PROTECTION OF COPYRIGHT IN THE DIGITAL ENVIRONMENT

Dissertation submitted to National Law University and Judicial Academy, Assam

in partial fulfilment for award of the degree of

MASTER OF LAWS /

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SUPERVISOR CERTIFICATE

This is to certify that MS. TAANVIA JAHAN has completed her dissertation titled **"PROTECTION OF COPYRIGHT IN THE DIGITAL ENVIRONMENT"** under my supervision for partial fulfillment of LL.M DEGREE PROGRAMME at National Law University and Judicial Academy, Assam.

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DECLARATION

I, TAANVIA JAHAN, do hereby declare that the dissertation titled "PROTECTION OF COPYRIGHT IN THE DIGITAL ENVIRONMENT" submitted by me for the award of the degree of MASTER OF LAWS/ ONE YEAR LL.M. DEGREE PROGRAMME of National Law University and Judicial Academy, Assam is a bonafide work and has not been submitted, either in part or full anywhere else for any purpose, academic or otherwise.

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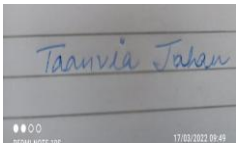

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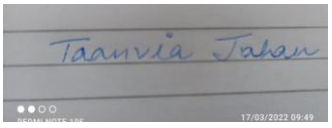

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1860- Indian Penal Code

1908- Code of Civil Procedure

1957- The Indian Copyright Act (amended in 2012)

2000- The Information Technology Act (amended in 2008)

TABLE OF ABBREVIATIONS

1.	AIR	ALL India Reporter
2.	Anr.	Another
3.	Civ	Civil
4.	CPC	Code of Civil Procedure
5.	DLT	Delhi Law Times
6.	E-mail	Electronic mail
7.	ER	European Reports
8.	EU	European Union
9.	F.	Federal
10.	F.2d	Federal Reporter, 2nd Series
11.	F.3d	Federal Reporter, 3rd Series
12.	Fed. Cir.	Federal Circuit

13.	FIR	First Information Report
14.	Gov.	Government
15.	HTML	Hypertext Markup Language
16.	http	Hypertext Transfer Protocol
17.	ILR	Indian Law Reporter
18.	IPC	Indian Penal Code
19.	IPLR	Intellectual Property Law Review
20.	IPN	Internet Protocol Number
21.	IPR	Intellectual Property Rights
22.	IP address	Internet Protocol Address
23.	ISP	Internet Service Provider
24.	IT Act	Information Technology Act
25.	NSP	Network Service Provider
26.	OSI	Open Source Initiative
27.	OSS	Open Source Software

28.	PC	Personal Computer
29.	PDF	Portable Document Format
30.	P2P	Peer to Peer
31.	Pvt.	Private
32.	RAM	Random Access Memory
33.	ROM	Read Only Memory
34.	SC	Supreme Court
35.	SCC	Supreme Court Cases
36.	Sec.	Section
37.	RAC	Regional Access Coding
38.	TRIPS	Trade Related Aspect of IntellectualProperty Rights
39.	UN	United Nations
40.	UNICITRAL	United Nations Commission onInternational Trade Law
41.	URL	Uniform Resource Locator
42.	USA	United States of America
43.	USC	United States Code

44.	USPTO	United States Patent and Trade Office
45.	WCT	WIPO Copyright Treaty
46.	WIPO	World Intellectual Property Rights
47.	WPPT	WIPO Performances and PhonogramsTreaty
48.	WTO	World Intellectual Property Rights
49.	WWW	World Wide Web

CHAPTER -1

INTRODUCTION

The Intellectual Property Rights have started exploring the digital space too for the growth of their business. The main pillar on which the Intellectual Property Rights stand is the ground for innovation and creativity. The protection of this innovation and creativity is the main goal of Intellectual Property Rights, and this goal is also extended to the digital environment. In the case of the copyright, the authors of the work, author is defined under **Section 2(d) of the Copyright Act 1957,** here the authors of the literary, dramatic, artistic works, software programs are learning the functioning of the digital space in order to make their work published in the digital space.

The authors of all the works wants protection under the Intellectual Property Rights so that they can get back the money they have invested for their creation in the form of royalty, damages if someone unauthorized uses their work. In today's time there is a growing acceptance of the e-books or in case maybe digital literature.

Abundant of materials are uploaded in the internet for any subject in the form of publications or e-books. All this books and publications or any materials for that matter comes with a price, person requiring that material must pay an amount for downloading or viewing that material.

The owners of the copyrighted books and materials will only make their available in the digital space, when it is felt that the copyrighted works can be protected and the author can

control the use of the viewing or downloading of the copyrighted material and also being protected from piracy.

The digital space has also affected the arts and crafts industry. As the collection of the arts and crafts are displayed online just for viewing purpose. The artists belonging to the arts and crafts industry are using digital technologies to create art in the digital space. There is one important factor which is not yet determined that if the current copyright regime is sufficient enough in balancing between the aspect of private benefits and social benefits.

Another important question in this regard is that the current copyright law can provide incentives to the original work which is to consumed over a period of time. But answer to this question is not direct; as there are lots of illicit ways of having copyrighted works in the digital space today, by illegally reproducing the music files which is shared on the internet and distributing it in CD ROM and derive advantage of the same.

In this digital space, everything gets available with the click of a button and the person having access to the digital space can also access this materials can save a copy in the Random Access Memory. The person using the digital space, it gets easier for him not only to view the materials but also store it and if required eventually distribute it. If proper precaution is not taken by the author of the copyrighted works whose works are available in the digital media then if the works get copied the identity of the person is not revealed in the digital transaction.

One of the important reason for which the information is copied because the users thinks that materials are free of cost and so it is freely available in the digital space. “An

intellectual property right in cyberspace is the most sensational area to the new millennium people dealing with intellectual property over internet."

Internet has made every task possible as everything is just a click away. The digital space is filled with lots of intellectual creations and products and the creation of the computers and internet have brought into picture huge change relating to information. Internet has the ability to spread information in a huge scale.

Cyberspace has witnessed instances of piracy in case of Intellectual property rights. "Piracy and infringement of illegal acquisition and distribution of copyright materials including electronic and print form, compact discs, software stored in computer files and distributed on discs etc. come under the wing of infringement of IPR." Copyright is a right given to the authors of the copyrighted works of literary, artistic, musical, dramatic for their exclusive work and if any third parties uses it, it can be held as infringement or unauthorized use of the work. Exclusive use such as right to reproduce, right to issue the copies if not in circulation etc are given to the authors of the copyrighted work.

Section 14 of the Copyright Act deals with the exclusive rights. India has achieved new levels of achievement in all aspect of industries due to the introduction of internet. India has made a significant mark in the world economy, due to its advancement in the field of industries because of Internet. Every aspect of life is affected by the emerging trends of globalization. There is a requirement for new acts and rules in the field of internet and digital space.

The laws we have are quite traditional and conventional in nature and do not cater to the needs of the technological development. This is much needed in case of Copyright laws.

In this paper, the researcher is working on the protection awarded by the Copyright Act 1957 in digital space and linking it with various internet treaties. The researcher also attempts to address the aspect of liability of Internet Service Provider (ISPs).Internet has made everything easier in this digital world and also brought about some significant changes. It has made communication easier and faster, and also helped in the academic purposes. If proper protection is not given to the Internet users there can be huge violations in respect of the Intellectual Property Rights holder as there works are easily available in the digital domain anyone can copy and make similar work from this protected works which can be used by the one except the Intellectual Property Rights holder and earn profit without giving credit and royalty to them.

1.1.Literature Review

The researcher has gone through number of books and articles while working on the research paper. The following are some of them which the researcher has found relevant-

Books

i) **Andrew Murray, Information Technology Law, 2nd ed. 2013**

This book contains a detailed chapter on digital content and intellectual property rights in which how literal and non-literal copying is made through online is discussed by which the researcher gets a clear picture about copyright infringement in internet.

ii) V K Ahuja, Law of Copyright and Neighboring Rights, 2nd ed. 2015.

This book contains the 2012 amendment which is very much significant to India as it lay down some major amendments with respect to copyright matters to meet the needs of digital medium. The researcher has found a specific content on the copyright and internet

which in turn is helpful in doing this research. Also the book containsinternational treaties on copyright which is helpful in understanding the position of India in the international forum with respect to copyright..

iii) Karnika Seth, Computers, Internet and New Technology Laws, 1st ed. 2012.

This book deals with legal issues arising from cyberspace, both from an international and domestic perspective. Such issues include protection of intellectual property, jurisdiction issue in cyberspace, liability of service providers in matters of infringement of IP. The book contains the evolution of cyberspace, basic concepts of determining jurisdiction in cyberspace, and how to protect the IP in cyberspace which is very much helpful in doing the research.

(iv) Krishna Kumar, co-edited by S.R. Sharma, Cyber Laws- Intellectual Property and E-commerce Security, Reserved Edition 2010-11.

This book mainly deals with intellectual property rights and cyber laws. The book is very much helpful for the researcher in understanding the test for non-literal copying and as to what are the problems related to new technology.

(v) Pavan Duggal, Legal Framework on Electronic Commerce and Intellectual Property Rights in Cyberspace, 1st ed. 2014,

This book mainly deals with the evolution, development and current state of legal frameworks on electronic commerce and intellectual property rights in cyberspace as also various legal, policy and regulatory issues connected with the use of the computers, computer networks, computers resources. The book contains the provisions as to the Copyright Act and ITAct which is very much helpful in doing the research.

vi) Shailaja Menon, Protection of Intellectual Property Rights, 1st ed. 2003.

The book mainly deals with legal protection of computer software and other intellectual property of cyberspace and some of the burning issues of cyberspace. The researcher has found some relevant portions on computer software piracy and literal and non-literal meaning of computer programme which is very much helpful incompleting this research.

vii) Vakul Sharma, Information Technology, 3rd ed. 2011.

The book deals with numerous illustrations, concept notes relating to copyright issues in the digital medium and trademarks in the online medium and the liability of the intermediaries. This book is helpful for the researcher in the sense that the book contains some relevant concepts on domain names disputes in the present day world which is indeed provides as a guideline to the research.

Articles

i) Dennis M. Carleton, A Behavior-Based Model for Determining Software Copyright Infringement, Berkeley Technology Law Journal. This article illustrates why the copyright protection for computer software is essential as contrast to the traditional protection of copyright to the literary works.

ii) Farooq Ahmed, Liability Limits of Service Providers for Copyright Infringement, Journal of Intellectual Property Rights, Vol. 8. This article explains how the internet service provider comes to exist and how the legal liability placed on them who provides for services to protect copyright infringement cases.

1.2. Research Objectives

1. To study about the protection of software in the emergence of new category and kind of work such as software, digital music and videos.
2. To study about the Implications of the Indian Copyright Act,1957 and the International Copyright laws with respect to the issues due to emergence of digital technologies and internet.

1.3. Scope of the study

This study aims at critically evaluating the various facets of copyright law in India including the historical background of the Copyright law in India as well as keeping in view the international perspective. There has been immense development in the digital or cyber. The internet has made information access very faster and easier. Many new copyright laws concerning internet issues in the digital world have come up and old laws have undergone many amendments to cope with the problems and cases arising out of internet matters. The objective of the present research is to explain and testify whether the copyright law in India as well as the International Copyright convention have been able to enforce the statutory protection to the copyright owners and to curb the cyber menace access the globe.

1.4.Hypothesis

The Present copyright Regime is not sufficient to deal with the threat and challenges raised by the internet and digital technologies.

1.5.Research Questions

1. How is copyright infringed on the internet and how far ISPs liable for online piracy?
2. How far are the 2012 amendments of the Indian Copyright Act, 1957 beneficial for the copyright owners in the internet era?

1.6.Research Methodology

The methodology adopted by the researcher is doctrinal type of research. The present research is entirely based on library and other online sources. Various types of textbooks were found to be useful for collecting adequate information relevant for the present research. For better understanding of this topic several online websites has been proved to be very useful. For better understanding of the reader, explanatory mode of research has been followed. Also, the researcher in the present research has followed the Oscola 4th Edition citation pattern.

1.7. Research Design

In this study, an attempt has been made to examine and evaluate the provisions of the Copyright Act, 1957 and the amendments made therein and how copyright is protected in the digital environment.

In the first part of this paper, conceptual basis of Intellectual Property Rights is explained giving it a base for the paper by analyzing proper definition of the Intellectual property Rights.

In the second part of this paper, the history of the copyright law its various amendments and how the 2012 amendment is beneficial for the copyright owners in relevance to the digital world and eventually with the scope of Copyright Act, 1957.

In the third part of this paper, deals with copyright in internet issues which comprises computer programs, databases and multimedia works. The chapter further discusses the right of reproduction, distribution, communication and public display of a work through digital media. It also deals with digital Rights management (DRM) and Rights Management Information.

In the fourth part of this paper , it deals with the various rights of the copyright owner which includes right of reproduction in the Digital Environment, right of distribution on the Internet, public performance and public display on the Internet and lastly it also includes the management and administration of copyright in digital age.

In the fifth part of this paper, it deals with the global harmonization of the copyright law which includes various conventions like Berne Convention, Universal Copyright Convention WIPO Copyright Treaty and for Neighboring Rights : Rome Convention, Geneva and Brussel Conventions and WIPO Performances and Phonograms Treaty.

In the sixth part of this paper, discusses the infringement and remedies of copyright on internet through various modes including P2P File sharing technology mentioning the kazaa case, the Napster case, Grokster case, Pirate Bay case and Bittorent Protocol. It also

highlights downloading hyper linking and framing. Thereafter the liability of the ISPs regarding copyright infringement India is discussed.

The last chapter, i.e., seventh chapter deals with the conclusion and suggestions of the study. Here, an attempt has been made to draw conclusion from the present study and to provide suggestions for protection of copyright in India in the digital world. Throughout this study, the relevant provisions of the legislations, pertaining to the copyright Law , it protection in the digital environment have been examined and evaluated. The important judicial pronouncements of the various High courts and Supreme Court of India have been referred to, analyzed and evaluated at the appropriate places.

CHAPTER -2

CONCEPT OF INTELLECTUAL PROPERTY RIGHTS

2.1. Introduction

The subject of law known as intellectual property rights deals with legal protections for creative work or for economic notoriety and goodwill. Inventions, computer programs, literary and artistic creations, trademarks used by businesses to advertise their goods and services, and works of art are all considered to be intellectual property. Intellectual property law prevents people from plagiarizing or arbitrarily profiting from another person's work or reputation and offers remedies to the appropriate right holder.[1] The production, utilization, and exploitation of mental or creative labor are governed by intellectual property law. This rights have a monopoly impact though it is for a limited period but it must be seen that monopoly should only be extended to the innovation and creativity and not the fundamental blocks like the ideas, facts etc as they are available in the public sphere. This aspect can be applied in the copyright by applying different protection standards. Such as : "In the copyright law requires that for claiming protection under the law, works- literary, musical, artistic and dramatic- are required to have a minimum amount of originality. Another requirement is that the work must consist of *'expression of ideas'* and not just merely 'ideas'.[2] Likewise in patent law, the requirement for claiming protection under it is that there should be an invention, which is new, involving inventing step (non-obvious) and having some utility. The nature of such requirements varies for different categories of intellectual property depending upon the

[1] Dr. Ragbhbir Singh, *Law Relating to Intellectual Property Rights* (3rd edn, Universal Law Publishing Co.,2014).
[2] Alka Chawla, *Law of Copyright Comparative Perspectives* (1st edn, Lexis Nexis, 2013).

nature and scope of the protection intended to be extended to such categories."

After the established of World Trade Organization, there evolved the era of globalization, and in this era there started growing of acceptance of Intellectual Property Rights because all the industries are going through a phase of transformation from capital structure economies to knowledge driven economies due to evolution of technology and also internet in this field.[3]

Intellectual property is essentially a product of human intellect or has something to do with human intellect. It is a right embedded in a real property, hence it can only be a fictional property or a property in fiction. For instance, copyrights, design rights, and patent rights. Even though it is disseminated throughout some physical estate, intellectual property is basically an aspect of intangible property. It cannot be recognized through touch. "Scientific discoveries, industrial designs, trademarks, service marks, literary, artistic, and scientific works, as well as all other rights originating from intellectual activity in the industrial, scientific, literary, or creative fields, are all considered to be intellectual property."[4] The Intellectual Property Rights are the rights given for the innovation and creation of human mind. The creators are awarded rights under Intellectual Property Rights, and they can be under the Trademarks Act 1999 , Patents Act 1970 , Copyright Act etc. Rights are necessary conditions for the personal, economic, social, political, mental and moral i.e., overall sided development of human beings.[5]

[3] Calestous Juma, 'Intellectual property rights and globalization: implications for developing countries'(1999) Center for International Development at Harvard University<https://www.iatp.org/sites/default/files/Intellectual_Property_Rights_and_Globalization.pdf > accessed 04 April 2022.
[4] Ibid.
[5] Ananth Padmanabhan, *Intellectual Property Rights Infringement and Remedies* (1st edn, Lexis Nexis 2012).

Rights are those claims of individuals which are essential for the community.[6] Intellectual property can be summed up as a group of immaterial rights defending intellectual property that has commercial value. Trade secrets, publicity rights, moral rights, and rights against unfair competition are also included in this category, which principally consists of trademark, copyright, and patent rights. Intellectual creation is the subject of intellectual property. It promotes inventiveness and human invention. A compelling case for protecting intellectual property rights (IPRs) is that having faith in them serves as a tremendous catalyst for creativity. The required impetus for intellectual, technological, and scientific effort is provided by such protection.

The main objective of the intellectual property rights is to promote innovation and creativity and it is adopted to check that the creator's ideas are not copied or exploited without compensating either the individual creator or the concerned enterprise must be granted to all creators, whether they are businesses or individuals. The availability of such an exclusive right gives scientific and technical institutes that are willing to do so the legal security and essential impetus to encourage through material resources and the necessary finance.

2.2.GROWTH OF INTELLECTUAL PROPERTY RIGHTS

Since around a decade ago, developing countries have progressively come to understand that economic development is becoming more and more technologically based and is hastened by the greater use of new, highly advanced technology. Intellectual property

[6] Silvie Jain, 'Intellectual Property Rights',(2010) Vol.2(5) Journal of pharmaceutical science and research 314, 316.

denotes this cutting-edge information in the form of novel concepts, technological advancements, and goods with marketable qualities. One of the main drivers and strong imperatives in the process of economic transformation might be a contemporary and effectively enforced intellectual property regime. Because they have intelligence, humans are better than other living things. Human creativity produces intellectual property, which, when correctly utilized, can generate riches. It is basically a creation of human mind some examples in this aspect are innovation, industrial designs, literary and artistic works etc which is helpful in promoting business and also helps in growing and development of their business.

2.3. DEFINITION OF INTELLECTUAL PROPERTY

The law relating to intellectual property is based on certain basic concepts. Thus patent law centers round the concepts of novelty and inventive step. Design law is based on originality, which is not previously published in any other country as well as in India. Trade mark law is based on the concepts of distinctiveness and similarity of marks and similarity of goods. Copyright is based on the concepts of originalityand reproduction of the work in any material form."[7]

Salmond states that, "The unnatural product of a man's brains may be as valuable ashis hands or his goods. The law therefore gives him a proprietary right in it."

The law of intellectual property helps in promoting the innovation and creativity of human mind and also stops the third parties from exploiting the creativity without actually taking the consent of the creators or the inventors. This branch of law helps in

[7] Dr. M.K. Bhandari, *Law Relating To Intellectual Property Rights*, (3rd ed. Central Law Publications, 2012.).

protecting the aspect of human creation or achievement.[8]

Under contrast to other municipal rules, intellectual property has actually received more notable affirmation in international law. Three convincing reasons make the international aspect of intellectual property increasingly significant in the modern world. First, the nature of international trade is evolving. Intellectual property trade is increasingly a significant component of international trade between nations. The semi conductive chip, computer software, and biotechnology developments have greatly improved the estimate of data items. Second, there is a growing need for international cooperation as a result of how much more connected the world trade has become. A single country can no longer dictate economic policy to the rest of the world. Subsequently, Countries have asked for an expansion of international accords affecting intellectual property as a result of their recognition of this interconnectedness. Third, modern information storage and reprographic technologies make illicit copying possible faster and more effectively than ever before, weakening the creator's creation.

Definition of Intellectual Property Rights :- *"World Intellectual Property Organisation (WIPO) does not define intellectual property, but gives the following list literary, of the subject matter protected by intellectual property rights artistic and scientific works; performances of performing artists, phonograms, and broadcasts; inventions in all fields of human endeavor; scientific discoveries; industrial designs; trademarks, service marks, and commercial names and designations; protection against unfair competition; and all other rights resulting from intellectual activity in the*

[8] W.R. Cornish, Intellectual Property,(3rd Edn, Sweet and Maxwell 2001) 3.

industrial, scientific, literary or artistic fields."[9]

According to Wikipedia Encyclopedia, *"Intellectual property (IP) is a term referring to creations of the intellect for which a monopoly is assigned to designated owners by law".*[10]

Black's Law Dictionary defines *"intellectual property" as "(a) category of intangible rights protecting commercially valuable products of the human intellect. The category comprises primarily trademark, copyright, and patent rights, but also includes trade secret rights, publicity rights, moral rights, and rights against unfair competition."*[11]

Accordingly, Intellectual Property Rights (IPR) define variety of legal rights in protecting outputs of intellectual efforts of creativity in the realms of applied art, knowledge, and beautiful arts. Patents, plant varieties, integrated circuit layout designs, industrial designs, registered and unregistered trademarks, confidential information (trade secrets), geographical indications, and copyrights and related rights are all included.

[9] Dr. Naresh Kumar Vats, "Intellectual Property Rights versus Competition Law",(2011) 1 Kurukshetra LawJournal 188, 210.
[10] Ibid.
[11] Farooq Ahmed, 'Liability Limits of Service Providers for Copyright Infringement', (2003) 8 Journal of Intellectual Property Rights.

CHAPTER-3

NATURE AND SCOPE OF COPYRIGHT PROTECTION

3.1. History of Copyright Law

The result of English Common Law and statutory law is Indian Copyright law. The Indian Copyright Act, which was passed in 1847 during the rule of the East India Company, is the earliest piece of copyright legislation. This was in effect from 1847 and 1911. The Imperial Copyright Act of 1911 became operative in British India in the next year, beginning in 1912. The Indian Copyright Act of 1914, which was in effect when India attained independence and continued to be in effect for another ten years, succeeded the Imperial Copyright Act. Hence, "the Indian Copyright Act of 1914 was replaced by the Copyright Act of 1957."

3.1.1 The Copyright Act, 1914

The Copyright Act 1914 is adopted to give protection to the original works. The author's protection right came into picture the very moment the work is created. In the Copyright Act, registration is not at all mandatory and if registration is also not done, then also the author can ask for copyright in their work.[12] Copyright Act gives protection only to the expression and not ideas as ideas are already available in the public domain. The duration of protection which is mentioned in the copyright act is twenty five years after the demise of the author. As technology started evolving and new trends were coming into picture so just after independence, the Indian Copyright Act of 1957 was passed. This act was

[12] Ibid.

passed keeping in mind the new developments in technology and the international conventions.

Justice Krishna Iyer in the case of ***Indian Performing Rights Society Limited v East India Motion Picture Association***[13]**,** held that,

" *The creative Intelligence of man is displayed in multiform ways of aesthetic expression but it often happens that the economic system so operate that the priceless divinity which we call artistic or literary creativity in man is exploited and masters, whose works are invaluable are victims of piffling payments. World opinion in defense of human rights to intellectual property led to international conventions calculated to protect work of art. India responded to this universal need by enacting the Copyright Act of 1957."*

3.1.2 The Copyright Act 1957

The Copyright Act of 1914 was replaced by the Copyright Act 1957. The new copyright act was in harmony with both the Conventions i.e. "Berne Convention" and "Universal Copyright Convention." India is a member to both the conventions. This act is spread in 79 sections. Various changes were made in the new act of 1957. A copyright office was established under this new act and it was under the tutelage of the Copyright Registrar and he has to perform all this duties as per the Central Government.[14] The most important function of the copyright office is to maintain a register with particulars of the author maybe its work or details of author.[15] The Registrar was also given power to take care of

[13] AIR 1977 SC 1443.
[14] The Copyright Act (1957) s 9.
[15] The Copyright Act (1957) ss 44,45.

the applications regarding compulsory licenses and also entertain the complaints of infringement.

In the new act there was made available a new aspect which is settling up an copyright board, and the proceedings which is to be initiated before this court should be judicial in nature [16].

In this new act, "The definition of Copyright was amended in such a way that it included the exclusive rights to communicate through radio diffusion, the cinematography etc. The term of Protection under Copyright increased from 23 to 50 years and it was again extended to 60 years in the Copyright Act 1992 amendment.[17] Not only this different terms for different categories of copyright are mentioned specifically.

Apart from this, provisions relating to assignment[18] of ownership and licensing of copyright including compulsory licensing in certain circumstances[19], rights of broadcasting organizations,[20]international copyright,[21] definition of infringement of copyright,[22] exceptions to the exclusive rights conferred upon the author or acts which do not constitute infringement, [23] special rights of authors,[24] civil and criminal remedies against infringement and remedies against groundless threats or legal proceedings[25] were also introduced.

[16] The Copyright Act (1957) s 11.
[17] The Copyright Act (1957) s 22.
[18] The Copyright Act (1957) ss 18, 19A.
[19] The Copyright Act (1957) chapter VI.
[20] The Copyright Act (1957) s 37.
[21] The Copyright Act (1957) s 40.
[22] The Copyright Act (1957) s 51.
[23] The Copyright Act (1957) s 37.
[24] The Copyright Act (1957) s 57.
[25] The Copyright Act (1957) ss 54 ,70.

3.1.3 Copyright Act 2012

The Copyright Act 1957 underwent major changes in 2012 amendment. This amendment harmonized the Indian copyright law with the Internet Treaties named as "The WIPO Copyright Treaty (WCT) and WIPO Performances and Phonograms Treaty (WPPT)," for removing the challenges which are faced by the digital technology. The Act of 2012 have added some new sections like Sections 65A and 65B for proper protection with regard to the technological measures. Section 65A states that, "Any person who circumvents an effective technological measure applied for protecting any of the rights conferred in the Act, with the intention of infringing such rights, shall be punishable with imprisonment which may extend to two years and shall also be liable to fine. However, this section also provides exceptions which allow third parties to facilitate circumvention, provided s/he maintains a complete record of the details of the person and the purpose for which circumvention was facilitated."[26]

The main aim behind implementing this section is that in order to curb unauthorized use of copyrighted works and also avoiding exploitation of copyrighted work in the digital environment.

"Section 65B of the Copyright Act 2012" of the Act deals with the aspect of protecting the name of the performer, or any copyright valuable information which comes under the right management information. The section stated that, "Any person who knowingly removes or alters any rights management information without authority or distributes, imports for distribution, broadcast or communicates to the public, without authority,

[26] P. Narayan, *'Law of Copyright and Industrial Designs'*(4th edn, Eastern Law House Private Ltd,2017).

copies of any work, or performance knowing that electronic rights management information has been removed or altered without authority shall be punishable with imprisonment which may extend to two years and shall also be liable to fine." There is also a provision for civil remedy to the author of the copyrighted work.[27]

The aim objective of this section is to provide protection to the rights management information. Another objective of this section is to allow the owner of the copyrighted work to have control over their work and also limit the access to this works.

We frequently see DRM programmes that require user identification to access databases, prevent duplicating of a CD's or document's contents, and lock or restrict the use of a digital product to a specific device or location. Encryption and watermarks are tools that support such DRM applications.

The inception and inclusion of the sections 65A and 65B in the Indian Copyright act not only helps in the harmonizing with the internet treaties but also help to fight against piracy. Though the sections are there for proper protection of the Rights of management but there is a requirement for a proper well equipped law which help in the proper management of the information and provide protection in case of technological measures.

3.2. Scope of Copyright Law in India

One aspect of copyright law in India basically means giving a exclusive right to the owner of the copyright," which can be seen in different kinds of works like literary, dramatic, musical or artistic work, it also includes sound recording and cinematograph

[27] Audhi Narayana Vavili, *'Digital Copyright Infringement Issues'* (1st edn , The Icfai University Press,2008).

films. Laws relating to Copyright are governed by The Copyright Act, 1957. The Act provides such a right to the owner of the Copyright which excludes third parties from using the work of the owner. Hereby it means a exclusive right allotted to the owner of the Copyright. The Act also provides for economic rights which are known as the exclusive rights under section 14 of the Act and moral rights under section 57 to the owner of the copyrighted work.

Section 14 of the Act defines 'copyright' means, "An exclusive right to do or authorize the doing of any of the works specified. Copyright is the term to describe the bundle of rights which are granted by statute, for limited periods of time and subject to certain exceptions, in respect of original literary, dramatic, musical or artistic works, such as novels, plays, poems, musical compositions, paintings, sculptures as well as of sound recordings, films broadcasts and typographical arrangements of published editions." These are proprietary rights, giving the owner the right to do or authorize other persons to do the acts restricted by the copyright law.[28]

Some examples of economic rights under Copyright Act are: "Copying the work and use the copyright work in any other way including issuing the work to the public, renting or lending copies of the work to the public, performing, showing or playing the work in public, communicating the work to the public. Further, the right extends to broadcasting of the work and the making available to the public of the work by electronic transmission in such a way that member of the public may access it from a place and at a time individually chosen by them and adaptation of the work or doing any of the above in relation to the adaptation". According to copyright law, these rights are referred to as

[28] Black's Law Dictionary, Thomson, West group, 8th ed. 1999, p 361.

restricted acts that allow the owner to reclaim his economic rights. The author's work is unique and cannot be copied by anyone else. Any person who violates a work's copyright without the owner's permission commits the violation themselves or gives another person permission to do so, and under the Act, both civil and criminal penalties may be applied. As a result, the owner of a copyright is required to take action to stop others from engaging in certain types of activities that violate his rights. "Copyright means the right to copy, specific, a property right in an original work of authorship including literary, musical, dramatic, choreographic, pictorial, graphic, sculptural, and architectural works; motion pictures and other audiovisual works; and sound recordings fixed in any tangible medium of expression giving the holder the exclusive right to reproduce adapt, distribute, perform and display the work. Copyright is a monopoly of limited duration, created and wholly regulated by the legislature and an author has therefore no other title to his published works than that given by statute." In "***Atari Games Corp. and Tengen Inc. v Nintendo of America Inc"***[29] discussing the case of "***New Kids on the Block v News Am. Publishing"***[30], "The copyright holder has a property interest in preventing others from reaping the fruits of his labor, not in preventing the authors and thinkers of the future from making use of, or building upon, his advances. The process of creation is often an incremental one, and advances building on past developments are far more common than radical new concepts. Where the infringement is small in relation to the new work created, the fair user is profiting largely from his creative efforts rather than free-riding on another's work. A prohibition on all copying whatsoever would stifle the free flow of

[29] 24 U.S.P.Q 2d 1015 (Fed Cir. 1992).
[30] 1992 WL 171570 (9th Cir. 1992).

ideas without serving any legitimate interest of the copyright holder"[31]. Copyright work whether it is literary, musical or creative it is exclusive and can be exploited only by the author of the work , it can be reproduced, licenced, and used for commercial purposes. . On or after the implementation date of the statute, this right is granted by the law and is protected for a specific period of time after the author's death. Making copies is also referred to as copying, which is the imitation, replication, or transcript of an original as well as writing prepared for printing. Multiple rights on the same work are made available as part of copyright, which is sometimes referred to as a "bundle of rights."

In case of a literary work, the author, for instance, has the right to print hardcover or paperback editions, transform the work into dramatic and cinematic versions, and use it for adaptation and abridgement." A piece of writing can also be transformed into a play or a musical that can be presented publicly. Computer software and computer programmes are regarded as literary works in practically all nations. Only a few nations, including the United States, have recognized computer programmes as patentable works (U.S). The classification of computer programmes as literary works has raised a number of issues regarding the legal standards that apply to traditional/analog media, their extension to digital media, and their implications.

Copyright becomes active as soon as a work is created. "The creation of the work, whether verbally or in writing, on paper, canvas, tape, disc film, or another recording medium from which it can be reproduced, is protected from duplication." Contrary to patents and trademarks, copyright does not require any formalities to exist and there is no

[31] *Sega Enterprises Ltd v Accolade Inc*.,24 U.S.P.Q2d 1561 (9th Cir. 1992).

system in place for the registration of rights. For copyright protection, no application to any authority is required.[32]

Since registration is not mandatory in case of copyright , this cannot be taken as an defense against the author by forfeiting his ability to seek redress under copyright law. Even while the Act allows for the registration of creative works, this is not necessary in order to assert copyright over the work. The Act makes no mention of registration as a prerequisite for copyright maintenance, either individually or collectively. When a particular author begins asserting copyright over a work that has been registered at the office of the Registrar of Copyright, the registration just a first piece of prima facie evidence. Therefore, registration of a copyrighted work is not necessary for the existence of the copyright or the acquisition of ownership.

Only a preliminary indication of the information submitted in the register is provided by the registration. In a similar manner, Section 13 of the Act makes no mention of any registration being required. It only includes works with copyright and those for which copyright cannot exist until certain requirements are met. Thus, copyright is created immediately after it is created without any formalities, in accordance with the Berne Convention of 1886.[33]

"A copyright work means any work in which copyright subsists. The works must comply with the criterion of originality in order to be protected. Original means that the work must originate from its author and must not be copied from another work."[34] Creative expression is given copyright protection. The notion or techniques that might be utilised

[32] *Sundarsan v A. C. Tharulokchander* (1973) 2 Mad L J 290.
[33] Ibid.
[34] *University of London Press Ltd v University Tutorial Press Ltd* (1916) 2 Ch. 601 at 60.

in an expression of the work have continually been disallowed by the statute and judges. However, this does not imply that the work must be an expression of creative or imaginative thought; rather, the essential originality refers to the way in which the thought is expressed. The author must have used enough individual talent, effort, and judgment to warrant copyright protection for the outcome in order to meet the low requirement of originality.[35]

3.3. Criteria for Determining Originality in Copyright

The true criteria for determining whether a piece is original is whether it required the author's skill, labour, and knowledge, and if it did, then he would be "protected by law" and no one else would be allowed to steal or appropriate to himself the outcome of his labour, skill, and learning. In the case of compilations like dictionaries, gazetteers, maps, arithmetic, encyclopaedias, and guidebooks, new publications dealing with the same subject matter will inevitably resemble existing publications, and the "common source" defence is frequently used when a new publication is claimed to be an infringement of an earlier one. There might not be uniqueness in the combination but labor and skill of the author is used. Copyright in original sense refers to the fact that the author of the work is responsible for its creation, meaning the work was original and not plagiarized. Because of this, “A work is original and is entitled to copyright protection even if it is exactly like a prior work, provided that it was not taken from the earlier work but rather the result of the author's own efforts.” It is important to distinguish and separate the terms "originality" and "creativity." The first doesn't suggest uniqueness. However, the latter does not imply a creative leap or a novel notion in the sense of something that has never

[35] *Kelly v. Morris* 1866, L.R. 1 Eq 697.

been thought of before. Instead, it describes things that have a hint of originality in copyrightable expression.[36]

If a piece of work is replicated without any obvious differences from an earlier version, but the copying process took specific expertise, training, and judgement on the side of the copyist. The only skills, knowledge, training, and judgement that are protected by a copyright are those that are used in acts of writing. All other abilities are not covered by a copyright. Only the authors are eligible for copyright. As an example, suppose a scholar spent years exploring the museum and finally, after much effort, discovered some manuscript that was unknown until then. As a result, he or she hasn't produced something that "owes its origin" to them and hasn't engaged in authorship by producing a "distinguishable version" that does. That is to say, one cannot call themselves an author if they have mechanically or slavishly reproduced the work of others.[37] Therefore, a work is considered original if it is the outcome of an individual's autonomous work. There are no copies of it. "Assuming such independent efforts, authorship will be acknowledged in the final product even if it can be demonstrated that another person previously produced a comparable or even identical work independently and without the creator's knowledge."So originality might be considered the fundamental component of authorship. Not only a minor variation that might happen during a translation to a different media, but at least some significant variation.

It indicates that even if one copied from a work and added his own physical expertise, they could still face accusations of copying an earlier work. In practise, it might be quite

[36] Dr. T. Vidya Kumari, '*Copyright Protection ,Current Indian & International Perspectives'* (1st edn, Asia Law House,2004).
[37] *L Batlin & Sons Inc v Snyder* 536 F.2d 48 (2d Cir) 1976.

challenging to refute such a charge. It would be necessary to avoid substantial similarities with the underlying work in order to defeat such a claim. For something to be considered the work of an author, originality itself must demonstrate some degree of intellectual labour. Even very little of this intellectual work can be necessary to prove authorship. In a different variation of work which is the author's own effort and is not much different from the earlier work but there is a slight modification , then also it will be liable for protection under copyright.

In Bleistein case though the poster concerned was for advertisement per se, the reasoning of Justice Holmes refusing to weigh the artistic quality of the work, provides the underlying rationale for the prevailing rule as to the determination of the necessary quantum of originality. Subsequent case laws show that the author's creative contribution will be of a much humbler and more minimal nature. Hence, it may be said that an independent effort of the author containing sufficient skill to motivating another to copying, is ip so facto a sufficient quantum of originality to provide copyright protection.[38] And the amount of time spent is irrelevant, as copyright may inhere in "the work in an instant."[39]

However, if the work is deemed too trivial or insignificant, then the courts have invoked a minimal requirement of creativity over and above the requirement of independent effort.[40] This standard of originality does not include requirements of novelty, ingenuity or aesthetic merit, and there is no intention to enlarge the standard of copyright protection to require them. This probably means that, the minimal requirement of creativity extant

[38] *Drop Dead Co. v S.C. Johnson & Son, Inc* 326 F.2d 87 (9,h Cir. 1963).
[39] *RockfordMap Pub., Inc. v Directory Serv. Co. of Colo.,* 768 F.2d 145 (7th Cir. 1985).
[40] *Feist Publications Inc. v Rural Tel. Serv. Co*. 499 U.S. 340, 358 (1991); *Atari Games Corp. v Oman* 888 F.2d 878, 883 (D.C. Cir. 1989).

under the Copyright Acts in countries is not to be enlarged, and not that it is to be eliminated.[41]

The law of copyright protects not the ideas or opinions, but the form in which ideas and opinions are expressed. There cannot be a definition of what is called protectable expression and non protectable idea in accurate terms. This must be decided from facts and circumstances on case to case. Idea expression is recognized first in the "Agreement on Trade Related Aspect of Intellectual Property Rights (TRIPS)." It provided that "copyright protection shall extend to expression and not to ideas, procedures, and methods of operation or mathematical concepts as such."[42]

The WIPO Copyright treaty stands on the same footing as that of the TRIPs, "Copyright is a right given to or derived from a work, and it is not based on the uniqueness of ideas; rather, it is based on the right of an author, artist, or musician to stop someone from copying an original work, whether it be a book, song, or image that he himself has made. Nothing in the concept of copyright prevents a second person from obtaining an identical outcome as long as it is the result of an independent process."

In ***Jefferys v. Boosey***,[43] it was observed that, "Copyright is not concerned with the reproduction of ideas, but with the reproduction of the form in which ideas are expressed. Ideas it has always been admitted are free as air. A copyright is not a monopoly unlike patents and registered design, which are. Thus, if it can be shown that two precisely similar works were in fact produced wholly independently of one another, there can be no

[41] Arjun Krishnan, 'Testing for Copyright Protection and Infringement in Non-Literal Elements of Computer Programs' [2005] 10 Journal of Intellectual Property Rights.
[42] Article 9(2), TRIPS.
[43] 1855) 4 H.L.C. 815.

infringement of copyright by one of the other. The position is that, if the idea embodied in the plaintiffs works is sufficiently general; the mere taking of that idea will not infringe. If however, the idea is worked out in some detail in the plaintiffs work and the defendant reproduces the expression of that idea, then there may be an infringement. In such a case it is not the idea which has been copied but its detailed expression"[44]

In the case of "***R.G Anand v M/s Delux Films***," [45], the Hon'ble Supreme Court of India held that, ideas cannot be granted protection under the Copyright act as ideas are already there in the public domain. The court in this case gave some guidelines in respect of the idea expression dichotomy. The Court observed as follows: "It is obvious that the underlying emotion reflected by the principal characters in a play or look may be similar and yet that the characters and expression of the same emotions be different. That the same emotions are found in plays would not alone be sufficient to prove infringement but if similar emotions are portrayed by a sequence of events presented in like manner expression and form, then infringement would be apparent." The court went on stating that the in order to made out infringement there is no requirement of making a exact copy of the original work is not required if a small significant part is copied it is sufficient.

Similarly, in of "Donoghue v Allied Newspapers"[46] Farwell J by observing states that copyright does not exist in any idea and by pointing out states that: *"This beyond all question that there is no copyright in an idea, or in ideas... of the idea, however brilliant and however clever it may be, is nothing more than an idea, and is not put into any form of words, or any form of expression such as a picture or a play, then there is no such*

[44] *Ibcos Computers Ltd v Barclays Mercantile Highland Finance Ltd* (1994) FSR 275.
[45] AIR 1978 SC 1613; 1978 (4) SCC 118.
[46] 1937 (3) All ER 503.

thing as copyright at all. It is not until it is (If I may but it in that way) reduced into writing, or into some tangible form, that you get any right to copyright at all, and the copyright exists in the particular form of language in which, or, in the case of a picture, in the particular form of the picture by which, the information or the idea is conveyed to those who are intended to read it or look at it."

The Supreme Court of India in R.G. Anand case laid down seven basic propositions to identify the infringement of copyright. The first two propositions are related to idea-expression dichotomy, which can be mentioned here:

1. There can be no copyright in an idea, subject matter, themes, plots or historical or legendary facts and violation of the copyright in such cases is confined to the form, manner and arrangement and expression of the idea by the author of the copyright work.
2. Where the same idea is being developed in a different manner, it is manifest that the source being common, similarities are bound to occur. In such a case the courts should determine whether or not the similarities are on fundamental or substantial aspects of the mode of expression adopted in the copyright work. If the defendants work nothing but a literal imitation of the copyright work with some variations here and there it would amount to violation of the copyright. In other words, in order to be actionable the copy must be a substantial and material one which at once leads to the conclusion that the

defendant is guilty of an act of piracy It is now well known that copyright law does not grant the author of a literary work protection on ideas and facts.[47]

Only the creative expression of ideas is given the temporary exclusive privilege of being able to use the many rights that flow from it. Not all expressions are protected by copyright; only those that are "original" and permanently fixed in a medium are. The "sweat of the brow" doctrine was first developed by the court in "University London Press v. University Tutorial Press" to determine whether a work was original or not. . The Court stated that as long as the author or creator could demonstrate that some effort had been made to make it, the aesthetic quality of the work or its artistic appeal was irrelevant. The "sweat of the brow" was discarded and a new principle known as the "modicum of creativity" was established in "***Fiest Publication Inc. v Rural Telephone Service***,[48] .

The Supreme Court of India in ***"Eastern Book Company v D.B Modak"***[49] following the principles given by in the case of "***CCH Canadian Ltd., v Law Society of Upper Canada"***[50] rejected the "sweat of the brow doctrine," which conferred copyright on works merely because time, energy, skill and labor was expended The Supreme Court held that, "the work must be original in the sense that by virtue of selection, co-ordination or arrangement of pre-existing data contained in the work, a work somewhat different in character is produced by the author.

Thus, in India, the test for creativity establishes a higher threshold than the "sweat of the brow" doctrine, but not as high as modicum of creativity." It admits that not every

[47] *Baker v Seldon*, 101 US 99 (1879); *Nichols v Universal Pictures Corp* ., 45 F.2d (2d Cir. 1930); *RG Anandv M/s Delux Films*, (1978) 4 SCC 118.
[48] 199 US 340 (1991) at 345.
[49] 2007 INDLAW SC 1341.
[50] (2004) SCC 13 (Supreme Court of Canada).

industry, skill, or endeavour results in a work protected by copyright, but rather only those that produce works with a slightly different character, require some intellectual effort, and exhibit some degree of inventiveness. One of the most significant instances for understanding the idea-expression requirements in copyright protection is “Computer Associates International v. Altai, Inc.”[51], which adopted the "Abstraction-Filtration Comparison" test.

[51] 982 F.2d 693

CHAPTER -4
COPYRIGHT IN THE DIGITAL ENVIRONMENT

4.1.Internet and Intellectual Property Rights

As the world is heading towards digitalization, digital technologies have become the principal tools for creating and storing data for its speed and easy access Digital media plays a very important role in all aspects of our life. Since the present copyright law is not in place with the new digital features and for this reason the act faces difficulty in application in cases of technology. The most important feature in relation to digital environment specially internet is that it defines as a place where unlimited information can be accessed, which was not possible before. The user if they want to collect resources, they don't need to get the actual copies, but can get the documents available in the Internet as it is free of cost and can be accessed with just typing a link in web. The main difference between the Internet technologies and the traditional means of communication is the way that the former one allows a vast audience while the latter one is of restricted character.[52]

Intellectual Property Rights is applicable on the Internet but it is a bit difficult to make the applicability enforceable. When the work is in the digital format , reproducing of the online work is inexpensive and the quality of all this online reproduced work is near perfect quality of copies.

The main issue of the holders of the copyrighted work is that internet hampers their intellectual interest and their work is prone to online piracy. As internet is such a place

[52] Avtar Singh, *'Intellectual Property Law'* (1st edn, EBC Publishing Ltd, 2013).

where all kinds of information is available. It also has some positive side as it can help the author to reach out and distribute his work through email or any other medium. But before the advent of internet , an average consumer has limited ability to distribute the copyrighted work. The internet poses a threat from the copyright's point of view and it can create a troublesome situation because the users have the capacity to disseminate the holders material.[53]It creates a disequilibrium in the balance between the authors' and users' interest. There are instances such as the Napstar Case , MP3 case, in all these cases the infringing activity was brought to an end, the court suggested some more stringent laws rather than laws prohibiting unauthorized copying , public performance etc are required in order to protect copyrights in this digitalized environment.

The protection strategies of the copyright holders changed with times , now the strategies of the holders comprises of both technological and contractual private ordering measures. Here in the technological measures the rights have the effect of self enforceable and in the contractual private ordering measures ,the rights have the effect which can be enforced by the courts.[54]

The Copyright law regulates the human labor either be it in a mental way or in a creative manner. The rights which are covered under the copyright includes literary, dramatic , musical , computer programs, painting , cinematograph , sound recording etc.

The objective of copyright Act are in two folds , One is to assure that the authors, creators etc rights are protected for a and in case of infringement of their right, the creator of the work can claim compensation. And the second one is to encourage the young

[53] Ibid.
[54] Dr. V K Ahuja, *'Law of Copyright and Neighbouring Rights'* (2nd edn, Lexis Nexis, 2015).

minds to take ideas from all this work and in culminate them in their own work, as the Act gives a proper indexes of work which if used does not come under the infringement as it comes under the category of permitted use.[55] Copyright does not gives protection to the ideas as it is already in the public domain and only gives protection to the expression of the ideas. Copyright exist when the material form is original. The protection of the Copyright is of limited period and after the period gets over it falls into the public arena. It now becomes the property of the public. *"The court stated that the interest of the copyright law is not in simply conferring a monopoly on industrious persons, but in advancing public welfare through rewarding artistic creativity, in a manner that permits the free use and development of non protectable ideas and processes."*[56] The copyright law serves the interest of both the private and also of the society. To serve the society, evolution of the fair use doctrine was made which allows use of the copyrighted work to develop new work by taking just an idea does not comes under the infringement part. There are a list of work which comes under the permitted use and if used this it wont come under the infringement or exploitation of the work of the copyright holder.

According to Peter S Menell, *"Digital uprising is the third of the technological invention which heralded considerable affect on copyright protection. The first was the printing press which brought in the methods of mechanically storing and reproducing works of authorship, such as photography, motion pictures and sound recordings. Second was the advent of broadcasting, where it enabled to perform the work of an author at different locations. The Digital Media is the new mode of expressing the creative work. This is made possible by computer programming and digital sampling."*

[55] Ibid.
[56] *Computer Associates International Inc. v Altai Incu*, 982 F.2d 693.

The Digital Uprising hampering the copyright can be implemented with just a computer and a flawless internet and this is sufficient to copy , reproduce and distribute the work. This technological effect poses a greta challenge to the copyright law. Starting with the invention of printing press, tape recorders and now with the evolution of computers with internet have created a scenario of wide spread piracy of copyrighted work. As the reproduction work is simple and it involves no capital at all and the reproduction work is very difficult to control. There is also another important aspect that the copyright works can be accessed easily across the boundaries.[57]

One of the most important examples of copyright which is reproduce from a click are computer program and internet. Hence after the invention of computer program and internet there started various copyright issues which posed as challenges affecting a large number in the world.

4.2. Databases and Copyright

The systematic way of collection of data arranged in a proper way which allows for proper access of information is known as Database. The database system is very different from a database as database system can be software or a program which helps in administering the database. To understand the difference between database and database management is essential as then only we can decipher what is to be protected in a database. "Computer database means a representation of information, knowledge, facts, concepts or instructions in text, image, audio, video that are being prepared or have been

[57] Lior Zemer, ' What Copyright Is: Time To Remember The Basics' [2007] 4 BuffaloIntellectual Property Law Journal.

prepared in a formalized manner and have been produced by a computer, computer system or computer network."[58]

A database is basically a collection of records which majorly contains one or more pieces of data about some object. The data can be about any person or organization ot city or it can be also sequences of DNA.

For example, The fields for a database that is about people who work for a specific law firm and it will include the name, employee identification number, address, telephone number, date employment started, position ,salary for each worker and any other miscellaneous information if required.[59]

The term database basically means a compiler which is basically compilation of data, or other materials arranged in a systematic manner. In law, the facts cannot be protected but the way they are being arranged in a systematic manner or according to any logical principle and if any level of creativity is shown on the part of then only it can be protected. It is very important to distinguish between creative database and non creative database[60].

For example, a database is created on articles with relation to Companies Act 2013 , it should be given copyright as it is a result of labor, skill , capital and also labor while reading and extracting important elements from various judgments and in culminating it in the articles by the creator of the database. This is the reasoning of defining computer program as a part of the literary work and hence copyright protection is also allowed.

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[58] the Information Technology Act, 2000 , s 43.

[59] Haley Stein, 'Intellectual Property and Genetically Modified Seeds: The United States, Trade and the Developing World' (2005), 3 Nw. J.Tech.& Intellectual Property <https://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=1033&context=njti> accessed 07 May 2022.

[60] Karnika Seth, 'Computers Internet and New Technology Laws'(1st edn ,Lexis Nexis ,2012).

Lord Atkinson, defining the concept of originality in copyright said that, "It is necessary that labour, skill and capital should be expended sufficiently to impart to the product some quality or character which the raw material does not possess and which differentiate the product from the material."[61]

Database refers to the compilation of various data, works or any information or any independent materials which is arranged in a systematic or any other methodological manner following any basic principle of compilation. The database should be given copyright protection if the compilation is done of non original works because the compilation is a result of labour and skill of the creator of the database.[62]

Under Copyright laws , database has been given protection under the literary works. In India , databases have been treated as literary works under 2(o) of the Copyright Act, 1957, "'literary work' includes computer programs, tables and compilation including computer databases."

In the case of "***Telstra Corporation Ltd v Desktop Marketing Systems Pty Ltd"[63],*** "The Federal has clarified that in Australia only a low level of creativity and originality is required for protection. Data bases can be protected under the Copyright Act as literary works. For the purposes of the Copyright Act a literary work includes "a table, or compilation, expressed in words, figures or symbols".

There is a debate ongoing with regard to the protection of database between two models of copyright protection. The advocates of first model argues that the databases receive protection without showing any creativity or any original authorship. This model is based

[61] *Macmillan & Co. Ltd v. Cooper*, (1924) 40 TLR 186 at p. 188.
[62] Jain,Pankaj & Rai.Pandey Sangeet, *'Copyright & Trademark Laws relating to Computers.'*(1st edn, EBC 2005).
[63] [2001] FCA 612.

on the sweat of brow or industrious collection doctrine. They justify their stand by arguing that protection should be given to the databases as a reward for the hard work for compiling the articles. The reward will help them in developing new incentives.

The other model advocates the opinion that there should be atleast some level of creativity and rejects the earlier notion of giving protection without actually showing any kinds of actual creativity. They advocated that the copyright protection should extend to the expression that is contained in the database and it limits its part to the original way of arrangement of database.

In the US courts, the protection of copyright with regard to the database is a very debated issue. Maximum courts deferred to give protection to the databases which does not contain any kinds of creativity originality for the systematic arrangement of facts[64], this view of the US courts were adopted in the Copyright Act 1976. It was explicitly mentioned by the Congress in the Act that compilation of materials or arrangement of materials or facts in the compilation which lacks any kind of creativity or originality will not be protected, but still there is a section of minority of courts which still advocates that compilation of materials without using any kind of creativity or originality still gets protection.[65]

In the 1991 case of "***Feist Publications, Inc. v. Rural Telephone Service Co., Inc"[66],*** "The U.S. Supreme Court resolved the issue that had divided the lower courts and unanimously rejected the sweat of the brow or industrious collection doctrine. Moreover, even though the Court recognized that the selection and arrangement of facts could create

[64] *Miller v. Universal Studios, Inc*. 650 F.2d 1365 (5th Cir. 1981).
[65] *Leon v. Pacific Telephone and Telegraph Co.,* 91 F.2d 484 (9th Cir. 1937); *Jeweler's Circular Publishing Co. v. Keystone Publishing Co*., 281 F. 83 (2d Cir. 1922).
[66] 499 U.S. 340, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991).

the requisite originality for copyright protection, it emphasized that the copyright in the compilation would be "thin," i.e., it would extend to the particular selection or arrangement of facts but not to the facts themselves. Thus, by rejecting the notion that databases could be copyrighted without demonstrating originality and emphasizing that facts and ideas are not copyrightable, the Court appeared to settle the long-standing clash between the two conflicting models of compilation protection."

The test to determine originality in case of database is it should be a result of effort, skill and labour. If the facts are not original but if the arrangement or systematic way of selection is original then the arrangement can be protected. Original does not only mean invention or original or new thought. The main aspect of copyright protection is that it does not deals with originality in ideas but originality in expression, here the originality does not mean new or novel , its only that it should not be copied from any other work. "Originality requires an author to contribute something more than a merely trivial variation which is recognizably his own."

4.3. Protection of Database in India

Databases are protected in the same way as literary and artistic works are. The Indian Copyright Act, as revised in 1994, protects databases as 'literary works,' which encompass works like computer programmes, tables and compilations, and computer databases, among other things (The Copyright Act, 1994). Regardless of the form in which the product appears, the author's skill, labor, and judgement are protected. Section 13 (1) (a) of the Indian Copyright Act, 1957 covers "Databases" as "literary works," stating that "Copyright shall subsist throughout India in original literary, dramatic, musical, and aesthetic works."

Computer programmes, tables, and compilations, including computer data bases, are included in the definition of literary works as defined under Section 2(o) of the Copyright Act, 1957. According to Section 63B of the Indian Copyright Act, anyone who knowingly uses an infringing copy of a computer programme on a computer will be sentenced to a minimum of six months and a maximum of three years in prison. The Indian Courts recognizes copyright protection in database. It has been decided that a person's compilation of a client/customer list established by committing time, money, labour, and skill qualifies as "literary work" for which the author possesses copyright under the Copyright Act.As a result, if data bases are infringed upon, the outsourcing parent corporation may have action under the Copyright Act as well.

"Data" under Section 2(o) of The Information Technology Act, 2000 is defined as , "A representation of information, knowledge, facts, concepts or instructions, which are being prepared or have been prepared in a formalized manner and is intended to be processed, is being processed or has been processed in a computer, computer system or computer net-work and may be in any form (including) computer print outs, magnetic or optical storage media, punched cards." For the first time the concept of Database was defined under the IT Act 2000 under Section 43 explanation (ii) as, "A representation of information, knowledge, facts, concepts or instructions in text, image, audio, video data being prepared or have been prepared in formalized manner or have been produced by the computer, computer system or computer net-work are intended for use in computer, computer system or computer network."

If any person use without permission any person's computer or computer net-work secures, get access to the system or downloads data or down-loads, copies or extracts any

data or data base or information from the said computer, computer system or computer network or secures access to the system or down-loads data or down loads, copies or extracts any data or data base or information from the said computer, computer system or computer network which includes the data hold or stored in any removable storage media, the person infringing the rights of the aggrieved party have to provide compensation up to One Crore of Rupees as per Section 43 of the IT Act 2000. This section also covers the instances of cracking codes of computer , trespassing of computer, digitally copying, piracy violation , theft in case of data etc.

Section 66 of the Act provides for sanctions to the person who have the tendency to cause damage or cause wrongful loss to the public or any person by altering or damaging the information in the system which will diminish it value or its affect will be injurious , and in common terms it is called " Hacking".

4.4.Multimedia

Multimedia works by their basic premises are works combining different elements, such as text, sound, still visuals and moving images, of different classes of works. The resultant work defies existing classification. If the rights for all classes of works were the same, then perhaps, this would not have been a major issue. But the law as it stands in India, distinguishes between different classes of works in the matter of rights. For example, the rights in a literary work and those in a cinematographic film are different.[67]

There is no rental right in a literary work, whereas there is such a right in cinematographic film There is a view that multimedia works being a digital product be

[67] ibid

classified, as computer programs. Since there are separate provisions for rights and authorship of a computer program as distinct from literary works in the Copyright Act, this could be a possible solution. However, issues may arise on the retention of separate copyrights in the works incorporated in the multi-media, in terms of section 13 of the Act and the rights of performers in the product.

At present, large number of multimedia works is created by combining pre-existing works. The problem will get accentuated when more and more multimedia works will be created as new complex ones. The classification of multimedia works is an issue which needs to be looked into in-depth.

4.5. Technology and its Effect on Copyright

There has been growth of IP in the field of IPR , as it has became a vital tool for the success of any Business organization. As the IP field is all about new innovation and creation , and the protection of this innovative ideas and creation are the main goals of the IP law and this has became more helpful in the digital media.

The creators in the music industry or film industry are exploring the internet field and also simultaneously making their works available in the digital world. The creators of these works are seeking protection under the Intellectual Property Laws. On almost every subject online publication can be seen in the digital form. The use of online literature and e books is very prevalent in the present days and the authors are making there work available to the person and the person can utilize their work by making the payment.[68]

The creators of the particular works will be released in the digital medium only if they feel there work is protected. The digital space have also affected the arts and crafts and

[68] ibid

all its collections have started to digitalized. The creators are using various other technologies in order to make use most of the internet for circulation of their work. Our current copyright regime is not efficient in balancing the private incentives and social benefits .

The main question is if our law provides incentives for creation of high quality of original works and how it is consumed overtime. The answer to this question is that it can be realized through the various advances made in the digital technology in the legal market. For example : Music files shared in the internet or movies illegally reproduced and distributed those works on CD ROM and the potential gains can be realized only when advances will be made in the digital technology in the legal market. The digital space is siuch a area where everything can be searched or being made available on the click of a button.

The person visiting the internet has access to all the materials available. It's a place where data can be easily stored and copied unless it is protected and precautions is taken by the author.

One reason for copying is that users expected that information available on the net are free and can be downloaded free of cost, as the copying does not name any person

whose name is involved in the digital transaction. The researcher intended to make an attempt in understanding the challenges for the author in the digital forum.[69]

[69] Subhasis Saha and Sourav Keshri, 'Challenges to Copyright Work in the CyberSpace,'[2008] 13 Journal of Intellectual Property Rights.

4.6. National and International Legislation

Governments are free to limit the arena of IPR rights and the way how it should function and enforcement should be done. This limitation is combined with certain international conventions on which the national governments have agreed upon. As time evolves the possibilities of providing protection beyond the territories of the countries is increasing. The protection of author was earlier governed by bilateral treaties which later converted into multilateral convention known as the "Berne Convention for the Protection of Literary and Artistic Works" (Berne Convention), 1886". The Berne convention is regulated by the WIPO. The Berne Convention was last revised in 1971 and last amended on 1979. The Agreement on Trade Related Intellectual Property Rights (TRIPS) under the World Trade Organization (WTO) incorporates the law relating IP. The IPR laws have consistency but still there are some variations in all the domestic laws as per the requirement to what qualifies for IPR protection. The function of all the IPR rights are common in all the developed countries as they have the same kind of IPR regime. India belongs to the set of developing countries and is trying to cope up with the recent development in the international scenario. India is a member of the Berne Convention, Universal Copyright Convention (UCC) and the TRIPs Agreement , and so the copyright law of India is required to be in uniformity in all the international arena. There should be harmony among the international conventions or treaty with domestic law and for this reason there has been amendment in the IP regime. India provides protection by adopting the "International Copyright Order, 1999 to members of the Berne Convention, UCC or the WTO Countries". The TRIPS Agreement does not give protection to ideas, mathematical concepts etc. It includes some kind of protection to some form of copyright

only. The TRIPS Agreement protects computer programs as literary works under the Berne Convention. It also protects the databases or other compilations whose arrangement or selection make them intellectual creations, even when individual elements are protected by copyright.

4.7.Copyright And Digital Environment

As the technologies started evolving the traditional old intellectual property rights laws are not able to cope up with the new changes. The application of the law also requires good amount of changes in order to cope up with the emerging trends in the field of technology. Not only in India countries all over the world have started making amendments in their intellectual property laws just to cope up with the recent trends in the digitalization. If not properly enacted and brought changes in the existing regime it will hamper in providing remedies by the judiciary or the legislature.

The technological development has created a challenging society of creative work in the digital media. The increase in consumption and enjoying creative work in different ways has put a challenge at the international level. Today ripping of music files from a CD and store on a computer or any portable music device has become common and easy. This could not have been done unless permission or license is taken from the owner of that work.

The work can be flawlessly and inexpensively copied which can be done in an instantaneous manner and distributed all over the internet. The issues concerning literary work, musical work, sound recording, cinematograph and all other work of author may directly apply to computer program or software.The threshold of creativity and

innovation with relation to the copyrighted products is changing keeping in mind the emerging trends of technology.[70]

The change in the threshold of protection granted by the copyright law started after the invention of printing press to phonograms, radio and internet till date. This led to the change the basic substance of the copyright law. The traditional way of protection of copyright is analog methods of recording works of intellectual property rights either on paper, film, on magnetic tape. But, with the introduction of computer, digitalization of the same converts all words, images, sounds, graphics and films into binary numbers of l's or 0's. These digitally stored works, as bits grouped in bytes, disassociated from their physical form are then transferred over the networks to be finally reconstructed into recognizable art by a reference to their binary values.[71]

The authors started thinking internet along with opportunity a threat also. Because internet is a machine for extensive infringement without detecting. Internet have replaced the day to day conventional newspapers, radio etc. In the early era of Internet the work of the copyright owners in the segment of films, music etc were in great threat as it can be easily copied in the digital environment and the law relating to infringement and remedies in this regard was also not clear as the copyright law is based on the conventional traditional methods.

The accessibility of all this infringed copies over the internet is produced in huge scale due to advancement in technology. And taking all this issues in consideration there should be a new regime to protect all this works from the third party. One major development was the World Wide Web (WWW) which transformed the internet into a

[70] ibid
[71] ibid

network connecting different communities from all over the world. The Web became the place where people started exchanging and sharing idea and information. This expanded to buying and selling goods and services. From being in use for military and research purposes in the initial stages of development, has become precursor of information age revolutionizing by providing ready information on every conceivable area with advancement of digitalization. The copyrighted products are sold over the internet like books, movies etc.

All the copyrighted works are digitalized by reducing into numbers like ‘0’ and ‘1’ and this can travel anywhere in the world through networks. Though as time evolves and technology started evolving more some sort of protection is also given to the copyright owners like the encryption or watermarks. Along with this the owners of the copyright are provided safeguard by the process of digital rights management. Even after this also the threshold of protection allotted is not certain. It is also worthy to buy original or legitimate products. Nowadays in accessing free works also over the internet requires subscription by which the owner can monitor there services.

This has replaced the unauthorised online music sharing sites like Napster, KaZaA and Morpheus. This Peer-to-peer network enables users to upload and share music and movie

files through the digital media, which were amounting infringement of copyright. Napster used centralized server to process the transfer and hence was difficult to regulate resulting that, music industry had to face huge losses in this regard.

At present every computer system have their own CD burners which helps in downloading and saving movies or music without comprising the quality of the video.

Everyday more than 4 lakhs video are downloaded illegally. This market is very huge. The are many question in the field of copyright and digital environment are not at yet solved both at the international and domestic aspect. The recent developments in the field of copyright have huge impact in the long run.

The WCT and the WPPT provides some guiding principles for the domestic legislature. There are some issues which are debated and discussed by legislation, judiciary both at the international and domestic level. Few countries have enacted legislation to ensure protection and enforcement of copyright in the digital era. The courts have been responding to the new challenges in protecting the newer types of copyright.

4.8.Computer Program And Online Piracy

As per the Intellectual Property Rules, copyright law serves as the best source of protection for the literary and artistic works. As per the definition of literary work, computer programs are included within the ambit of literary works which include software programs also. So protection under copyright is the best protection awarded to the computer programs. Computers are basically machines and they cannot think on their own so software's are being installed in the computer to get the desired results as required by the programmer. Computer software's are a part of the computer system and thereby they are also granted protection under the copyright regime. The computer program are basically known as software. The computer system can understand only the binary codes '0' and '1'. So the programmers uses this code to decipher and create a program or software which results in the final product and it is understood by the common public.

Developing a good interface requires lots of effort and patience, as this will say that if the program interface is user friendly or not. The computer programs have huge commercial value in the market. So the protection of copyright and mostly infringement remedies is granted to the interface of the program, rather than the actual source code or object code.

One of the important case with regard to this aspect is ***Whelan Associates Inc. v. Jaslow Dental Laboratory***[72] where it was held that along with the protection of actual source code is also important along with protection of the structure, reorganizing . The test laid down in *Whelan case* came to be known as the "structure, sequence and organisation" test, since the court held that copyright protection of computer programs may extend beyond the programs' literal code to their structure, sequence and organization.

Till this period it was a well settled law copyright grants protection to software but the issue which arises in the ***Apple computer Inc v Franklin Computer Corp***[73] which was that till what extent the protection of copyright is granted to the non literal elements of the program code and it can include the structure , sequence and organization of the program

This issue was discussed and analysed in the case of ***Computer Associates International Inc v Altai Inc***[74] , where the wheelan case was criticized and in this case only the three steps Abstraction Filtration and Comparison method was established. This method was established in order to figure out extent the protection of copyright is granted to the non literal elements of the program code and it can include the structure , sequence and organization of the program.

[72] 797 F.2d 1222; 1240 (3d Cir. 1986); 479 U.S. 1031 (1987);
[73] 714 F.2d 1240 (3d Cir. 1983)
[74] (1992) 20 USPQ 2d

Hence after this case people started following the Computer Association Case method instead of the Wheelan test.

CHAPTER - 5
RIGHTS OF THE COPYRIGHT OWNER

5.1. Right of Reproduction in the Digital Environment

After the advent of digital technologies a new technique of transmitting of copies of the copyrighted work was introduced whereas in the traditional method of transmission of work it was basically of material copy which is basically based on paper or any other form as it may be. One of the important right of the copyright owners is the right of reproduction. The proper arena of right of reproduction was not even defined properly in the pre digital days. It was only in the Berne Convention the right of reproduction got recognized around 1967.

The main question which was in doubt was that will right to reproduction include digital copying or not. It was only after the implementation of WIPO Copyright Treaty the question in doubt was solved. It was finally settled that right of reproduction is also applied in the digital environment. The treaty further specified that *"the storage of a protected work in digital form in an electronic medium constitutes a reproduction within the meaning of Article 9 of the Berne Convention"*. There is no problem as such to recognize the right of reproduction in digital medium. The only problem arises in the part of transitory or incidental reproduction in the digital space. The copyright owner has the exclusive right of reproduction and if anyone uses this right without the permission of the owner it leads to the infringement of the owner's reproduction right. There arises no difficulty in determining the infringement of the right of reproduction in the digital space even if it is a computer program it can be easily determined.

In ***Atari Games Corporation v. Nintendo of America Inc***.[75] it was held that even the works that warrant limited copyright protection, verbatim copying is an infringement. In ***Photoquip India Limited v. Delhi Photo Store***[76] , The plaintiff claims that the defendants‘ products are an exact replica of his products, identical in every aspect and detail. The plaintiff also claims copyright is the drawings of the moulds or cost of the plaintiff‘s product. The Bombay High Court held that all the plaintiff‘s rights under Section 14 of the Copyright Act, 1957 have been infringed.

In ***MAI System Corp. v. Peak Computer Inc***. [77] the Court held that, "loading of copyrighted computer software from a storage medium into the memory of the computer causes a copy to be made". Hereby it implies that it means copying of infringement work is also copies which are made into Random Access Memory(RAM). This judgment attracted huge controversy, as it conveys that if one user browses on the Internet and use any material to read and not to copy , they will be tried under violation of copyright and it amount to copying. This decision was overturned in the case of ***Religious Technology v. Netcom***[78], which says that temporary browsing in the Internet does not attract infringement of copyright.

5.2. Right of Distribution on the Internet

The copyright law empowers the owner of the copyrighted work with a right which is to issue copies of the work to the public which are not in circulation. The work if it is distributed to the public without the consent or permission of the copyright owner then it will be treated as an infringement. In case of computers if the work is exhibited on the

[75] 975 f 2d 840
[76] NM684-2014-S427-2014-F.DOC
[77] 99 F2d 511 (9th Cir 1993)
[78] 907 f Supp 1361

Internet then it is said that that right of distribution is on effect. Though there is very slight difference between distribution and display but in case of cyberspace the distinction does not stand out. The infringement in the computer programs with regard to distribution can be caused due to three reasons:

1. If the work is distributed among the public by an electronic mail

2. If the distribution is done by taking printouts and then physically circulating it

3. The distribution is done after the work is displayed on the web pages in the cyber space.

The third point is very controversial how mere displaying can led to distribution. But in case of computer programs , the public distribution is synonyms to public display.

In ***Creative Width Design Solutions v. Print Adda & Ors***[79] the Delhi High Court held that, The defendant's goods are being sold through same trade channel as that of the plaintiff and the infringing products are available at lower prices than those of the plaintiff. The plaintiff would suffer irreparable loss and injury. So the defendants are restrained from making, selling, advertising the plaintiff's artistic works being wall decals/stickers that result in or amount to the infringement of the plaintiff's copyright.

In "***Sega Enterprises v. Maphia***,"[80] the Court held that, The actions of the Defendant, of encouraging his subscriber to upload Sega Games to his BBS which he would then allow his subscribers to download through the Internet amounted to violation of the Plaintiff's copyright as he induced, caused and materially contributed to the infringement

[79] CS (OS) No. 3974/2014, decided on 22 December, 2014.
[80] 857 F Supp 679 (ND Cal 1994)

5.3. Public Performance and Public display on the Internet

The are very less possibility of violating the rights with regard to public performance on the internet. The main concern arises with the violation of public display. Among the copyrighted works the right of reproduction is given only to original literary, dramatic , choreographic and musical work.[81]

The right of performance before the public if done without the without the authorization of the copyrighted owner will result in infringement. Public Display or Public performance can be dealt with the part that it is communicated to the public in a huge space; the medium of communication can be of any device or by performance. If the performance is done on a private level and it won't include the general public it is not referred to as infringement. The reproduction of any musical work into CDs or any hard disk may result in infringement of the distribution and also reproduction right. But this won't attract the infringement of right of public performance.

The very moment the work is displayed before the public without proper consent from the author the right of public performance is infringed. This right gets infringed only when the work is displayed before the public without taking the consent from the public. The various kinds of work which are there on the internet which anyone can see and view can be termed as public display.

The reproduction of literary, musical , artistic work if they are displayed on the internet , they will be referred to as public display. Regardless of the fact that the particular work is viewed or not , it have fallen under the preview of public display after it gets posted on the internet. This segment have several judgments as such "Playboy Enterprises, Inc.

[81] The Copyright Act (1957) s.14

v. Frena[82]" where the defendant was using photographs which were copyrighted, his defence was that the photographs were used by only a limited subscribers and so it does not falls under the public display. The court hereby observed that though it is viewed by a small number of subscribers it is displayed on the internet and hereby it attracts public display.

5.3.1 Adaptation on the Internet

Adaptation is basically when any alteration is made in the original work to produce a new work. Several countries protects the right of adaptation of the copyright owner. But in case of Internet it possess a huge problem as the internet is very vast and varieties of the material are available. Accessing all these free materials available on the internet and adding a new features to it for commercial purpose.[83]

Adaptation work in computer program which results in a new work should not be categorized as infringement. Alterations, arrangements and other kind of adaptation in the original computer program should be protected. This scenario is very much in debate that whether adaption of work which result in another work will fall under the category of infringement or not.

In the case of ***"Midway Mfg. Co. v. Artic International,***" [84] the court held the adapted work is liable for infringement as the defendant have used some sort of computer program in order to increase the plantiff's video game. In contrary with this judgment , the court in another case held that if any work increases the capacity of the original work

[82] 839 f Supp 1552: 29 USPQ 2d (BNA) 1827 (MD fla 1993)
[83]Ritwika Verma, 'Implications of Online Copyright Violation: Balancing the Enigmas of Technology with Copyright in the Internet Age',[2013] 1 International Journal of Law and Legal Jurisprudence Studies.
[84] 704 F2d 965

then it will not be categorized as infringement.[85] So in conclusion we can conclude that if the adaptation of the work which results in a new work or product comes under infringement or not depends on the facts and circumstances of the case and this can be determined by careful comparison between the original work and the adapted work.

5.4. MANAGEMENT AND ADMINISTRATION OF COPYRIGHT IN DIGITAL AGE

When a particular work is displayed on the Internet is it accessible to each and every one. Anyone can use such available works and make a new product. Technology is a bane for the owners of such copyrighted work whose work is on public display as they are freely available and can be copyrighted. There should be proper management for the administration of the copyright in the digital in order to avoid misappropriation. [86]

5.4.1. Right Management Information

In the digital scenario, the protected copyright work and its subject matter should be properly identified as who are their relevant owners and along with this licensing of the work should also be available in the digital medium.

On the one hand, this information must be easily readable for a potential user; on the other hand it should not be easily erasable so that it remains embodied during the subsequent stages of exploitation in connection with the work. In order for this information to remain embodied during the later stages of exploitation in relation with the work, it must be both easily readable for a potential user and difficult to erase.

[85] Lewis Galoob Toys v. Nintendo of America (964 F2d 965).
[86] Arjun Krishnan, 'Testing for Copyright Protection and Infringement in Non-Literal Elements of Computer Programs' [2005] 10 Journal of Intellectual Property Rights.

Additionally, right owners must be able to demonstrate their authorship and ownership of rights in the event of infringement; the necessary information must be incorporated into the work itself, even after it has been altered or if only a portion of the work has been utilized. This data is classified as "Right Management Information".

Right of Management Information is defined properly under Article 12 of WCT : "Identifies the works, the author of the work, the owner of any right in the work or information about the terms and conditions of use of the work, and any numbers or code that represent such information, when any of these items of information is attached to a copy of a work or appears in connection with the communication of a work to the public." [87]

In the Indian Copyright Act there is no such provision for the protection of the electronic rights management information. Although the Act's Section 52A allows for the display of certain information on sound recordings, this information is more used as a "exhibit" than anything else. Therefore, regulations in the copyright laws must be implemented to make it illegal to remove or modify any rights management information utilized in a copyright work.

5.4.2. Digital Rights Management (DRM)

The Digital Rights Management facilitates limitation on the use of the copyrighted work available online after sale. It is basically a way to control the use of the online available copyrighted works. The DRM works on three steps , first they will copyright a particular content, Secondly they will manage the distribution and third is the how the consumer

[87] Article 12 (2) of WCT

shall use it after sale has been done. These DRM typically address issues like who has access to a work, at what cost, and under what conditions. These rules handle issues like whether or how many copies of the work a user is allowed to create, how long they are allowed to access it for, whether or not they can edit or add to it, whether or not they can access it on one or more devices, etc. This system seeks to automate the licensing system and also observe if the licensing terms are complied or not.

The legal basis for DRM systems are found in the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT), focusing on the provisions of Obligations concerning Technological Measures (Article 11 of the WCT and Article 18 of the WPPT) and Rights Management Information (Article 12 of the WCT and Article 19 of the WPPT). Rights holders have put a lot of faith in DRM and other technological protection measures, in particular, as a way to enforce their rights in the digital sphere since they promise to stop the rampant copying of copyright works.. Substantial investments have been made in recent years with a view to the development and deployment of the systems in question. This work is predominantly private-sector driven and many systems are already available,' although not yet widely adopted by the market.

Interoperability is a critical issue that must be resolved because many different proprietary systems must work flawlessly together in order for them to be truly appealing to users. Although there are many initiatives to create interoperable standards, it is difficult to get the level of agreement needed among many different industry sectors and users. However, the widespread adoption of DRM systems is predicted because it is widely believed that doing so will improve legitimate Internet access to copyrighted works, to the advantage of users, intermediaries, and content providers alike.

Digital locks placed in accordance with DRM are argued to prevent users from doing something perfectly legal, such as making backup copies of CDs or DVDs, lending materials out through a library, accessing works in the public domain, or using licensed software. However, opponents of DRM argue that digital locks placed in accordance with DRM restrict users from doing these perfectly legal activities. This can be taken as fair use under the copyrighted work as sometimes it can be used for personal use and sometimes for its own benefit only. It is a fair use or not the computer program cannot detect it. Some of the examples of DRM can be limited access to the E book or copying of musical works in one or two copies etc. It also serves as an alternative of piracy which is recognized as one of the fundamental rights in India,

CHAPTER-6

GLOBAL HARMONISATION OF THE COPYRIGHT LAW

There was no possibility of harmonizing the copyright law, as the copyright law is followed in different manner in the common law and the civil law countries. Several treaties and negotiations were done in the aspect of harmonization of the copyright law across the whole world. This harmonization was achieved by entering into several International, bilateral , multi lateral or regional treaties. The harmonization of the copyright law and its neighboring rights are incluminated in the "Berne Convention",[88] "Universal Copyright Convention"[89] , WIPO Copyright Treaty[90] and for Neighbouring Rights : "Rome Convention,"[91] Geneva[92] and Brussel Conventions[93] and WIPO Performances and Phonograms Treaty.[94] Some of the Conventions and Treaties are discussed briefly here after:

6.1.BERNE CONVENTION FOR THE PROTECTION OF LITERARY AND ARTISTIC WORKS.

This was adopted for the protection of the authors of the literary and artistic works. It was adopted in the year of 1886. This is one of the oldest international treaty with regard to Copyright law. This convention protects the author of both Literary and Artistic works.

[88] Berne Convention for the Protection of Literary and Artistic Works,(1886).
[89] Universal Copyright Convention, (1952)
[90] WIPO Copyright Treaty, Geneva (1996)
[91] International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organization (1961)
[92] Convention for the Protection of Producers of Phonograms Against Unauthorized Duplication of their Phonograms (1971)
[93] Convention Relating to Distribution of Programme Carrying Signals Transmitted By Satellite, Brussels (1974)
[94] WIPO Performances and Phonograms Treaty, Geneva (1996)

The Director General of the World Intellectual Property Organization is deposited with the Instruments of accession or ratification .The Berne Convention was revised several times in order to cope up with the advancement in the technologies. The first revision took place in Berlin 1908, followed by the revision in Rome 1928, in Brussels in 1948 in Stockholm in 1967 and in Paris 1971. The main aim of this convention is to protect the works which comes under the scope of " Literary and Dramatic work". The works under this segment can include anything it can be periodicals, newspapers . encyclopedias, pamphlets etc. This convention provides an inclusive list of works which are protected under this convention.

The duration of protection of the work is from the date on which the author died till fifty years.

The Berne convention is based on the two principles of National Treatment and Automatic Protection. National Treatment means that any work originating in one of the member countries will get the same treatment in all other member countries as if it has originated in that country. And the National Treatment is not subject to any conditions it is automatically protected and it is independent of the protection which is there in the country where the work was originated. In the Berne Convention apart from this principle, the convention also have a set of standardized limits of protection which every member country must follow.

This convention provides protection to the economic rights and moral rights of the authors. Under the economic rights , some of the rights which fall under this category are: Right to make reproductions of their work in any manner, right to translate their works, right to broadcast of their works, right to recite in public etc. And under the moral right,

authors can claim authorship of their work and also claim compensation or damages in case of multilation or deformation or any work which is prejudicial to the author's honor or reputation.

6.2.UNIVERSAL COPYRIGHT CONVENTION, 1952

The Universal Copyright Convention (UCC) was adopted in the year 1952 and it was revised in the year of 1971. The main reasons for the adaptation of the UCC was that that the super powers i.e. USA and USSR and many other Asian countries were not part of the Berne Convention due to high level of protection. The UCC was developed under the tutelage of a newly founded cultural organization, "United Nations Educational, Scientific and Cultural Organization. As per the UCC any country can become the member of UCC and seek protection like the USA without asking the Berne Convention to lower their protection. In case of dispute between the Berne Convention and UCC the terms of Berne Convention will prevail.[95]

6.3.WIPO COPYRIGHT TREATY

After the TRIPS agreement was adopted, the lacuna posed by the technologies are still not addressed. It mainly did not address the technological problems which were created by Internet. Before the adaptation of these treaty, the international copyright community were following the strategy of guided development rather than developing any new international norms. Guidance was provided in the manner that how to respond to the problems which were created due to technological advancement in the field of Intellectual Property Rights. This policy had an impact on the national legislations but it was found

[95] Universal Copyright Convention, Paris Text (1971), Article XVII(1)

that the guidance was not sufficient for proper implementation of all the technological development in the Intellectual Property Rights world.

There started developing of an international framework at GATT in the Uruguay Round negotiations which resulted in the formation of World Trade Organization (WTO) and WIPO. After the TRIPS agreement under WTO, the process of new copyright and neighboring rights in the WIPO committee gained speed. And finally on December 20th 1996 to fill the gap caused by the technological advancement , the WIPO Diplomatic Conference on Certain Rights and Neighboring Rights questions adopted the WIPO Copyright Treaty, 1996(WCT).

The need for this kind of proposal was to create a uniform view with regard to certain questions where the government of the member countries interpret their obligations in different ways. This proposal was also in need to provide adequate solutions to clarify the interpretation of questions which were raised due to economic, social and technological effect and also provide protection to the authors of the literary and artistic works in such a manner that it creates a balance between the rights of the author and also in the interest of the public.

The WCT is closely connected to the Paris Act of the Berne Convention. It is a special agreement within the meaning of "Article 20 of the Berne Convention." The WCT obligates the contracting parties to comply with Article 1 to 21 and the Appendix of the Berne Convention. Article 1 of the WCT states that it is a "special agreement within the meaning of Article 20 of the Paris Act, and that nothing in the treaty is to derogate from the contracting parties existing obligations under the Berne Convention." The WCT provides protection under three aspects:

1. As per the Berne Convention computer programs are also a part of the literary works.[96]
2. Compilation or database or selection which is constituted by intellectual creations.[97]
3. Ideas, procedures or mathematical concepts are not covered under the copyright protection.

The WCT provides the contracting parties to limit the reproduction rights following the formula under Article 9(2) of the Berne Convention Act.[98] The contracting parties should protect against the circumvention of copyrighted works and also against interference with electronic rights management information[99]. This also requires effective remedies to enforce under this treaty.[100]

6.4. SPECIAL CONVENTION IN THE FIELD OF NEIGHBOURING RIGHTS

Author's protection with regard to copyrighted work is not only important it is essential to provide protection to the intermediaries which help in communication the work of the authors to the public. In case of literary or artistic works , the way by which it is communicated to the public through performers, producers of phonograms and broadcasting organization, the right should also be protected. Hereby under the neighboring rights , some conventions and treaties were adopted so that the right of the intermediaries are not exploited.

[96] WIPO Copyright Treaty, (1996) Art 4.
[97] WIPO Copyright Treaty, (1996) Art 5.
[98] WIPO Copyright Treaty, (1996) Art 10.
[99] WIPO Copyright Treaty, (1996) Art 11.
[100] WIPO Copyright Treaty, (1996) Art 12.

6.4.1. INTERNATIONAL CONVENTION FOR THE PROTECTION OF PERFORMERS, PRODUCERS OF PHONOGRAMS AND BROADCASTING ORGANIZATION, 1961

After the growth of technology, the idea of adjacent rights became extremely important. Unauthorized copying or replication of sound recordings of musical performances is growing to be a big issue in the phonogram industry. A resolution urging states to explore taking measures to protect the interests of phonogram performers and manufacturers was passed by the diplomatic conference in Rome in 1928. The preparation process was in full gear; numerous expert committees developed draughts of conventions. However, it wasn't until 1960 that, "A committee of experts jointly organised by WIPO, UNESCO, and ILO met in The Hague and drafted a convention. This draft served as a basis for the deliberations in Rome, where a Diplomatic Conference agreed upon the final text of the International Convention For The Protection Of Performers, Producers Of Phonograms And Broadcasting Organization, the Rome Convention of October 26, 1961."

The Principles of Rome Convention is almost same as that of a Berne Convention :

1. This convention is based on the notion of national treatment and in respect of performers, producers of phonograms and broadcasting organization, the threshold of the treatment is each of the category is different and specific
2. The Rome Convention permits exception for personal use.
3. It lays down a minimum term of protection of 20 years..

6.4.2. CONVENTION FOR THE PROTECTION OF PRODUCERS OF PHONOGRAMS AGAINST UNAUTHORIZED DUPLICATION OF THEIR PHONOGRAMS 1971

Around 1960, when there started evolving technologies there also started the problem of massive piracy through duplicating machines which affects the rights of the producers of the phonograms. The music/recording industry put huge pressure on the WIPO and UNESCO to figure out a way by creating some rules or regulations or any kind of sanctions against record piracy. The two organization simultaneously began working on drafts, and eventually, in 1971, "A committee of government experts produced a draft treaty that was to be acted upon at a diplomatic summit in Geneva seven months later On October 29, 1971, the phonograms convention was made available for signature. It went into effect on April 18, 1973.[101]

The Phonogram Convention forbids not only the manufacture of phonogram duplicates but also the distribution of such copies and their importation for distribution.[102] The way phonogram convention should be implemented is a matter of domestic law. They can include protection by granting copyright in the phonogram, granting other specific rights or by law relating to unfair competitions or penal sections[103].

[101] WIPO, Guide to the Rome Convention and Phonograms Convention
[102] Rome Convention (1961) Art 2
[103] Rome Convention (1961) Art 3

6.4.3. CONVENTION RELATING TO DISTRIBUTION OF PROGRAMME CARRYING SIGNALS TRANSMITTED BY SATELLITE, BRUSSELS 1974.

This convention regulates satellite transmission as a matter of public international law, obligating member states to comply with regulatory standards rather than investing authors and broadcasters with private rights against unauthorized carriage of signals. The obligation exists in respect of organizations that are nationals of a contracting state.

The Brussels convention differs from the Traditional copyright and Neighboring treaties. The convention protects against the distribution of programme carrying signal rather than distribution of the signal's content.[104] This means that the signal is protected if the work is not even protected by copyright or neighboring rights. The provision of this convention are not applicable where the distribution of signal is made from a direct broadcasting satellite.

6.4.4. WIPO PERFORMANCES AND PHONOGRAMS TREATY, 1996(WPPT)

WPPT was adopted at the same diplomatic conference as that of WCT and also it caters the same electronic media. WCT draws reference from Berne Convention whereas WPPT draws reference from Rome convention. Under the WPPT , there is a provision under Article 5, which is almost similar to Article 6 of the Berne Convention by stating that there is requirement that the performers receive rights of attribution and integrity in their live aural performances or performances fixed by phonograms. WPPT is the first international agreement where moral rights have been prescribed for performances in an international organization.

[104] Brussels Satellite Convention 1974, Article 2

WPPT also provides for Economic rights for performers which have been fixed in phonograms such as Right of reproduction, right of distribution, right of rental and also communicating it to the public. WPPT also provides for Economic rights for live performers such as right of broadcasting, right of communication , right of fixation. The moral rights granted under the WPPT are : right to claim identification as performers and to right to object to any mutilation or distortion which may hamper the reputation of the public.

In case of producers of Phonograms, WPPT provides some economic rights like: as Right of reproduction, right of distribution, right of rental and also communicating it to the public. The minimum term of protection is 50 years. The contracting parties shall also provide legal remedies against the circumvention of technological measures

CHAPTER -7

INFRINGEMENT AND REMEDIES

7.1. INTRODUCTION

The copyright industries though they have opened their doors for internet but they could not realize the fact that our present copyright law does not provide much protection in case of technological advancement. The market is full of pirated copies and that is sufficient to hamper the market of the owner of the copyrights. There are numerous website where people can upload files which are not their own and have copyright of others. There are quite a number of technologies which is used to violate copyright on the internet:

Fig: Infringement of Copyright on Internet(1.2)

7.2. P2P FILE SHARING TECHNOLOGY

Data transport via the internet is facilitated by peer-to-peer distribution networks. It is described as two or more computers linked together by software that allows data transmission between the connected machines .As a result, it is a kind of temporary Internet network that enables a connection between computer users who are using the same networking software and direct access to files from one another's hard drives. This indicates that there is a direct link and that there is no need for a middle server because the file is being moved straight from one machine to the other.[105]

It simply means that there is no requirement of a middle server to transfer files. P2P technology was not of much relevance until and unless it is used by Napster until it is used to facilitate file sharing.P2P technology was not created for its implementation in the copyright infringement. It main purpose was to remove the struggle while struggling for accessing the server. And when there emerged P2P networks like Gnutella and Kazaa, this technology started getting blamed for piracy. Though the technology used is blamed by the experts of the field, it is the use which should actually be blamed.[106]

"A user who has downloaded P2P file-sharing software is able to request any file using the software (such as an audio album or movie). A search is then conducted among all users of the software, and the requestor is given a list from which to select the content he

[105] Raman Mittal, 'P2P Networks: Online Piracy of Music, Films and Computer Software,' (2004) 4 Journal of Intellectual Property Rights 40, 46.
[106] Aakansha Kumar, 'Internet Intermediary (ISP) Liability for Contributory Copyright Infringement in USA and India: Lack of Uniformity as a trade barrier, [2014] 19 Journal of Intellectual Property Rights.

wants to download." The user violates copyright laws if he decides to download a file that is protected by that right. As a result, P2P file sharing software that makes it possible to share music online badly jeopardises the economy and severely threatens the music business.[107]

The development in the field of P2P technology started with Shawn Fanning's 1999 release of Napster, a piece of software. "Napster was initially made available as a centralized unstructured peer-to-peer system that needed a central server for peer finding and indexing." The earliest peer-to-peer file sharing system is usually regarded as having existed. ***A & M Records v. Napster***[108], the first case addressing the unauthorized sharing of music via P2P networks, was resolved. Naptser had a database of music on the computer of persons all over the world and they are willing to share. Napster was a centralized technology and it can also monitor the acts of copyright infringement. Thus it had the idea of copyright infringement and it comes under the scope of indirect infringement. The US court of Appeal held Napster for copyright infringement. Napster loss the case and blocked all the downloading of the copyrighted content. Napster was shut down as a result of injunction.

As Napster was facing litigation, "Gnutella", "eDonkey 2000", "Freenet" was out in the market in 2000. Gnutella is said to be the first decentralized file sharing network. It does not have any centralized server as such to maintain database.

[107] Mohd. Fayaz Ali, 'Copyright and P2P File Sharing- The Law Across Jurisdiction', (2009) Madras Law Journal 68,73
[108] 239 F.3d 1004 (9th CIR. 2001).

7.2.1. Napster Case

The first peer-to-peer networking case to reach the courts was the Napster one. Shawn Fanning desired to let his buddies listen to the music on his computer. He considered creating software that would allow users to transfer music between computers. Nobody else agreed that it was a good idea. He quit college when he was just a teenager to work on this programme. Napster now makes it possible to transfer music in MP3 format.

This can be done by downloading and installing it in the system.This makes it possible for the machine to access the Napster server. The Napster server looks for other online users who might have the requested song when a request is made. In that case, Napster connects the two computers so that music files can be easily shared and no problem is faced during downloading of the music files. P2P file sharing is involved.

The Napster server just connects computers to one another; copyrighted music, however, does not pass through it, meaning that it never receives or contains unlawful music. It basically enables the transmission of MP3 music files from one PC to another. The first method of indexing, a central server, is what Napster employs. There were around 25 million Napster users at one time. They had free access to music files that might have been protected by copyright. Several record labels sued Napster to prevent it from unauthorized copying or downloading.

7.2.2. Kazaa Case

Similar to Napster, “Kazaa is a Dutch firm that sells P2P file sharing software.” But the programme is not restricted to MP3 files nor does it use a similar technique to Napster's. It uses a third technique to index the files. In the US, a lawsuit has been brought against

Kazaa. While this lawsuit was pending, a Dutch copyright organisation sued Kazaa in Holland, threatening to punish the company $124,000 per day if it continued to provide file-sharing software. “In December 2003, the Dutch Supreme Court confirmed a lower court's ruling and determined that Kazaa cannot be held accountable for copyright violations of music or movies shared using their free software.” The case of Kazaa is not yet decided but the court have already pronounced judgement in the Grokstar case.

7.2.3. Grokster Case

Software for file sharing is also sold by Groskter and SmartCast. The "Fast Track" technology from Kazaa is licenced to Grokster. The third way of indexing files is used by Grokster, as it is with Kazaa, whereas the second approach is used by Gnutella and Smart Cast. In the US, the entertainment businesses sued Grokster and Smart Cast. Suit was filed by the Entertainment industries[109] against Grokster and Smartcast , and their first appeal was set aside. The entertainment industries filled for appeal. In the case of “***MGM Studios Inc. v. Grokster Ltd.***,”, the supreme court allowed the appeal by overturing the rulings of the lower court.

7.2.4. Pirate Bay Case

They offer a Bittorrent Tracker-based Internet file-sharing solution with the assistance of other computer and are based out of Sweden. Its founders were charged with violating copyright laws in a Swedish court. The owners in defence argued that they are not liable for infringement because they have not displayed any copyrighted work in their server,

[109] *MGM studios v Grokstar*, 545 U.S. 913

and that they are innocent. They were found guilty and penalised in 2009. The judges, though, are allegedly accused of bias. The appeal of this case is still pending.

7.3. DOWNLOADING FOR VIEWING CONTENT ON THE INTERNET, HYPER-LINKING AND FRAMING

The main question involving this part if downloading the webpage for viewing or reading comes under copyright infringement or not. "Views are that for accessing a webpage on the internet , the user downloads the copy of the webpage on his system for viewing it". And if such work carry copyright its reproduction will be liable for infringement. Here the intent and motive of the author is taken into consideration and since the intent here is to just view the page and nothing else so it will not come under the impact of copyright infringement. Storing the materials in a CD or floppy is completely different from that of downloading it for viewing necessity. "When any work or material is uploaded on the Internet it is done with the intention that the particular work is for view or reading purpose and no infringement can be called on this matter."

In the case of ***Religious Technology v. Netcom***,[110] observed that the temporary browsing of webpage does not attract infringement of copyright. It's contrary decision was held in the ***MAI Systems Corp v. Peak Computer, Inc***[111] which is totally wrong as it says that mere visiting the webpage amounts to reproduction and liable for infringement.

[110] 907 F. Supp 1361 (N. D. C81 1995)
[111] 991 F 2nd (9th Cir 1993)

In ***Microsoft Corporation & Anr v. Prithviraj & Anr***[112]; the plaintiff Microsoft Corporation sought permanent injunction restraining infringement of copyright by the defendant Prithviraj & Anr. The Delhi High Court held that the defendants have violated the copyright of the plaintiff by carrying on business of Hard Disk loading i.e. pre-loading various software programs of the plaintiffs on to the computers sold by the defendants. The court also granted the plaintiff damages to the tune of Rs 16 lacs.

The author addresses that the Copyright Act 1957 Act should clarify more on the take that mere downloading in order to view the page which arises out of technical necessity does not amount to infringement.

7.4. ISPs LIABILITY FOR COPYRIGHT INFRINGEMENT

When the present copyright act was drafted there was no development in the field of technology or internet. There is no as such express provision for the ISP's liability determination. But some provisions can be interpreted from ISPs liability view point.[194] However some provisions in the Act could be interpreted to have some bearing on the liability of ISPs. As per Section 51 (a) (ii) of the Copyright Act-

"Copyright in a work shall be deemed to be infringed, when any person withouta license granted by the owner of the Copyright or the Registrar of Copyright under this Act or in contravention of the conditions of a license so granted or of any condition imposed by a competent authority under this Act permits for profit any place to be used for the communication of the work to the public where such communication constitutes and the

[112] *Microsoft Corporation & Anr v. Prithviraj & Anr*. CS(OS) 1623/2010 decided on 02.05.2014.

infringement of the reasonable ground for believing that such communication to the public would be aninfringement of copyright."

ISPs help in storing the user's material and also helps in transmitting that material. " The computer services and other telecommunication facilities are actually located at their business premises and hence they would verily come under the expression any place and could be held liable for the infringing activities of third parties whose material they store or transmit if other requirements are fulfilled." The expression of permits for profit means that the particular place is used by the ISPs for profit purpose.

Further "any person who knowingly infringes or abets the infringement of copyright " is made criminally liable under the Act. Recently in "*Star India Pvt. Ltd v. Haneeth Ujwal*[113]", it was held that, ISPs have an obligation to ensure that no violation of third party intellectual property rightstakes place through its networks. The court invoked the License Agreement between the Department of Telecommunications and the ISP to saddle the ISP with the responsibility of ensuring that any infringing work is not carried on its network. ISPs can also be made liable under the Information Act of 2000. The famous case on this regard is the Bazee.com case.

After the amendment in Section 79 of the IT Act 2000 it was held that the intermediaries are not liable until and unless actual knowledge or intention is there.

[113] CS(OS) 2243/2014

7.5. REMEDIES AGAINST INFRINGEMENT OF COPYRIGHT

The violation of copyright is addressed under “Section 51 of the Copyright Act of 1957.” As per the law if the work is done without the authorization of the copyright owner or Registrar of Copyrights, the copyright is considered to have been violated. In addition, the work cannot be produced for trade, hire, or sale, or for any other purpose that will impair the owner's rights. The Act provides for three types of redress against infringement: civil, administrative, and criminal. The civil remedies includes, “restraining orders, monetary fines or accounts of profit, the distribution of counterfeit copies, and monetary penalties for conversion.” Administrative remedies stops on import of infringing copies into India. And criminal remedies provides with fine or imprisonment.

7.5.1 Civil Remedies

This remedy is given when the rights of the of the owner are violated. Section 54 specifies that, “Only one owner of copyright which includes an exclusive licence can file a suit for civil readdress. In case of anonymous or pseudonymous work a publisher is the owner till the identity of any of the authors is disclosed. This remedy is not subject to direct infringement or contributory infringement. It merely provides the right of copyright owner to claim damages, injunction or accounts of profits if any person infringes his copyright.” Civil remedies can be either in the method of prevention or compensation.

7.5.2 Criminal Remedies

Along with civil remedies, there are also criminal remedies available, which are different and autonomous. Criminal remedies include imprisoning the offender, levying a fine, seizing all copies that violate copyright laws, and handing them over to the owner of those rights. The Copyright Act offers criminal penalties for copyright infringement. Section 63 of the Criminal Code stipulates that anyone who knowingly violates copyright or assists in infringements faces a penalty of up to two lakh rupees in fines and up to six months in jail. The original law stipulated that a year in prison and a fine were the maximum penalties. The Copyright Act of 1957 was amended in 1984 to significantly increase the penalties in order to reduce the pervasive videotaping and musical record piracy. Mens rea, or knowledge, is a necessary component of the crime. Lack of awareness regarding copyright facts will not be taken as defense and the prosecution have to proof the burden.

In the case of "***A.K. Mukherjee v. State"*** [114], the court observed that offences which are mentioned under section 63 " A bare perusal of the provision would go to show that emphasis is on the words knowingly infringe the copyright in a work. These words clearly postulate knowledge on the part of the accused that he was infringing the copyright work. Mere possibility of his having known it would not suffice. There has to be a clear and conclusive proof of the requisite knowledge. Even the existence of reasonable means of knowing would not be enough. In short thus the use of the word knowingly in the provision results in requiring mens rea in the full sense."

[114] 54 (1994) DLT 461

In "***Bhupendra M. Patel and Anr. v. State of Gujarat,"***[115] The court held that in a case brought under section 63(a) of the Act for both intentional copyright infringement and aiding and abetting activity. The offenders were both given three months of simple imprisonment by the court. However, after revision, the sentence for the second offender was reduced to a month-long term of simple imprisonment without affecting the fine by order dated February 2, 1979. However, the owner of the copyright must initiate civil proceedings in order to receive compensation for conversion of unauthorised copies. "There has been very few prosecution under the Act and the cases that have gone to appellate courts show that the high courts do not view criminal prosecution for infringement of copyright with due seriousness as is reflected from the judgments of Delhi High Court and Bombay High Court in ***Siaram Silk Mills v. State***[116] and ***Gulfam Exports and Others v. Sayed Hamid***[117] respectively."

7.5.3 Administrative Remedies or Border Measure

The remedy of administrative measures is only for bringing into India the infringing copies of the copyrighted work , when the work is made outside the territory of India As there is a principle that it would infringe the work in India, if it would have been developed here..

Section 53(1) permits, "A copyright owner or his duly authorized agent to make an application to the registrar of copyright requesting him to pass an order to prevent importation of such infringing copies". Under Section 53(2), registrar have the power to enter any premises which may be found of having infringing copies and if not the

[115] 1980) GLR 582
[116] (2001) PTC (21) 600 (Del).
[117] 2000 (20) PTC 496

registrar any person authorizes on behalf of the registrar and do it. The work on which copies the order of the registrar is there it is prohibited from importation as per Section 11 of the Customs Act 1962 and any provision of the Customs Act will be applicable if required so. Section 11 of the Custom Act provides that, "If the Central Government is satisfied that it is necessary for the protection of patents, 'trademarks and copyright, it may prohibit either absolutely or subject to conditions, the import or export of goods of any specified description. The goods confiscated in normal course under the Customs Act vest in the government but proviso to section 53(3) provides that all copies confiscated by the order of Registrar under section 53(1) shall be delivered to the owner of the copyright in the Work."[118] The Supreme Court in ***Gramophone Co. of India Ltd.* v. *Birendra Bahadur Pande,*** [119] discussed about one of the major difference between orders issued under section 11 of the Customs Act, it is a quasi legislative in nature and the one issued under Section 53 of the Copyright Act which is quasi judicial in nature.

The Registrar is not required to issue an order pursuant to Section 53 of the Copyright Act as soon as the Copyright owner submits an application to him. Naturally, he must think about the nature of the harm to be avoided. He needs to think about whether the Indian copies would violate the copyright. He must take into account whether the applicant is the rightful owner of the copyright or the owner's lawfully appointed representative. He must take into account any arguments put up as justification for the import and listen to people who claim to be impacted if an order is issued. He may take into account any further pertinent information.

[118] The Copyright Act 1957 s 53(1)
[119] (1984) 2 SCC 534

The Supreme Court also debated the definition of the word "import" in section 53. It was decided that the terms "importing into India from outside India" and "import" were synonymous in sections 51 and 53. That it wasn't only imports for cross-country travel. As a result, the Registrar is able to use the authority granted by the provision even if the commodities are in transit through an Indian port on their way to a location outside of India. The Registrar can use this provision as a powerful instrument to battle the growing threat of counterfeit goods, such as audio-video cassettes, CDs, tapes, books, and other items, coming from other nations with lax copyright laws or lax enforcement practises.

7.6. REMEDIES UNDER INTERNATIONAL CONVENTIONS

7.6.1. Civil Remedies

Some articles of the TRIPs deals with the civil and administrative remedies. The treaties overseen by WIPO do not have any equivalent clauses. The member states are expressly required by Articles 44 to 46 to give their judicial authorities the authority to issue injunctions to order, “the payment of damages sufficient to compensate the right holder when the infringer knew or had a good faith belief that they were engaging in an infringing activity, and to order an infringer to pay the right holder's fees.”

7.6.2. Criminal Remedies

The TRIPS Agreement's "Criminal Procedures" portion of Part III contains one article (Article 61), which outlines general guidelines for criminal prosecutions of specific types of intellectual property violations. The TRIPS Agreement specifically mandates that countries establish criminal proceedings and sanctions for commercial scale offences. These punishments must include time behind bars and/or monetary fines large enough to

discourage infringement, as well as, when necessary, the seizure, confiscation, and "destruction of the infringing items and associated supplies and tools.". The treaties overseen by WIPO do not impose any requirements or prohibitions on criminal procedure or punishments.

7.6.3. Administrative Measures

"The Berne Convention states that recordings of musical works made in accordance with Articles 13(1) and (2) of the Convention, which permit the application of non-voluntary licences, and imported into a country where they are regarded as infringing recordings without permission from the parties concerned are subject to seizure."

According to the laws of the nation where the work is protected by law, the seizure will take place.

The aforementioned articles 13 and 16 will be included in TRIPS as well because TRIPS 1994, which is managed by the "WTO," complies with " Articles 1 through 21 and the Appendix of the Berne Convention." Articles 52 to 60 of the TRIPS Agreement's Section 4 deal with the "Special Requirements Related to Border Measures" that member states must adhere to and provide comprehensive recommendations.

Similar to TRIPS, the WCT and WPPT stipulate that member states must abide with "Berne Convention Articles 1 through 21 and its Appendix."

Both of the treaties additionally obligate the state parties to include strong enforcement mechanisms in their domestic legislation to counteract any act that violates the rights outlined in the respective treaties. The member states must also offer quick fixes to stop violations and serve as deterrents against future infractions. Civil, administrative, and

criminal remedies are all included in this. Unlike WCT and WPPT, India is a member of both the “Berne Convention” and TRIPs

Regarding the rights of copyright owners, the Copyright Act is thorough and complete. “No one shall be entitled to copyright or other similar right in a work, whether published or unpublished, except under and in compliance with the provisions of this Act, as stated in Section 16.” The rightful owner of the work must first be established in order to pursue legal action for infringement.

Section 55 states that the owner of the copyright may sue the defendant for accounting, damages, and injunctions. Damage and account remedies are alternative rather than cumulative, and the plaintiff must pick one of the two. “If the plaintiff opts for accounts, he is essentially endorsing the illegal act committed by the defendant in relation to his legal rights.” The plaintiff must examine the defendant's account records for specifics on sales and expenses.

According to Section 58, the legal owner of the copies that violate the copyright is assumed to be that person. However, a new procedure must be started from the one the plaintiff had already started to demonstrate that the defendant had violated his rights if he wants to recover the copies that were made in violation from them. The Copyright Act contains a flaw in that a plaintiff must first obtain relief from a competent court before starting a new process to achieve finality.

Prior to the modification of 1984, the most severe penalty for a violation of Section 63 was a year in prison and a fine. The 1984 changes significantly increased the punishment in order to reduce widespread videotape and musical record piracy. According to the modified clause, the crime of copyright infringement is punishable by imprisonment for a

minimum of six months and a maximum of three years, as well as by a fine of at least 50,000 rupees but up to two lakhs. Despite this, the vice of piracy is on the rise, necessitating the passage of more rigorous and dissuasive regulatory measures.

CHAPTER 8

CONCLUSION AND RECOMMENDATIONS

8.1. Conclusion

Intellectual property rights are basically a kind of property rights but they are intangible in nature. “Intellectual Property Rights protect the innovations and the creations of the author and also reward them for their innovative activity. The most important characteristics of Intellectual Property Rights is that it excluded the third party from exploiting the creation of the creator.” And in case of exploitation by the third party, infringement can be awarded on them. There are various kinds of intellectual property rights that are available in cyberspace which includes copyright, domain name, trade secrets. “The intellectual property rights provide is a legal concept on granting legal rights to the creator of the Intellectual Property Rights owner of the work.” The legal rights awarded in the Intellectual Property Rights field can include sector like “Literary, Dramatic , Musical , Artistic, Cinematograph and Sound Recording.” And if the legal rights allotted to the legal owner if exploited by the third party then it can also led to criminal penalties as well as civil penalties.

One of the main aspect of Intellectual Property Rights with regard to Internet is the “Copyright law.” “The Indian Copyright Act 1957 provides for the protection of conventional methods in the works of literary, artistic, dramatic, musical, sound recording and cinematograph.”

But as technology started evolving there started a requirement for a law which would

protect the copyrighted work in the " literary, artistic, dramatic, musical, sound recording and cinematograph" in the digital space.

In the 2012 amendment made in the Copyright Act, two provisions were included in the Act, section 65A and section 65B. Section 65A protects the copyrighted work by curbing its unauthorized use and also curbing digital infringement. And section 65B provides for the "protection of rights of management." It was in the 2012 amendment when the copyright law of India started harmonizing with the Internet treaties.

Internet has brought very frequent infringement in the field of copyright which also includes piracy. Technology advancement has resulted in copyright infringement. For instance, "there are blatant instances of music piracy over the internet due to the absence of legal protection for copyright holders" and also a lack of public awareness of the violation of copyrighted sound recordings. The inconsistent adoption of current international agreements among various nations, such as Internet treaties that are not adopted by the majority of countries, reduces their effectiveness, especially in the global context of the Internet, and is another obstacle to uniform copyright protection on the web.

The protection of Intellectual Property in the digital space have become a concern , because the laws which we have in existence is quite old and only deals with the conventional way. As time evolves everything is before us on the click of a button and the old conventional intellectual property laws are not sufficient to protect the copyrighted work which is available in the digital space.

Protection should be granted to the Intellectual Property available in the digital space as it is emerges as the backbone for the development of the e commerce. Sometimes few

related issues have arisen, for example, the problem relating to jurisdiction, recognizing various forms of online infringements, etc which apply in the digital environment

8.2. Recommendations:

(i) India might have incorporated some important provisions for online file downloading and restricting infringement of the rights of the copyright holder under the IT Act 2000 and Copyright Act 2000, but it is still not clear there are still good rate of copyright infringement in the digital environment. The growing number of copyright infringement in the digital environment should be controlled otherwise the innovation and creativity of the copyright holder is to be hampered.

(ii) Though after the 2012 amendment, India has started harmonizing with the "Internet Treaties" like the "WIPO Copyright Treaty and WIPO Performers and Phonograms treaty" and also included provisions like Section 65A and Section 65B. But there is a requirement for a proper law which will help in curbing online piracy and help in proper enforcement of the Internet treaties.

(iii) Another important issue which is not solved is that mere downloading in order to view the page which arises out of technical necessity does not amount to infringement, because there are few judgments which states that visiting the webpage amounts to reproduction and liable for infringement. And there also judgments which are in contrary of the same. Because storing the materials in a CD or floppy is completely different from that of downloading it for viewing necessity.

(iv) There is an urgent need to amend the Copyright Act 1957 in order to cope up with the technological advancement and also implement the internet treaties properly and proper

enforcement mechanism should be there in order to implement and take action in case of infringement.

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