas which can be incorporated into tangible objects. Like all other moveable and immovable property rights, the owner or proprietor of this also enjoys certain rights, the owner or proprietor of this also enjoys certain rights without his authorization in recognized limits.

As the technology has expanded its arena, the people started being dependent on the technology advancements. Now the people are dependent on the technological products rather than actual product that were used before the introduction of technology. And this poses a great threat for IP laws and their enforcement in the digitalized world. Technological changes always create challenges to the basic principles of Intellectual property laws. The three technological advances, namely, the digitalization of information, networking, and Internet, have primarily turned the economics of reproduction: networking has changed the economics of distribution; Internet has changed the economics of publication. The change is far reaching because costs have decreased to unimaginable level, as a result of which traditional assumptions about IP laws have



to be rewritten. With each new passing technological breakthrough, we are confronted with difficult questions about the relationship between the new technology and copyright law. The term “copyright” has added dimensions today because in the internet environ the difference between the original and the copies seems to vanish completely, it is the most widely breached and the least fully understood by anybody but intellectual property lawyers.<sup>1</sup> The copyrighted work as ‘property’.<sup>1</sup> Thus, though the form is tangible and cannot be perceived through our senses but like all the other rights the copyright also empowers the holder of it.<sup>1</sup> A lot of copyrighted products and works can be easily accessed with the help of computers, software and internet.

Taking into consideration, the example of movie and music, people used to go multiplex and theatres to watch movie and to buy CDs and DVDs to watch them. But now buying CDs and DVDs has become almost obsolete seen even in the case of music. The easiest way of these sources of entertainment is that people just download them from different websites such as torrent effortlessly causing the loss to the copyrighted movies and music album. The concept of copyright existed previously before the introduction of internet sites, the introduction of the CD burners allowed people to make copies of the copyrighted software, movies and music. The one of the example can be taken into the reference is the use of pirated Microsoft software in the laptops and computers that are even available in the market at the very lowest price than the original software. Almost 90 percent of music downloaded online is illegal and 42 percent of the software

running in world is illegally downloaded<sup>1</sup>. The convenient and economical way has triggered the people to violate the copyright infringement law unconsciously.

There are some problems that arise in IP protection due to the introduction of digital media are as follows<sup>1</sup>:

*Firstly*, the distribution, the digital medium creates difficulties in the way in which copyrighted products are distributed. In digital medium, a copyrighted work is licensed for tenure rather than sold. This involved the complete transfer of ownership providing rights in a copy to be transferred from the vendor to the purchaser and to the next purchaser in sequence. For example, distribution by way of Internet as well as in the form of prerecorded compact disks (CD’s) and DVD’s, wherein the owner’s identity can be easily changed, is another major problem calling for Electronic Right Management Systems and their regulations in terms of WIPO Copyright Treaty (WCT) and WIPO Performances and Phonograms Treaty (WPPT)<sup>1</sup>.

*Secondly*, there is an intimate connection between access and copying in the digital environment problem posed by Internet is the question of what constitutes copying in the digital medium. The essence of IP laws is to confer upon authors the exclusive right to control the reproduction of their works in copies. Protection of this right in digital media possesses difficulties. For a user to view a document, a copy of the document must be loaded into the memory of the computer. Whether this, temporary copy in memory should be considered a reproduction under the copyright law is not free from controversy. The Berne



Convention does not provide for general right of distribution or right of communication to the public. Article 8<sup>1</sup> of the WCT provides that the authors of literary and artistic works shall enjoy the exclusive right of authorizing and communications to public of their works by wire or wireless means including the making available to the public of their works in such a way in such a way that members of the public may access these works from a place and at a time individually chosen by them. Cyberspace is a place where copyright infringements and acts of piracy flourish; computer programme codes are easily copied.<sup>1</sup> The new concept of virtual property is eager to enter the field of IPR. Article IO(I) of the agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) provides copyright protection to the computer programmes. Article 4 of EIPO Copyright Treaty (WCT) also provides protection to computer data as 'literary data'. In India as per Section 79 of the IT Act 2000, network service providers are not liable in certain cases.

*Thirdly*, problem posed by Internet relates to search engines. A search engine builds periodically a directory of frequently accessed sites and also of the metatags which are primarily the key words. Question arises whether a return produced by search engine links a content that contains infringing material, and it may constitute a copyright infringement?

*Fourthly*, Linking and deep linking pose new problems for copyright HTTP(Hyper Text Transfer Protocol) as such facilitates linking of one website with another without the knowledge or consent of the owner of

the linked website. Linking raises question, whether the link provider is liable for copyright infringement or not? Similarly, deep linking occurs when selective contents of subordinate pages of a home page are linked by another person thus bypassing the top page in the hierarchy leading to loss of revenue due to the fact that the user will not be aware of the real owner of the site.

*Fifthly*, the problem faced by the digital medium is the issues include what is protectable confidential information? What is an obligation of confidence? How does an obligation of confidence arise? How does an obligation of confidence last, how is confidential information protected?

*Sixthly*, the issues include patenting and protecting ideas, patenting the computer software in general and that of Internet, business method patents, Internet publications, Patent Infringement, etc.

*Seventhly*, the issue is that a trademark may clash on the Internet with somebody's Internet domain name and *vice versa* forming genuine trademark versus domain name disputes, domain name registry dispute policies, corporate trademark and domain name protection policies. Mega-tags, word stuffing and search engine keyword sales etc<sup>1</sup>.

*Lastly*, there are different liabilities related to defamatory statement over networks, liability for virus dissemination, liability of online intermediaries (IT Act 2000), e-mail and Internet access policies etc and problem of controlling different activities such as gambling, pornography, and sexual offences, contempt of court, financial



services, advertising on Internet, encryption policy, computer misuse, hacking, etc<sup>1</sup>.

### **PROTECTION OF DATABASE THROUGH COPYRIGHT**

A very important aspect of the new digital age is the personal nature of new technology.<sup>1</sup> An individual can copy copyrighted work from his personal computer easily. It is of course very difficult for copyright owners to file case against these individuals who may be all over the globe.<sup>1</sup>

#### **International Convention**

The International perspective in respect with the protection of database includes the Berne Convention which provides for the protection of collections and compilations of literary or artistic works by reason of the selection and arrangement of their contents constituting intellectual creations. The protection under such is without prejudice to the copyright in each of the works forming part of such collections. WIPO Copyright Treaty, which was adopted by the Diplomatic Conference on December 20, 1996, extended the provisions of the Berne Convention to the compilations of databases following the same principles of protection<sup>1</sup>. Similarly the TRIPS Agreement under World Trade Organisation (WTO) also provides protection to the databases on similar lines.

WIPO Draft Databases Treaty of December 1996, on the other hand also aims to harmonise national laws in respect to protection of databases<sup>1</sup>. This treaty mentions increasing risks due to the possibilities of making exact copies of

whole databases or parts thereof with little costs. And thus establishes a new form of protection of databases granting rights to enable the makers of databases to recover the investments made<sup>1</sup>.

In India, the copyright Act, 1957 has been amended five times in the years 1983, 1984, 1992, 1994 and 1999. The amendment of 1984 was noteworthy for extending the scope of copyright protection to computer software.<sup>1</sup> The Copyright Amendment Act 2012, inserted section 31D that any “broadcasting organization communicating to the public” of any literary, musical work or sound recording, to follow the compliances under the Copyright Act, which include but not limited to, giving prior notice of the broadcast, duration, territorial coverage and pay the royalties to the owner of rights in each work, announcing the names of authors and performers. It has prescriptive process of prior intimation for any modification or alteration to the literary or musical work. Further, the broadcaster has to maintain records, books of account and render copies to the owners of the copyright.<sup>1</sup>

Sec.2(ffc) of Indian Copyright Act, 1957 defines ‘Computer Program’ as a set of instructions expressed in words, codes, schemes or in any other form, including a machine readable medium, capable of causing a computer to perform a particular task or achieve a particular result. Indian Copyright Act, 1957 protects “Databases” as ‘literary works’ under Section 13 (1) (a) of the Act which states that Copyright shall subsist throughout India in original literary, dramatic, musical and artistic works. The definition of literary works has been



provided under Section 2(o) of Copyright Act, 1957 which includes computer programmes, tables and compilations including computer data basis. In the case of *Burlington Home Shopping Pvt ltd v. Rajnish Chibber*<sup>1</sup>, the Delhi High Court has recognized that a copyright existed in a compilation that was a client list. Moreover, in the case of *Diljeet Titus v. Mr. Alfred A. Adebare*<sup>1</sup> where customer lists stored on a computer were recognized as a protectable compilation under Copyright Act, 1957. The concept or idea of algorithm is not capable of copyright protection but programmes which are operating computers are accepted to be within the ambit of artistic and literary work and thus protectable.<sup>1</sup>

However, to establish protection and to be ensured that these are not copied and used without legitimate protection legal mechanism needs to be established. The key issue in the light of this, which arises, is the protection of databases and the conflict of interests between the developers and authors of the databases on the one hand and the users of the databases, on the other. Since, authors or developers are interested in receiving remuneration from databases which is based on their intellectual and skill inputs, so they want to restrict it copying from databases while users are longing to make use of the information either without paying for it or at a relatively lesser cost.

Sec.14 of the Copyright Act, 1957 empowers authors of original literary, dramatic, musical, artistic works, computer programmers etc with various rights in relation to their works. They have exclusive right to reproduce their work, make copies, perform their work in public or display,

make translation of their work, adaptation of work etc. The term “originality” has been interpreted by the Indian Courts in consonance with the interpretation of the British Courts.<sup>1</sup> The owner of a copyright in computer programs shall have all the copyrights,<sup>1</sup> assignment of copyright,<sup>1</sup> special rights,<sup>1</sup> rights of owner in respect of infringed copies, etc.<sup>1</sup> The computer program under the Copyright Act, 1957 must be original. The infringement of non-literal part or the copying of computer design will constitute copyright infringement. The question in computer software cases has been regard to the limits of substantial copying and as to what are the portions which come under the copyright protection.<sup>1</sup> In the case of *Eastern Book Company v D B Modak*<sup>1</sup>, the Supreme Court substantially raised the threshold for “originality”, when it ruled that an exercise of skill and judgment was required to qualify as an original work. The works at dispute in this case were copy-edited judgments with head-notes. The apex court held that copy-edited judgments did not satisfy the threshold of originality. The head-notes were however protected since the court was of the view that substantial skill and judgment went into creating head-notes.

Sec.14 (a) (vi) of the Copyright Act, 1957 confers the right of adaptation on the owner of the copyrighted work. Here, ‘adaption’ refers to the right of making derivative work taking some elements from the framed sites and some from the multimedia setting and combining them to some other fit into the definition of adaption. The Supreme Court relied on the case of *CCH Canadian ltd vs Law Society of Upper Canada*<sup>1</sup> and observed that derivative work must have



some sufficient distinguishable quality or features which the original work does not possess. Only trivial inputs will not satisfy the test of copyright of an author. Novelty or innovation is not the requirement of copyright but it does require minimum degree of creativity. The Court observed that copyedited texts of judgments of appellant deserved protection of copyright and partly allowed the appeals directing that though respondents may sell their CDs with their own editorial content and headnotes during pending of the matter in high court but it can do so without using the footnotes, headnotes, editorial comments and inputs of the appellants. Therefore, framing using internet technology infringes the rights of the creators.

In the light of this, a recent Indian case, *Gramophone company of India v Super cassette Industries Ltd*<sup>1</sup>, the court took the view that plaintiff had infringed the copyright of plaintiff in sound recordings wherein a remix version of a song was being sold by defendant on the internet or as mobile tune. The court observed that right of a copyright holder in a recording version to sell, give on hire or offer for sale or hire to public or distribute is not curtailed by the format in which it may be sold online.

In the case of *Feist Publications v. Rural Telephone Service Co*<sup>1</sup>, the Supreme Court rejected the "sweat of the brow" doctrine that provided copyright protection for databases and compilation based upon the effort use to created the compilation. Instead, the court decided that compilations and databases are protected by copyright only when they are arranged and selected in an original manner. Although the level of

originality needed is not very high, the white pages of a phone books are not protectable because the selection of the data and the arrangement of the data were not sufficiently original as to come under the protection of the Copyright Act. Consequently, the competing telephone directory publisher was allowed to extract all of the data from the white pages without liability for copyright infringement.

However, not all databases are protected under the law, only those databases which feature some degree of originality in compilation of the facts are protected. Copyright protection granted to a database, does not automatically grants copyright to the data inside it. It depends on the data in which it is stored may or may not protection. The US Supreme Court, in *Rural Telephone v Feist*<sup>1</sup> laid down a three prong test to decide whether the compilation is original or not, firstly, there must be a collection of "pre-existing materials or data", secondly the data must be "selected, coordinated, or arranged" in a particular way and thirdly the resultant work as a whole "constitutes an original work of authorship".

Section 51 of the Copyright Act, 1957 lays down the provisions relation to the infringement of copyright. It does not expressly provide as to whether such infringement occurred in cyberspace or in physical world. If we read the language of the Section 51 along with the Section 14 of the Copyright Act, 1957 it becomes clear that reproducing any copyrighted work, issuing copies of the work to the public or communicating the work to the public would amount to the copyright violation under the Act. But, in case of linking or in-lining there





is no reproduction of any copyrighted work. The reproduction takes place at the end of the user who visits the linked page via link.

In the famous and well recognised case of Napster<sup>1</sup>, a college student by name Napster developed a software called Napsters. Music share software by which any person by using which can access to any computer databases in the network by breaking the secret codes and download music CD's or albums stored their in. This resulted a sudden fall in the sale of music albums and CD's of recording companies. After considerable effort and expenditure of money the music recording companies located the source. In a series of litigation by these companies, Napster was indicated and punished.

However, it seems impossible to completely cease the infringement of violation of copyright laws as there is no such remedies have been provided in any of the laws whether it be in India or outside India. For Instance, the case of Pirate Bay can be taken into consideration. The biggest BitTorrent tracker site on the web revels in copyright infringement. As such it has attracted perhaps more legal attacks than any other website. In 2009 three administrators of the site and their investor were convicted of copyright offences in a Stockholm court. They were sentenced to one year in jail each and millions of dollars in fines, but the website remains online and the four remain free. The case is currently going through the Swedish appeals process, which could take years. But, by this time already, many more similar sites have already been introduced. Considering the data related to piracy, it can be inferred that around 22 percent of all

global internet bandwidth is used for online piracy and 70 percent online users find nothing wrong in online piracy. Only, 1 out of 1000 pieces of the most popular content on the OpenBitTorrent tracker is non-copyrighted due to which the various economic losses amounts to \$2.5 billion<sup>1</sup>.

The Indian legal protection of software copyright meets international standards partially. The Indian law does not prevent a properly registered software package from being copied for use on multiple computers, and does not object to copying of the software for non-commercial use.<sup>1</sup> Section 63B of the Indian Copyright Act provides that any person who knowingly makes use on a computer of an infringing copy of computer program shall be punishable for a minimum period of six months and a maximum of three years in prison. Deterrence regarding copyright infringement is insufficient because of difficulty in procuring evidence and the simple punishment the law gives. Conviction rates in this field are low due to multiple reasons.<sup>1</sup> The Bern Convention says that "there will be a copyright infringement when an individual copies a work held in electronic format without the authority of the copyright holder."<sup>1</sup>

Apart from the piracy, a new trend has emerged in the global field as authors and the writers are no longer look up at publishers for the publication of their work. They have started using Internet for the publication of their work and publishers offline fear a decline in their business. There is emergence of new concept of open access. Rights of exclusion are the core of copyright; copying, distributing or making



some other privileged used of another's work is infringement in absence author's permission.<sup>1</sup> This right of the author gets a blow with open access policy as the mandate in itself gives permission to publish the work without the author's permission.<sup>1</sup>

The world of computers is made up of both tangible and intangible property. In India too, open access is gaining momentum as it is believed that 'free open and digital access to scientific research will ensure percolation of cutting edge research at a rapid pace into higher education curricula, thereby raising the standard of the technical and scientific education in the country. This in return will foster a richer research culture.<sup>1</sup>

But it must be considered that open access is made possible by the internet and copyright-holder consent. The only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited. In an open access environment, the work remains under copyright, but a variety of creative commons licenses may be applied to the work. As open access continues to build momentum and debates about copyright become more intense, the importance of the law is only going to grow.

### CONCLUSION

The main aim of the open economic market, is the transparent and effective commercial laws so that the intervention of the government can be reduced in the working of the business. The economic policies in India are being liberalised for a competitive market economy, which has demanded for new relationships between science, law, commerce and trade. Therefore, the laws for

database protection would require a sufficient degree of certainty in their application to be effective in supporting the commercial activity. On the other hand, equally important are the needs for scientific and technological enterprise for free exchange of information and that data and information in the public domain should not be lost to the private interests. Both interests must be balanced by any legal treaty or instrument for protection of databases.

The copyright law needs to ensure a balance between open access and usage of it. The main motive behind the idea of open access is that free access of the information to the public at large in an efficient manner. But, it must keep in mind that the originality of the work of the authors must not be infringed as they have the copyright in it. The present day scenario demands the situation of inclusion of such provision in the copyright law, 1957 so that it could enrich a better research to the public at large and also the rights of the authors are not infringed.

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