REVIEW OF RESEARCH

ISSN: 2249-894X

IMPACT FACTOR : 5.7631(UIF)

VOLUME - 12 | ISSUE - 5 | FEBRUARY - 2023

EFFECTIVENESS OF COPYRIGHT LAW IN THE CYBER AGE: A STUDY

Dr. Pradeep Kumar
Assistant Professor, College of Law , IIMT University Meerut.

ABSTRACT

It has become commonplace to say that we have entered the cyber age, or, the age of information. These fancy words imply that a new wind is blowing in intellectual property and privacy laws. This explores the technological transformation of legal regimes for intellectual property and privacy. It first reviews the intellectual property protection controversies brought up by the popularity of the Internet. It is followed by an examination of the legal and technological efforts to solve the conflicts raised by the free exchange of information on the Internet. The rest of this focuses specifically on what the currently developed intellectual property protection technologies might contribute to the legal discourses of intellectual property and what implications they might have for online privacy, which is another significant emerging concern in the cyber age. This article also looks into the argument as to whether the availability of intellectual property protection technologies such as trusted systems has proven that the conventional wisdom that the advent of digital technologies implies the need for stronger intellectual property protection laws is correct. It further argues that intellectual property protection technologies should be regulated in the public interest so that the balance of intellectual property protection and online privacy won't be undermined.

KEYWORDS : *technological transformation , technological efforts , intellectual property protection and online privacy.*

INTRODUCTION :

The internet has transformed the economics of communication, creating a spirited debate as to the proper role of federal, state, and international governments in regulating conduct that relates to or involves the internet. Many have argued that internet communications should be entirely self-regulated—either because they cannot or should not be the subject of government regulation. The advocates of that approach would prefer a no-regulation zone around internet communications. Others are concerned about the potential for internet communications to harm third parties. State legislatures responding to that concern have responded with internet-specific laws directed at particular contexts. From yet another perspective, much of the academic literature that engages this debate is flawed by a myopic focus on the idea that the internet is "different," without considering how the differences affect the efficacy or propriety of the regulation.

The ability to transform intellectual property into digital form indeed becomes problematic for copyright lawyers. The ease with which digital information can be copied and distributed is why people predict that human knowledge and culture could be transported in the farthest reach in

history.[1] However, it also gives rise to the vision that the digital revolution made true by the Internet undermines copyright law and leads some commentators to announce the death of copyright and the need for a new intellectual property paradigm.[2]Intellectual property rules have evolved to achieve the delicate balance between public and private interests. With this understanding in mind, the question we should ask is: what is the reality of the digital revolution for intellectual property and how should we look at it? Based on some recent technological developments, this paper illustrates that the conventional wisdom of intellectual property law is not entirely correct. It argues that copyright is not dying, it is undergoing a process of being replaced by technology.

The technological transformation of intellectual property focuses particularly on copyright protection. It addresses the conventional wisdom of intellectual property rights about the threats of the Internet.

COPYRIGHT PROTECTION TECHNOLOGIES.

It demonstrates briefly that emerging technologies make it easier for copyright owners to control their digital works and thus illustrates why the conventional story about the vulnerability of digital content on the Internet might be wrong. Online privacy concerns raised by the use of copyright management systems conclude with some preliminary observations on the future of intellectual property and online privacy in our cyber age.

This idea must be freely disseminated from each other to the whole world for the moral and mutual learning of man and the improvement of his condition, it seems to have been specially created and Naturally kind when he created them to expand the whole space. By not reducing its density at any point and like the air we breathe, we move and make our body unable to close or fit completely.

Copyright initially developed in response to the printing press and gradually evolved to encompass other methods of mechanically storing and reproducing works of authorship, such as photography, motion pictures, and sound recordings. The advent of broadcasting the ability to perform work at distant points led to the expansion of copyright to encompass exploitation of creative expression in new markets. The digital revolution represents the third distinct wave of technology that portends a significant change in copyright.

Cybercrime is the industry's perennial curse. The judiciary, law enforcement agencies, and the industry are striving hard to cope with the complexity and intensity of global cyber theft. Nevertheless, the industry-judiciary-law enforcement agency trio has made significant progress in the last few years to stem the cyber theft menace.

This user group of copyright material consisting largely of researchers, academicians, librarians, non-governmental aid organizations, etc. is the segment that gets caught in the crossfire between the industry and the cyber law circumvents at times.

1.1 MEANING

Copyright means the exclusive right to do or authorize others to do certain acts concerning
(1) literary, dramatic, musical, and artistic works,
(2) cinematograph film and
(3) sound recording. The nature of the act varies according to the subject matter.

In principle, copyright is the right to copy or reproduce copyrighted works. Various activities that extend copyright are listed in the section. 14 of the 1957 Act. The exclusive right to carry out the relevant activities extends not only to the whole work, but also to each of its essential parts, or its

[1] Mark Stefik, *Letting Loose the Light, in* Internet Dreams: Archetypes, Myths, and Metaphors 220-21 (Mark Stefik ed., 1996).

[2] *See, e.g.,* John Perry Barlow, *Selling the Wine Without Bottles: The Economy of Mind on the Global Net* (Dec.1993), *available online at*

interpretations or aspirations. The period of copyright is the life span of the author of sixty years of work, with a few exceptions...

Copyright is a unique kind of intellectual property. the right which a person acquires is a work, which is the result of his intellectuals labor, is called his copyright the primary function of copyright law is to protect the traits of a man's work labor, skill test from the expression copier of words' first used in the context, according to Oxford Dictionary in 1586 the words' first used in the context according to Oxford Dictionary, in 1586 the word copy in connoting a manuscript or other matter prepared for printing.

Word copy according to Black's Law Dictionary means "transcript imitation reproduction of an original writing, painting, instrument or the like"

The (unabridged) Oxford English Dictionary in twelve or the like volumes defines" copy" as meaning " in printing manuscript (manuscript or printed) of certain literary or artistic production whereby he is invested for a specified period with the sole and exclusive privilege of multiplying copies of the same and pushing selling them.

Copyright, as defined in the Oxford English Dictionary, is an exclusive right given by law for a certain term of an author composer, etc., or his assignee to print publish and sell copies of his original work.

Copyright in some form seems to have been recognized in ancient times. the Roman law adjudged that if one man wrote anything on the paper or parchment of another the rating should belong to the owner of the blank material: meaning thereby by mechanical operation of writing by the scribe deserved to receive satisfaction.

The statutory definition of copyright means the exclusive right to do or authorize others to do certain acts in relation to-

1. Literary, dramatic, or musical works;
2. Artistic work;
3. Cinematograph film; and
4. Sound recording.

1.2 OBJECTIVES OF COPYRIGHT LAW –

The object of copyright law is to encourage authors, composers, artists, and designers to create original works by rewarding them with the exclusive right for a limited period to exploit the work for monetary gain. The economic exploitation is done by licensing such exclusive rights to entrepreneurs like publishers, film producers, and record manufacturers for money the greater beneficiaries of the copyright law than the creators of works of copyright.

The object of copyright law is to encourage authors, composers, and artists to encourage authors composer's ad artist's to create original works by rewarding them with the exclusive right for a specified period to reproduce the works by works for publishing and selling to the public.

The foundation of India. Copyright law which is of English origin and provenance has a moral basis, and is based on the Eighth commandment ." thaw shalt not steal" (as held by the supreme court in R.G. Anand Case (1978) the fundamental object of English copyright law has always been the protection of the fruits of a man's a man skill labor and effort from appropriation by others.

Thus protecting recognizing and encouraging the labor skill and capital of another is the object of copyright. In time warner entertainment co., *L.P. v RPG Netcom*,[3] observed that the object of copyright law is to prevent copyright of physical material and form in the object field of literature and art. It is essentially a negative right given to the author in the sense that the Act does not confer the owner with a right to publish his work but the right to prevent third parties from doing that which the owner is solely allowed to do under the Act.

[3] Air 2007 Del 226 2007 AIHC 542 NOC; 2007 (6) ALJ. (NOC) 1014; 2007 (2007) (34) PCT. 668 The Court

In the wake of the tremendous growth of cybernetic, computer software, internet, digital instrumentation mobile technologies, etc. the information technology Act 143 was passed in India in the year 2000.[4]This IT Act not only adopted the UNCITRALModel Law on e-commerce indo dogmatic legislation but also brings a detailed procedural infrastructure to regulate the electronic marketplace.

I don't think this section of the law provides anything specific. Framework for dealing with specific copyright infringement on the Internet Some provisions of the IT law may be interpreted to be intended to deal with certain aspects of copyright, for example, section 43 relating to penalties for damages. Computers, computer systems, etc. Related sections read that;

"If any person, without permission of the owner or any other person who is in charge of a computer, computer system or computer network,…. downloads, copies or extracts any database or information form such computer, computer system or computer network including information or data held or stored in any removable solvable storage medium, he shall be liable to pay damages by way of compensation not exceeding one core rupees to the person so affected "

Further, the IT Act also provides some definitions which can be very vital in the context of digital copyright works, such as;

(i) To 'download' means to transfer a file from one place on the internet to another. The files may be documents, Images, or applications...
(ii) To "copy" means to imitate or reproduce a replica of the original...
(iii) To ' extract' to take out, distill, deduce, derive or quote from any source.

The IT Act also gives useful definitions of ' data' computer databases' computer networks' under its various provisions which can be handy when dealing with copyright law in the digital environment.

Besides, there is section 79 that provides for limited liability of ISPs for violations committed by their clients so long as knowledge was absent as well as due diligence on his part. It is third-party copyright infringement. it can be argued that such a broad defection allows many definitions allows many different of It is interpreted in a manner broader than what was contemplated by the framers as the court all due diligence is very contestation to the explanation attached to the section will make any intermediary a network service provider. 146 However the ISPs are protected under the copyright if such an act falls under the protection of the fair dealing provision of the Art.

1.3 HISTORY OF COPYRIGHT

The first copyright law in the world was Anne's statute, which was adopted in England in 1710. The law first introduced the idea of the author of the work, owns his intellectual property, and set fixed conditions for protection. Under this law, copyrighted work is kept in some copyrighted libraries and registered in the Guide Hall. There is no automatic copyright protection for unpublished works.

Laws based on the Ann Statute gradually appeared in other countries, such as the 1790 copyright law in the United States, but copyright law remained unconstitutional until the 19th century. However, the Berne Convention was introduced in 1886 to ensure mutual recognition of copyright between states and to promote the development of international standards for the protection of copyright. The Berne Convention eliminates the need for individual job registration in each country and is accepted by almost all nations around the world (more than 140 of the world's 190 states). Since the ratification of the treaty by the United States in 1988, it has now covered almost every major country. The Berne Convention remains in force to this day and continues to provide the basis for international copyright.

One of the biggest changes made with the adoption of the Berne Convention was the addition of copyright protection to unpublished works and the elimination of registration requirements. In

[4] Information technology Act the Information technology Act 143 was passed in India in the year 2000

the countries of the Berne Convention, this means that a person (or organization they work for) owns all the work he produces immediately when it is recorded by any means, whether by recording or not. Drawing, recording, etc.

While the adoption of the Berne Convention has many benefits for the original creators, the system for the protection of unpublished works is still internationally divided, with some countries providing optional registration services within their jurisdiction. Others do not provide registration at all. Without registration, it can be difficult to determine who is the legal owner of a copyrighted work. The national registration system may be reluctant to offer dispute resolution in another country. The Office of Intellectual Property (IPRO) was established to establish an international hub for the deposit of unpublished works from around the world through its intellectual property registration service. It is hoped that this will provide a standard registration point for all citizens of the Berne Convention. Copyright law and technological advances are forever linked.

The advent of movable type in 1436 caused a proliferation of books across Europe. It is estimated that before Gutenberg's printing press the number of books in all of Europe numbered in the thousands, but within 50 years, that number approached ten million. The such explosive growth and its accompanying economic opportunities created an immediate need for protection of the rights of both author and publisher from the earliest of literary pirates.

The world's first copyright law, the Statute of Anne, was enacted in England in 1710. Exercising its power under the newly adopted Constitution to secure the rights of authors and inventors, Congress passed an act almost identical to the Statute of Anne as the first American copyright law in 1790.

As books continued to be easier, faster, and cheaper to produce and distribute, domestically and internationally, in Europe and North America, it became clear that enhanced protection of authors and uniform international copyright standards were required. One such movement for international uniformity led to the Berne Convention and its 1887 adoption of certain, standards, minimum levels of copyright protection, and their enforcement in the member countries across Europe and elsewhere the world.

The present-day is the locus of the most intense and most extensive expansion of technological progress in recorded history. Thus, if history is any lesson, this is an era in which broader, more secure copyright rights are essential to protect the rights of thinkers, writers, and visionaries. Go to the History of Copyright for more details and authoritative references.

1.4 INDIAN COPYRIGHT LAW

Section (FFA) Computer includes any electronic or similar device having information processing capabilities.

Section (FFA) Computer program" means a set of instructions expressed in words, codes, schemes, or in any other form, including a machine-readable medium, capable of causing a computer to perform any particular task or achieve a particular result.

In India, the first copyright Act was passed in 1914. It was a replica of the English[5] suitably modified to make it applicable to the ten British India. The Act presently in force was legislated in the year 1957 and is known as[6] amended by Copyright (Amendment) Act, 1999. It adopted many principles and provisions contained in the U.K. Act of 1956.[7]

1.5 AMERICAN COPYRIGHT LAW

The Statute of Anne served as a significant source of inspiration for the majority of the colonies' copyright laws once they gained independence from England. However, the Constitution gave the federal government the authority to safeguard authors and their works, and a

---

5 Copyright Act of 1911
6 Copyright Act, 1957
7 U.K. Act of 1956

"comprehensive" copyright act was enacted in 1790 (Copyright Act of 1790, 1 Stat. 124). The 1790 Act, which was repeatedly amended in the 1800s, only has historical interest. The addition of musical compositions to the protected list in 1831 was one example of one of these revisions, while the addition of photographs in 1865 was another example of a change in technology and ideology. Also, the Statute of Anne's initial fourteen-year protection was extended to 28 years in 1831, with the possibility of a 14-year extension.

Even though this history may seem out of date for working as a paralegal in the 21st century, it will help you understand copyright law in the future. The development of international copyright law in the latter half of the nineteenth century may have been the most significant development. While the majority of this course will be devoted to U.S. law, understanding contemporary international copyright law, which derives from the Berne Convention of 1886, is essential for safeguarding your client's rights to her works. Although the original Berne Convention was only signed by ten nations in 1886, and more than 160 nations are parties to the agreement as of November 2005, international issues will be discussed in greater detail toward the end.

1.6 THE COPYRIGHT ACT OF 1909

While the Berne Convention and other international issues will be discussed later in the course, the Copyright Act of 1909 still has an impact on the rights to some works today! The Copyright Act of 1790 is only interesting for historical reasons. That is correct; despite the passage of the 1976 Act, its amendments, and a variety of international treaties, the outmoded, outmoded law that was enacted almost a century ago is still relevant and enforceable. As a result, anyone working in intellectual property must comprehend, at least partially, how the 1909 Act affects copyright holders' rights today.

We won't go into great detail here, but you should know that copyright protection was strictly enforced by the 1909 Act's "publication & notice" requirement. In most cases, in addition to the name of the copyright holder and the date of first publication, one was required to include the copyright symbol or the word "copyright." Every use and every copy of the work are subject to the notice's technical requirements. An owner may not be protected from users of her work if these requirements are not met at the outset and throughout the duration of the copyright. The notice's location was also mandated by law. In addition, some courts would consider a party's attempts to comply with the Act when deciding infringement cases, while others would refuse to uphold the rights of copyright owners who inadvertently departed even slightly from these requirements.

Because many works created prior to the 1976 Act still fall under the 1909 Act, the 1909 Act is significant. As a result, the most important question to ask when researching a copyright case is which law applies. Important details include whether the work was published, whether a proper notice was included with the publication, and whether the work was in its original or renewal term on January 1, 1978, among other things.[8]

The fundamental concept that underpins copyright protection is still preventing individuals from making copies of books without permission; however, the method by which we choose to accomplish that objective is by no means straightforward. After all, we now deal with more than just printed books; Today, the protection extends to digital works, art, and musical compositions, to name a few.

As a result, one of the most important issues in copyright law is what ought to be protected based on our notion of what is right. This is distinct from the issue of what the law safeguards. It is essential to comprehend that copyright law is currently in a state of flux, despite the fact that we rarely deal with normative questions of this nature. Copyright law cannot always keep up with the ever-changing technological landscape and the increasingly global nature of communication. Therefore, it becomes a matter of arguing that this ought to be the case in order to persuade a court that some new form of transmission is a "writing" or that some new form of expression should fall

[8] See *Copyright Law: A Practitioner's Guide*, Keller & Cunard, §7:3, Practicing Law Institute (2005)

under the definition of a protected "work." After all, it's hard to argue that the law as it stands was meant to protect a form of expression that didn't even exist when it was passed!

Take into consideration the fact that there was a debate about whether computer games created by computer code were "fixed" works that could be copied. As we progress through our discussion of the Copyright Act of 1976 and its subsequent amendments, we will address the intricacies of these and other issues. We are most concerned about the specifics, remedies, and protections provided by the 1976 Act. We won't have time to go over every section of the 1976 Act's Title 17 of the United States Code, but we will cover the most important parts.

1.7 NATURE OF COPYRIGHT LAW

The law does not permit one to appropriate to himself what has been produced by the labor, skill, and capital of another this is the very foundation of copyright law. The object of copyright law is to protect the author of copyright work from an unlawful reproduction or exploitation of his work by others Copyright protection is essential to encourage exploitation of Copyright work for the benefit of the public. The exploitation is done by entrepreneurs like publishers, film producers, or sound recording producers to whom the owner of the copyright assigns or licenses the particular right. if the entrepreneur is to recover the capital invested to publishers, film, and earn profits he has to be protected from unauthorized reproduction original cost of producing the work at a fraction of the original cost of production and underselling the producer, in the case of Sound recording's and cinematograph films a pirate could ruin the producer by his piracy. Without legal projection, for a certain period, no entrepreneur will undertake the publication of books or production of sound recordings or films.

In ancient times creative writers, Musicians, and artists wrote composed, or made their words mainly for fame and recognition rather than to earn a living or make profits. Copying was a laborious and expensive process. The Importance of copyright Protection was recounted only after the invention of the partition press in the 15th century which enabled the reproduction of books in large numbers practicable.

- **Multiple nature of the right**

Copyright is a multiple of a bundle of different rights in the same work. these rights can be assigned or licensed either as a whole or separately. thus in the case of literacy work, there is the right to reproduction in hardback and paperback editions, the right of serial publication in magazines, the right to dramatic and cinematographic versions the right to translation adaptation abridgment the right to the public performance of a play or a musical work and so on.

- **Scope of Copyright-**

Copyright is a creation of the statue. No Person is entitled to copyright or any similar right in any work except those provided under the Copyright Act. Copyright law is in essence concerned with the negative right of preventing copying of physical material existing in the field of literature and the arts. Its object is to protect the writer or the creator of the original work from the unauthorized reproduction or exploitation of his materials the right also extends to prevent others. From exercising without authority any other exercising without right also extends to prevent others, from exercising without authority any other form of right attached to copyright for example in the case of literacy work the right of making a dramatic version, cinematograph version, translation adaptation, or abridgment

1. **Ideas** – There is no copyright in ideas. Copyright subsists only in the material form in which the ideas are expressed. It is not an infringement of copyright to adopt the ideas of another.
2. **Labour, skill, and capital** – To secure copyright protection what is required is that the author must have bestowed upon sufficient judgment, skill, and labor or capital. It is immaterial whether the work is wise or foolish accurate or inaccurate or, whether it has or has not any

literary or artistic merit. Case, it must depend largely on the special facts of the case and is very much a question of degree.

3. **Original** - Intellectual property exists in the original work only. The word "original" does not mean that the work must be an expression of an original idea or creativity, the originality of which must refer to the original form or the new form, but the work must not be copied from another work, that is, it must have origins. From the author.
4. **Nature of rights and work -** The nature of the rights conferred son the owner of the copyright depends upon the nature of the work. But one feature common to all kinds of work is the right to reproduction in material and the right to publication.
5. **Live events -** There is no copyright to live events. No license is required to transmit programs of sporting events and news events. this is subject to the special rights conferred on performers.
5. **Work Immoral, Illegal, etc.** – Copyright protection is not granted where the work is grossly immoral, illegal, defamatory, seditious irreligious or contrary to public policy or contrary to public policy or calculated to deceive the public.

1.8 TECHNOLOGY, DEVOLVEMENT, AND EVOLUTION OF COPYRIGHT TO CYBER LAW

Commentators began to think about the implications of digital technology for intellectual property rights when the vaporous nature of the Internet captured worldwide attention.[9] This section describes what threats the Internet poses to traditional copyrights and how the conventional wisdom of intellectual property evaluates and interprets the threats.

A. Threats to Enforcing Copyright Rights on the internet as we have well known, the Internet poses threats to copyright owner's ability to enforce their copyrights. This phenomenon even leads critics like John Perry Barlow and Esther Dyson to predict the end of the current regime of intellectual property. From an economic point of view, digital copies of intellectual property can indeed be produced without any loss of quality.[10] In addition, there are no meaningful marginal costs of reproduction or distribution of intellectual property on the Internet.[11] What makes the situation worse, it is said, is the use of anonymous remailers and other technologies by copyright pirates leaves a traceable trail of activities.

Consequently, the first legally significant feature of digital information is that it must be produced to be accessed. For one computer to access an intellectual property stored on a network, it must first copy some or all of that intellectual property into RAM. This feature of digital technology gives rise to controversy as to whether we need a new definitional scope of reproduction for the cyber age.[12]

Second, a user must display or perform the digital information to see it on a monitor or hear from speakers attached to the computer. To the extent the display or performance is"public", the use might violate the exclusive rights of the copyright holder. Until recently copyright law has been able to balance the public and private interests surrounding intellectual property. It seems fair to say that intellectual property rules have evolved to achieve the balance that promotes progress in science and useful arts, ensures broad access to information, rewards creators with limited monopoly rights, and encourages technological innovation. However, with the above controversies raised by the

---

9 *See, e.g.,* Douglas J. Masson, *Fixation on Fixation: Why Imposing Old Copyright Law on New Technology Will Not Work,* 71 IND. L. J. 1049, 1054 (1996).

10 Eric Schlachter, *The Intellectual Property Renaissance in Cyberspace: Why Copyright Law Could be Unimportant on the Internet,* 12 Berkeley Tech. L. J. 15, 19-20 (1997).

11 Eric Schlachter, *The Intellectual Property Renaissance in Cyberspace: Why Copyright Law Could be unimportant on the Internet,* 12 Berkeley Tech. L. J. 15, 19-20 (1997).

See, e.g., Information Infrastructure Task Force, Intellectual Property and the National Information Infrastructure: The Report of the Working Group on Intellectual Property Rights 66 (Sept. 1995).

advent of the Internet age, we suddenly pay a lot of attention to the claim that individual end users do not observe copyright rules in their daily behavior. Under this context, the question we should ask becomes whether this delicate balance has been disturbed. If it is true, it is worthwhile to ask a further question as to how the law and technology we have now responded to the disturbance.
B. The simple wisdom of intellectual property rights As noted above, it is argued that laws designed to prevent physical expression of expression may not be applicable in a world where intellectual property can be distributed in the form of Abstract. It follows that the only reasonable solution is to recognize the death of copyright and the need for a new model in which intellectual property owners will be forced to distribute their products for free, but seek compensation for related services. Distributed work...

Given the myriad problems briefed above, it is perhaps no surprise that the prediction of the death of copyright emerges. But, the reason copyright is dying might not be digital works on the Internet are unprotectable. The following Part will show the current copyright regime might be in danger because digital works are too protectable under the emerging technological architecture.

1.8.1 Technologies in Controlling Intellectual Property

This Section describes how new technologies trusted systems or copyright management systems[13] are outweighing the law's ability to maintain the stable equilibrium between the public interest and the private control long preserved in the history of intellectual property.

It first briefs the features of the new technologies and then explores their potential in shaping the future of the intellectual property regime in the information age. A. Copyright Management Systems A copyright management system (CMS), or, a trusted system, is a piece of software or hardware that "can be relied upon to follow certain rules."9 These rules, often called usage rights, are defined by what is known as a rights language, a machine-readable code attached to a digital work. The technology of trusted systems is capable of following digital rights language 10 and thus allows computers to protect and distribute information in a more secure Similarly, Fair Use Doctrine could be eliminated by specifying a fee for any usage. It is also true that copyright owners could circumvent the rule by allowing software owners to make free copies for archival purposes.

[13] Mark Stefik, *Trusted Systems*, Sci. Am., Mar. 1997, at 78.