

Recent Challenges in Protection of Intellectual Property

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Abstract: Intellectual Property has been traditionally categorized into industrial property and copyright. Term industrial property includes patents, trademarks, industrial designs and geographic indication of source. Copyright protection is granted to protect literary, artistic and musical works. Today use of internet makes challenges for protection of intellectual property. Intellectual property in its various forms has migrated to the internet. The biggest challenges for the success of e-commerce is to ensure proper control of intellectual property present in cyberspace in the hands of right owners.

Keywords: Intellectual property, Copyright, Patent, Trademark, Layout design, Geographical indication

I. INTRODUCTION

In common use, property is simply 'one's own thing and refers to the relationship between individuals and the objects which they see as being their own to dispense with as they see fit. Scholars in the social sciences frequently conceive of property as a bundle of rights and obligation. They stress that property is not a relationship between people and things, but a relationship between people with regard to things.

Property is often conceptualized as the right of 'ownership' as defined in law. Private property is that which belongs to an individual and public property is that which belongs to a community collectively or a State. Property is usually thought of in terms of a bundle of rights as defined and protected by the sovereign. Traditionally, that bundle of right includes:

- Control use of the property
- Benefit from the property(e.g.: mining rights and rent)
- Transfer or selling of the property
- Exclude others from the property

The term intellectual property reflects the idea that this subject matter is the product of the mind or the intellect and that intellectual property rights may be protected at law in the same way as any other form of property.

II. INTELLECTUAL PROPERTY LAWS

Intellectual property laws are territorial such that the registration or enforcement of IP rights must be pursued separately in each jurisdiction of interest. However, these laws are becoming increasingly harmonized through the effects of international treaties such as the Berne Convention, Paris Convention and WTO Agreement on Trade- Related Aspects of Intellectual Property Rights.

Intellectual property laws confer a bundle of exclusive rights in relation to the particular form or manner in which ideas or information are expressed or manifested and not in relation to the ideas or concepts themselves. The term "intellectual property" denotes the specific legal rights which authors, inventors and other IP holders may hold and exercise and not the intellectual work itself.

Intellectual property laws are designed to protect different forms of intangible subject matter, although in some cases there is a degree of overlap. Like other forms of property, intellectual property (or rather the exclusive rights which subsist in the IP) can be transferred or licensed to third parties.

III. INTELLECTUAL PROPERTY PROTECTION TOOLS

There are various kinds of tools of protection that come under the umbrella term "intellectual property Important among these are the following.

- Patents
- Trademarks
- Geographical Indications
- Layout Designs of Integrated Circuits
- Trade Secrets
- Copyrights
- Industrial Designs

3.1 Patents

A patent is a government license that gives the holder exclusive rights to a process, design or new invention for a designated period of time. Applications for patents are usually handled by a Government agency.

3.2 Copyright

Copyright is a right given by law to the creators of literary, dramatic, musical and artistic works and producers of cinematograph films and sound recordings to do or authorize the doing of certain acts with regard to their creations. It is a kind of protection against unauthorized use or misuse of a work, but for a limited duration. Generally the rights include the right of authorship, reproduction, distribution, communication to the public, broadcasting, adaptation and translation. The exact nomenclature and scope of the rights may vary from country to country and from a class of work to another class of work. However, international treaties such as the Berne Convention for the protection of

literary and artistic works and the agreement on Trade Related Aspects of Intellectual Property Rights have brought in some kind of harmonization in these rights.

In India, copyright is governed by the copyright Act, 1957, the copyright Rules, 1958 and the international copyright order, 1999. The copyright Act. Provides the basic law so far as copyright are concerned, the copyright rules contain the rules and regulation as well as various procedures and the international copyright order extends copyright protection to works of nationals of specified foreign countries.

The copyright act classified the works in which copyright subsists in India in to the following three classes:

- (a) Literacy, dramatic, musical and artistic works
- (b) Cinematograph films
- (c) Sound recordings.

The scope of “literary work” includes any “work which is expressed in print or writing, irrespective of the question whether the quality or style is high”. It also includes computer programs and computer databases. Dramatic work includes any piece for recitation, chorographic work or entertainment in dumb show, the scenic arrangement or acting, form of which is fixed in writing or otherwise but does not include a cinematograph film. Musical work means a work consisting of music and includes any graphical notation of such work but does not include any words or any action intended to be sung, spoken or performed with the music. Artistic work means a painting, a sculpture, a drawing (including a diagram, map chart or plan) an engraving or a photograph, whether or not any such work possesses artistic quality; a work of architecture and any other work of artistic craftsmanship. The copyright act defined cinematograph film as “any work of visual recording on any medium produced through a process from which a moving image may be produced by any means and includes a sound recording accompanying such visual recording” sound recording (Phonogram) is a recording of sound from which sounds can be produced regardless of the medium on which such recording is made or the method by which the sounds are produced.

3.2.1 Rights Included in Copyright

Copyright is a bundle of rights and this bundle can be broadly classified into two categories, viz. economic rights and moral rights economic rights are so called because they imply as a rule that within the limitation set by the copyright law the owner of the copyright may make all public use of the work conditional on payment of remuneration. These rights enable the copyright owner to reap economic returns for his work. The major economic rights available in the Indian copyright act are the following:

- (a) Right of reproduction
- (b) Right to issue copies of a work
- (c) Right of public performance
- (d) Right of communication to the public
- (e) Adaptation right
- (f) Translation right

Right of reproduction is the most fundamental of all economic rights. The right envisages that copyright owner has the exclusive right to authorize the making of one or more copies of a work or of a substantial part of it in any material form, including sound and visual recording, the most common kind of reproduction is printing an edition of a book. Storing of a work in any medium by electronic means is also reproduction. The copyright act given the right of reproduction in all classes of works.

Moral rights are generally provided with a view to assert the authorship on a work and also to uphold the right of integrity. The Indian copyright act provides this as special right of authors to claim authorship of the work and to restrain or claim damages in respect of any distortion, mutilation, modification or other act in relation to the said work which is done before the expiration of the term of copyright if such distortion, mutilation modification or other act would be prejudicial to his honors or reputation. Moral rights are independent of the economic right and remain with the author even after he has transferred his economic rights. In the era of digital technologies, moral rights, particularly right of integrity are very necessary to safeguard against misuse and distortion of an author’s work.

Copyright, being a property right, can be transferred or assigned to another person. It can also be inherited during the time it exists. Without transferring or assigning, a copyright owner can license specified uses by others.

3.2.2 Infringement of Copyright and remedies Thereof

Any copying or duplication, adaptation, translation, public performance, communication to the public or broadcast done without the authorization of the copyright owner, or even where any work has been licensed or assigned any violation of the conditions of the license or assignment constitutes copyright infringement. Any import of infringing copies also constitutes copyright infringement. Even such copies made outside India cannot be imported into India without infringing copyright where such copies, if made in India, would infringe copyright, even if it may not be an infringement in the country of origin. Since copyright is a proprietary right, the owner has to administer his own rights. The copyright act provided for collective administration of right through registered

copyright societies. These societies have to be formed voluntarily by the copyright owners. Only the owner of copyright or the society who have the rights can institute civil and criminal proceedings against infringement of his works. Civil remedies include injunction and damages. Copyright infringement is also a cognizable offence. Copyright infringement is punishable with imprisonment or a term ranging from six months to three years and with a fine ranging from Rs. 50,000 to Rs. Two lakh. District courts have been given jurisdiction to try the suits relating to copyright violation within the vicinity of which the owner of the copyright resides or carries on business.

3.2.3 Limitations/Exception to Copyright

The rights granted by copyright are exclusive in nature. This exclusive is sometimes criticized as monopoly in favour of the right owners. Therefore, in the remedy in the opposing private and public interests the legislature provides the remedy in the form of drawing limitations/exceptions to copyright. This is achieved by two means; firstly, limiting the duration in which a work enjoys copyright protection and secondly, allowing certain uses without specific authorization by the owner of copyright, known as fair use provisions in copyright parlance.

Copyright is an intellectual property right and like all other intellectual property rights in is for a limited duration. This limitation emanated from the basic concept of intellectual property right that while creators of intellectual property have the right to control the reproduction and other uses of their works, they being essential elements in the scientific and cultural progress of humanity, the society has the right to access and share the same so that social and cultural life of humanity gets enriched. While the Berne convention provides for a minimum period of protection which is life term of the author plus 50 years thereafter, national governments are free to provide a longer term of protection. In India, original literary, dramatic, musical and artistic works enjoy copyright protection for the lifetime of the author plus 60 years if they are published within the lifetime of the author.

Many types of exploitation of a copyrighted work which are for social purposes such as education, religious ceremonies and so on are exempted from the operation of the right granted in the act. For example, playing music at religious ceremonies, including marriage processions and marriage festivities, official function of central and state governments and local bodies will not be affected by copyright. This is done in keeping with the social and cultural traditions of the country.

3.2.4 Registration of copyright

The copyright act provides for registration of work. However the registration under the act is voluntary and

not obligatory. Registration in does not itself confer copyright but the particulars entered in the register of copyright maintained in the copyright office constitute prima facie evidence of ownership of copyright in copyright cases. As per the provisions of the act, copyright subsists in any work as soon as it is created, without any formality like registration being observed.

3.2.5 International Nature of Copyright Protection

Copyright are national in nature. This means that your rights are recognized by your national laws and extend to the territorial limits of your country. However, international treaties like the Berne convention for the protection of literary and artistic works (1886) the universal copyright convention (1952) and the agreement on trade related aspects of intellectual property rights (1994) ensure protection of copyrights of nationals of a member country in all other member countries. Through the principle of National Treatment it is ensured that foreigners if they are nationals of a member-country are given the same rights enjoyed by the nationals of a members country are given the same rights enjoyed by the nationals, except in the matter of term of protection.

India is part of the international copyright regime through its membership of Berne convention for the protection of literary and artistic works, convention Establishing the world intellectual property organization (WIPO), universal copyright convention, convention for the protection of producers of phonograms against unauthorized duplication of their phonograms, Multilateral convention for the avoidance of Double Taxation of Copyright Royalties and Additional Protocol and the Agreement on Trade Related Aspects of Intellectual Property Right (TRIPS).

IV. TRADEMARKS

A trademark is a distinctive sign of some kind which is used by a business to uniquely identify itself and its products and services to consumers and to distinguish the business and its products or services from those of other businesses. Conventionally a trademark comprises a name, word, phrase, logo, symbol, designs, image or a combination of two or more of these elements,

The essential function of a trademark is to exclusively identify the commercial source of origin of products or services thereby facilitating identification of products and services which meet the expectations of consumers as to quality and other characteristics. That way, trademark law is designed to fulfill the public policy objective of consumer protection by preventing the public from being misled as to the origin or quality of a products or service. Trademarks also serve as an incentive for manufacturers, providers or suppliers to consistently provide quality products or services in order to maintain their business reputation.

4.1 Establishing Trademark Rights

The law considers a trademark to be a form of property. Proprietary rights in relation to a trademark may be established though actual use in the marketplace or though registration of the mark with the trade marks office of a particular jurisdiction. A trademark may be eligible for registration if, amongst other things, it performs the essential trademark function and has distinctive character.

A registered trademark confers a bundle of exclusive rights upon the registered owner, including the right to exclusive use of the mark in relation to the products or services for which it is registered. The law also allows the owner of a registered trademark to prevent unauthorized use of the mark in relation to products or services which are similar to the registered products or services and in certain cases, prevent use in relation to entirely dissimilar products or services.

Trademarks rights must be maintained through actual use of the trademark. These rights will diminish over time if a mark is not actively used. In the case of a trademark registration, failure to actively use the mark or to enforce the registration in the event of infringement may also expose the registration itself to removal from the register after a certain period of time.

The symbol **TM** may be used when trademark right are claimed in relation to a mark, but the mark has not been registered with the government trademarks registry of a particular jurisdiction, which the symbol **®** is used to indicate that the mark has been so registered. It is not mandatory to use either symbol, although the force of convection is such that the symbols are widely used around the word.

4.2 Passing off

If a trademark has not been registered, some jurisdictions especially common law countries offer protection for the business reputation which attaches to unregistered trademarks through the tort of passing off. Passing off may provide a remedy in a scenario where a business has been trading under an unregistered trade mark for many years and a rival business stars using the same or a similar mark.

The law of passing off prevents one person from misrepresenting his or her goods or services as being the goods and services of the plaintiff and also prevent one person form holdings out his or her goods or services as having some association or connection with the plaintiff when this in not true.

Passing off and the law of registered trademarks deal with overlapping situations, but deal with them in different manners, passing off does not confer monopoly rights to any names, marks, get-up or other indicia. It does not recognize them as property in its own right. Instead, the law of passing off is designed to

prevent misrepresentation to the public where there is some sort of association between the plaintiff and the defendant. Where the defendant does something so that the public is misled into some damage, under the law of passing off it may be possible for the plaintiff suffers some damage, under the law of passing off it may be possible for the plaintiff to initiate action against the defendant. The three fundamental elements to passing off are therefore reputation, misrepresentation and damage to goodwill.

4.3 Remedies for Breach

The extent to which a trademark owner may prevent unauthorized use of trademarks. Which are the same as or similar to its trademark depends on various factors such as whether its trademark is registered, the similarity of the trademarks involved, the similarity of the products and/ or services involved and whether the owner’s trademark owner to demonstrate its trademarks is well known. If a trademark has been registered, then is easier for the trademark owner to demonstrate its trademark right and to enforce these rights through an infringement action.

Unregistered trademark rights may be enforced by way of a lawsuit for passing off, while the exclusive right which attach to a registered mark can be enforced by way of an action for trademark infringement. Following table shows intellectual property protection tools.

Table 1. Intellectual Property Protection Tools

Patents	Protect inventions that are novel, non-obvious and useful. Patents have a term of 20 years from the date of filing a complete specification.
Trademark and Service Mark ® TM	Protect distinctive marks such as words/signs including personal names, letters, numerals, figurative elements (logos), visually perceptible 2D or 3D shapes or their combinations capable of distinguishing the goods or services in connection with which it is used in course of trade. In some countries sounds and distinctive smells can also be registered as trademarks. It can be perpetually renewed from time to time.
Industrial Design Registration	Protect novel non-functional features of shape, configuration, pattern, ornamentation or composition of lines or colors, applied to any article either in two or three dimensional or in both forms by any industrial process or means whether manual, mechanical

	or chemical, separate or combined which in the finished article appeal to and are judged solely by the eye. This registration has a specific term (initially 10 years and renewable for another term of 10 years).
Copyright ©	Protect creative works that are musical, literary, artistic, lectures, plays, art reproductions, models, photographs, computer software, etc. It is valid for the lifetime of the author and minimum 50 years after the death of the author.
Layout Designs for Integrated Circuits	Scope of protection not only includes the protected chip but also the articles incorporating it. The term of protection is 10 years.
Geographical Indications (GI)	Protect the distinctive names of goods that can be identified as originating or manufactured in the territory of a country, or a region or locality in that territory where a given quality, reputation or other characteristic of such goods is essentially attributable to its geographical origin. The term is initially for a period of 10 years and can be renewed perpetually.
Trade Secrets and Undisclosed Information	Protection to persons/institutions on information lawfully under their control from being disclosed to, acquired by or used by others without their consent in a manner contrary to commercial practices so long as the information is secret and has commercial value because it is secret.
Competitive Practices in Contractual Licenses	Protection against incorporation of restrictive clauses in licensing deals such as exclusive grant back conditions, conditions preventing challenges to validity and coercive package licensing, etc. That may have adverse impact on trade and impede transfer of technology.

V. MIGRATION OF INTELLECTUAL PROPERTY ON INTERNET

The character of the intellectual property system is evolutionary. While the nature of the rights themselves, to control and exploit the products of one's creativity and innovation, remains relatively constant, the manner by which they are expressed and exchanged is

constantly adapting to development in the underlying technologies. The invention of in turn, the printing press, phonograms, radio and television broadcasting, cable and satellite transmission, videocassette recorders, compact disc(CD) and digital versatile disc (DVD) technology and now the internet has affected both the form and the substance of intellectual property rights. Ever adaptable, intellectual property has now migrated to the internet and is being modified to suit the online environment.

The digitization of works of intellectual property, by the process that reduces text, visual image and sound to computer- readable binary code of '0's and '1's has led to the creation of digital products which can travel over the networks. This has enabled intellectual property to migrate so efficiently to the internet. This migration of intellectual property onto the internet can be seen with respect to each species of rights. But predominantly the migration is best visible in case of copyright and trademarks.

In the field of copyright, vast numbers of works of literature, film and art and notably computer programs, have already transferred to the digital environment. Textual works such as books and newspapers are ideally suited to digitization and there is evidence of a growing demand for e-books. There has been real success in the online availability of science, technology and medical publications, where the demand for fee-based research has supported the e-publishing industry. Increasingly, numerous journalists and aspiring writers have engaged in online publishing to post blogs, web logs or journals, that allow individuals to make their views available to the public without the need for intermediation by large publishing house or distributors. In the field of fine art, indigenous craft and artifacts, numerous museums and art galleries have digitized their collection and made them available for viewing on the internet.

There are numerous.Com companies that rely on business models that trade in physical objects of intellectual property. The online traders utilize vast database of book, video and music titles and user-friendly purchasing systems to attract consumers away from the shopping mall and then send these intellectual property products to consumer's postal mail. Travel sites and airline companies and entertainment ticket sellers, profit thought saved over heads by conduction sales online using e- ticketing or mailing tickets to purchasers. Numerous small and medium sized enterprises have used the Internet in this way, as a marketing tool to locate buyers for their products in a huge global marketplace.

Domain names are user- friendly addresses that correspond to the unique Internet Protocol numbers that connect our computers to the internet and enable the network routing system to direct data requests to the

correct addresses. Because domain names are intuitive and easy to remember they now perform functions as business or personal identifiers. Businesses advertise their domain name to signal a web presence. In this way domain names perform an identifying function akin to that of a trademark.

VI. CHALLENGES FOR INTELLECTUAL PROPERTY IN CYBERSPACE

Although a good proportion of the information on the web is in the public domain that is, freely available to use and copy an increasingly significant amount is protected as intellectual property. Many.com companies took the approach that it was initially more important to make their products available freely and thereby establish a market presence and to address issues of revenue and profit at a later stage. The enthusiasm excited by the availability of so much information, easily accessible through browsing and hyper linking, contributed to a general expectation that this information was free and its use uncontrolled. So a key challenge is the expectation among many users that information and intellectual property sourced or downloaded from the internet should be free of charge.

Right owner such as film and music creators, software developers, authors and publishers are now exploring ways in which to make their products available online, while protecting their right and recouping their investment. To some extent, the uptake of fee-based intellectual property services is dependent on the efficient management of these rights, as well as the availability of workable and secure methods of micro payments that would enable pay-per-unit purchases and the building of consumer confidence in online payment security, privacy and consumer protection. So another challenge is to make intellectual property rights holders feel secure and sure that they can protect their property from piracy and control its use, before they will be willing to make it available online.

Peer-to-peer(P2P) networks enable millions of users to upload and share their, music and film files via the internet, often infringing copyright in the works they trade, difficult issues are raised by the vast availability of intellectual property on the internet, the ease of copyright and distribution of copies and the relative anonymity afforded to these digital transaction. Many companies that continue to operate in the online environment have developed other business models, often relying on advertising revenue or value-added service charges to finance their free services and information. Surveys have shown that consumers are gradually becoming more willing to pay for online content. However there remains a general reticence to pay for material that was once free. This trend suggests that education of online consumers is another challenge for smooth exploitation of intellectual property on the internet.

How does one protect digital content when technology by its nature, encourages Copying, new international laws such as the WIPO Internet Treaties, adapt the intellectual property laws to facilitate the dissemination of protected material over the Internet. Technological tool such as encryption and watermarking provide practical solutions and together with digital rights management initiatives, contribute to meeting this concern. However, many creators and rights holders remain apprehensive.

The first cum first served principle of domain name registration has let to the misuse of trademarks on the Internet. How to stop this abuse is the paramount task of trademark owners and international legal community. Trademark owners expend vast resources, engaging automated 'web crawling' software and cyber surveillance firms, to monitor the billions of Web pages and protect their intellectual property rights.

Search engines have come to acquire a unique position in the cyberspace. If you are not indexed by a search engine you simply do not exist. But in order to be indexed and to achieve a good rating on any search engine, businesses have adopted all kinds of ethical and unethical practices. The unethical practices in the overall search engine optimization are Known as spam dexing which involves the abuse of someone else trademark. Another legal challenge is to streamline the working of search engines so that their abuse is minimized leading to the overall confidence enhancement of the consumers.

VII. CONCLUSIONS

Intellectual Property is an important tool for the economic, social and cultural development of all countries. Intellectual property refers to creations of the mind: inventions, literary and artistic works and symbols, names, images and designs used in commerce. For SME (Small and Medium Size Enterprises) and its innovation it is crucial both to protect IP and to properly choose with whom to share innovations and trade secret among the staff and partners. Intellectual Property thus assumes significance in order to ensure that the investments are recouped in a profitable manner. The protection prevents third parties using the protected IP in an unauthorized manner and in case of any unauthorized use provides legal remedies to prevent the same and claim damages. The given right to the creator/inventor is an incentive for them to produce ideas that will benefit the society as a whole.

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