

**INTELLECTUAL PROPERTY RIGHTS AND CYBERSPACE AND
INTERNATIONAL LAW – A COMPLICATED RELATIONSHIP**

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Abstract

It cannot be considered that cyberspace is fragmented in national jurisdictions, because cyberspace works throughout the world. Conversely, intellectual property rights remain regional in nature: they can be studied in relation to the protection of copyright in general and computer programs in particular, in relation to patent protection for computer-generated inventions. And to a lesser extent with respect to trademark / domain name protection. However, intellectual property protection has been consolidated through international conventions, in particular the TRIPS Agreement. This unification has also reduced the principle of territoriality governing intellectual property rights. An international convention on cyberspace would have to address the regional problem of intellectual property rights and perhaps consider establishing an international organization to monitor and monitor the said Convention. The paper first focuses on the relation between intellectual property rights, cyberspace and international law. secondly concept of ownership and sovereignty of property relevant to cyberspace and protection of intellectual property in international law with territorial nature of intellectual property rights. Thirdly identify protection of software by copyright and other intellectual property rights that relates to cyber space.

Keywords: Intellectual property rights, cyberspace, international law

1) Introduction

Intellectual property rights (IPRs) are the rights granted to intellectual property creators, including trademarks, copyrights, patents, industrial design rights and certain trade secrets in certain jurisdictions. Art works, including music and literature, as well as discoveries, inventions, words, phrases, symbols, and designs can be protected as intellectual property. Similarly, Cyber Space is a term derived from the science fiction film by Fred Roderick in 1920, and the term actually describes the virtual world as something far from the real world. Today, this term is used to describe people's attachment to Internet services or can simply be placed in the words "socialization" or "social media." To date, the world is facing much of the rise in cybercrime because of the only factor of Globalization.

Intellectual property is the creation of special national and commercial laws, like any other property¹. But the attitude and recognition of intellectual Property in international law is not that simple, which has not changed through the fact that intellectual property rights may extend to whole world, because they are legal concepts rather than limited eyes or as tools of impasse. You cannot take a piece of land out of the country and its jurisdiction is national². The brand can be created by registered under national legislation in the country, but it can have an impact around the world. In this regard, intellectual property rights share some similarities in practice with the global quality of cyberspace. Often cyberspace acts as a carrier of IP objects and then they need protection in different countries, for example, text protected by copyright on the Internet. In addition, the electronic version is very easy and cheap and the version exactly corresponds to the original. Therefore, the intellectual property right attached to the digitally transmitted object is initially the product of a national law that can be spread internationally. This is affected by international intellectual property conventions.

2) Intellectual property protection in international law

International IP law dates back to the 19th century³. The most important international conventions are the Paris Convention for the Protection of Industrial Property 1883,⁴ which regulates the minimum standard for the protection of patents,⁵ designs,⁶ trademarks and trade names,⁷ protection from unfair competition⁸ and Berne Convention for the Protection of Literary and Artistic Works 1886,⁹ of copyright or copyright protection.¹⁰ Agreements establishing a union for the protection of industrial and intellectual property rights. In this Union, the nationalities of any State in the Union shall enjoy the same protection of their intellectual property rights in all other States of the Union as they enjoy country of origin (National Treatment).¹¹

¹ Like, the statutory rules declaring intellectual property rights as property right in copyright, trademark, unregistered design, patent. The status of goodwill is more difficult to assert by protected by passing off and off confidential information.

² That is also reflected by the rule of *lex rei sitae* or *lex situs* in private international law

³ Overview of the international intellectual property law can found in dinwoodie.

⁴ Paris Convention for the Protection of Industrial Property 1883, Stockholm text 1967, amended 1979.

⁵ Art. 4 – Art. 5quater.

⁶ Art. 5quinquies.

⁷ Art. 6 – Art. 9, Art. 10ter

⁸ Art. 10bis.

⁹ Berne Convention for the Protection of Literary and Artistic Works 1886, Paris text 1971, amended 1979

¹⁰ Art. 2 et seq.

The Paris and Berne Conventions were assimilated under the TRIPS Agreement (TRIPS Agreement) of 1994, with Annex 1C to the Marrakesh Agreement Establishing the World Trade Organization (WTO).

According to the arts. 2 and 9, respectively, "members of the TRIPS Agreement shall comply" with the Paris and Berne Conventions.¹² Since the TRIPs Agreement was originally envisaged as a treaty to ensure the enforcement of intellectual property rights (Western) in the rest of the world, TRIPs are exceptionally detailed for an international convention and can provide themselves with adequate comprehensive rules for a national IP system in a country that does not already have one.¹³ In fact, compliance with the TRIPs agreement required virtually no adaptation of the national thinker. Property systems in the Western world but led to significant changes in many non-Western jurisdictions.

In addition to the Paris, Berne and TRIPS conventions, other international conventions and standards relate specifically to cyberspace, such as the WIPO Copyright Treaty of 1996. This treaty has been added to the concept of the right of communication to the public. Of communications from works protected by copyright. "By wire or wireless means, including making the works available to the public in such a way as to allow members of the public access to such works from a place and at a time of their own choosing." In this way, the WIPO Treaty deviated from the classical concept of publication (in a book, etc.) Copyright was responsible for downloading texts and other works on the Internet.¹⁴ Another term is the Uniform Dispute Resolution Policy of WIPO. Domain Names (UDRP), a weak law, was adopted by the Internet Corporation for Assigned Names and Numbers (ICANN). There are also national laws, such as

The United Nations Commission on International Trade Law (UNCITRAL) adopted the Model Law on e-commerce in 1996, Information Technology Act 2000, the Indian Penal Code, the Indian Evidence Act, 1872, the Bankers' Books Evidence Act, 1891 and the Reserve Bank of India Act, 1934. These provisions

¹¹ Paris Convention, Art. 2, Berne Convention art 5.

¹² However, the moral rights provisions in Art. 6bis of the Berne Convention are excluded from the compliance requirement in the TRIPs agreement, see Art. 9 (1), TRIPs Agreement.

¹³ TRIPs Agreement 1994, Part II, section 1: copyright; section 2: trademarks; section 3: geographical indications; section 4: industrial designs; section 5: patents; section 6: layout-designs (topographies) of integrated circuits; section 7: protection of confidential information; section 8: control of anticompetitive practices in contractual licenses.

¹⁴ The 'making available' right, is an 'umbrella solution' (see Ficsor 2002: 204) because it contains a neutral description of interactive transmissions which in law is neither to be characterized as distribution nor as communication to the public.

relate only to enforcement of intellectual property rights and are outside the scope of this discussion.

It must be borne in mind that the international intellectual property system is designed to provide a regulatory framework in the context of trade and peaceful activities. It is part of international economic law, not the law of war and peace. Therefore, it has no practical relevance to cyber attacks and cyber terrorism. Of course, people and countries involved in such activities do not care about, but make fun of, private intellectual property rights. The possibility of reparation for intellectual property infringement as a result of cyber attacks before a civil (national) court is usually remote (leaving the problem of jurisdiction aside) and, of course, has no deterrent effect. The issue of cyber warfare must be dealt with in accordance with the standards of "traditional" international law, not under the special law under which intellectual property laws form part.

3) International perspective of Cyber Law

The rapid development of the Internet and information technology around the world has led to new growth. Special forms of transnational crime related to the Internet. These crimes are not practical. Limits can affect any country in the world. Therefore, conscience is needed and enacting the necessary legislation in all countries to prevent the crime. Worldwide, it covers trade, internet based communications and land computers limits, and thus create a new world of human activity and affirmation of feasibility. Legalization of the application of laws based on geographical boundaries. This new limit, which is from the screens and passwords, separate the "cyber world" from the "real world" of the atoms. Regional authorities and law enforcement authorities find this new environment profound threatening

Internet criminals pose a major threat to computer networks around the world. Therefore, efforts are being made to develop a cyber-control model. Criminal law to prevent and control cybercrime globally. A meeting of the Special Working Group of Experts was held in October 1998 in Tokyo, in light of the difficulties faced by the United Nations, to resolve legal problems related to combating cybercrime.

The European Commission of Experts on Cybercrime has prepared two draft conventions on cybercrime in April 2001 to develop strategies and strengthen international cooperation to address the problem of security against cybercrime.

In view of the expanding dimensions of cybercrime, there is an urgent need for model legislation to address the problem of the increasing incidence of such crimes. It must be

strongly emphasized that criminal law must continue to evolve if new developments in technology are adequately addressed.

It is true that the World Intellectual Property Organization (WIPO) finalized two treaties in 1996, generally referred to as "Internet treaties" to address the challenges posed by the Internet, but only the right to communicate was discussed, and no provisions on the right to communicate were included.

In addition, the treatments were neutral on the subject of ISPs and the problem was identified by Member States through their legislative machinery. Under these circumstances, the treaties were of little use in resolving the liability of ISPs, a controversial legal issue arising from cyberspace as a result of the nature of the digital networks themselves.

The European Community has adopted guidance on e-commerce, which contains a set of rules that spell out the criteria that should be applied to various intermediaries over the Internet as a result of their participation in illegal or infringing material placed by third parties on their Internet facilities.

"India reaffirmed that the existing principles of international law are, in general, applicable in cyberspace and that there was a need to continue and deepen deliberations on the applicability of International Law to cyberspace and set norms of responsible behavior of states," a statement by the Ministry of External Affairs said.

4) Concept of property and sovereignty in intellectual property and relevancy with cyberspace

Cyberspace offers a new idea of the void of ownership; space is now perfectly logical, as is the assignment of space to persons or entities as owners, or, conversely, the free maintenance of individual private property as a general or common form of space. "Traditional" is also a normative creation that is committed (sometimes) to material matters, and the qualification of the thing as "ownership" attributed to "owner" is also a standard concept.¹⁵ So cyberspace is not really a concept of a new phenomenon that the law must deal with, particularly with regard to Content of protection: Text is the text protected by the normative concept of copyright, whether it is printed or actually distributed or placed on the Internet and is available on the Internet. The only major difference is the (actually) larger problem of the application of intellectual property in cyberspace.

International nature of Cyberspace with private property

The international nature of cyberspace with separate persons and companies (private, owned) as actors in cyberspace can obscure the legal division between sovereignty and ownership. A traditional source of distinction between private property such as power and sovereignty as an empire is Grotius. : People and objects subject to sovereignty, while property rights extend only to things. Montesquieu says this: political laws grant freedom to someone, while private laws grant property rights to someone. As a glossary, Rousseau pointed out that property is unchangeable, while sovereignty is not. It is well known that the economic reality of this division is not clear in any way. Property rights are rights against people in terms of dominium, which can alter the rights of people in general in a given region (a kind of "imperialism" in a social sense). This also applies to the effects of international intellectuals. Thus, anyone with a proprietary authority approaching cyberspace may gain sovereignty over almost all people, especially when traditional State activities are "assigned" to state-supported non-state entities.

Protection of property, also in the form of intellectual property, enjoys some recognition under international law. The direct reference to property protection can be found in the Universal Declaration of Human Rights, Art. 17.¹⁶ However, neither the 1966 International Covenant on Civil and Political Rights nor the International Covenant on Economic, The 1966 Covenant on Economic, Social and Cultural Rights contains provisions for the protection of property; the latter only has an indirect reference to patents and copyrights protection in Art.15(1).¹⁷ The protection of property is more clearly established in the Statute of the European Convention on Human Rights, not in the Convention itself, but in art. 1 of Protocol I. According to this provision, "every natural or juridical person has the right to the peaceful enjoyment of his property". The European Court of Human Rights extended the meaning of the term "property" to include intellectual property rights, such as patents, trademarks, trademark applications, and copyright.

¹⁵ Effect of the concept of dematerialized property

¹⁶ Art. 17: 'Everyone has the right to own property alone as well as in association with others. No one shall be arbitrarily deprived of his property.'

5) The territorial or national nature of intellectual property rights relevant to Cyberspace

Any discussion on intellectual property rights, whether in a general context or in the specific context of cyberspace, must determine the legal system when describing the intellectual property right in question. There is a long-standing international treaty on intellectual property (notably the Paris Convention of 1883, the Berne Convention of 1886 and, more recently, the TRIPS Agreement of 1994); there is also regional coordination. With respect to certain intellectual property rights but the main situation remains: IPRs are of a regional nature, limited to specific jurisdictions. So there are Indian copyright, British copyright, Indian patent, Italian patent and others. As has already been said, this necessarily contradicts the international quality of cyberspace.

6) Cyberspace and Intellectual property: Protection of computer software by copyright and other intellectual property right

a) Copyright protection

Computer programmers and communications programs increase the size of the market and the economic value, and the nature of protection provided is very important. The program can be easily copied and can be copied at low cost. Can be easily converted from one computer language to another. In the absence of hardware that prevents copying, the cost of copying the software package for most systems is low. Even when direct copying is not possible, prominent software and engineers can often reverse engineering software. Intellectual property rights law introduced problems with new technologies, such as computer programmers. The law states that something can be protected in writing through copyright or a machine can be protected by a patent, but not both at one time. However, computer programmers have both aspects of authoring and invention. These problems lead us to question the applicability of intellectual property rights law. The Sui Generis approach is seen as an alternative to the intellectual property model that allows adaptation of protection. They rely on legislative work or treaty negotiation. Their dogmatic evolution is also a slow process.

¹⁷ Art. 15 (1) (c): The parties to the Covenant on Economic, Social and Cultural Rights recognize the right of everyone 'to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.'

India's copyright law follows international conventions, and the current copyright law is far behind to the west where India has not signed the WIPO Internet Treaties, there is no similar legislation in India the Digital Millennium Copyright Act or the European Union directly applies Internet treaties in WIPO! Current copyright law in India does not contain provisions relating to "technological protection measures" or protection Rights management information. "Some provisions of the Indian Penal Code, 1860 (IPC) may be sufficient expected legal protection of technological measures. Section 23 of the IPC talks about "illegal gain or an unfair loss."¹⁸ This section can be trusted for unauthorized access to Protected Work. Section 28, which speaks of "counterfeiting", can be used effectively to stop copying worker.¹⁹

India, the Information Technology Act (Information Technology Act) 2000 to address the problems caused by 'cyberspace' about ecommerce behavior. The IT law does not put any concrete framework for dealing with copyright violations of the Internet. There are provisions that can be interpreted as seeks to address certain aspects of copyright as is clear from Article 43 which pertains to punishment computer damage and system.

b) Trademark and Domin names

The trademark has been a hot online property since its inception. Internet, today, you do not have Just provide a great platform for users for educational purposes, but also for commercial purposes. Now I have provided great economic value for online business, but at the same time is also are exposed to many of the ways in which these online business owners are at risk. You have different market in cyberspace, such as trademarks, some alphanumeric characters.

Given the "domain names on the Internet" and the risks associated with these domain names known as domain name conflicts. The history of trademark law in cyberspace can be linked to the creation of the world.

Wide Web (www) which has certainly created a link to trademark law on behalf of the Internet domain .Conflicts and create a buzz among users as marketing for the Internet. Thousands of companies have set up online stores to distribute marketing. Literature, providing customer service, selling goods and services online. Not unexpectedly, due to

¹⁸Section 23 of the Indian penal code "wrongful gain "is gain by unlawful means of property to which the person gaining is not legally entitled.

¹⁹Section 28 of the Indian penal code "counterfeit"-a person is said to "counterfeit "who causes one thing to resemble another thing, intending by means of that resemblance to practice deception, or knowing it to be likely that deception.

In this marketing factor, there is an increasing relationship between trademark law and Domain Names. As a result, it was the next dynamic growth of the World Wide Web. New intellectual property challenges were issued in relation to the trade mark violation. For registered trademark owners, the Internet is a lucrative platform, but in some cases it is problematic in the growth of your business. These brand owners often have to deal with some disputes related to domain names bound by a third party, such as cyber squatting, etc. But in India, For example, there is no law to protect domain names, so the cases of electronic assembly are: Determined under the Trademark Law of 1999. Under current law, article 292. Provides for registered trademark protection. Section 323 provides protection of unregistered trademarks. However, the verb silence on the protection of trademark infringement in cyberspace. The majority of the domain name disputes appear to include registered trademarks, where the dispute is alleged to arise registering or using a domain name that violates any legally recognized right, such as any trademark right or customary law in its consent or any other right to the case.

Trademark laws are of a regional nature, but the Internet is in the global domain, and the conflict bad faith registration are usually resolved using the UDRP (Standardized Domain) Name of the dispute resolution policy), a process developed by ICANN. Under UDRP, WIPO is ICANN's domain name dispute resolution service provider created as a tool to enhance protection and disclosure use IP around the world.

c) Patent

Protecting software through copyright is a limited option. Copyright law does not protect the idea, procedure, process, and system, method of operation, concept, principle or discovery. On the other hand, the patent provides more secure protection than copyright, where protection is determined by the scope of the patent and not by the way the product competitor develops. Through patent, the exact limit of the patented program is defined by the nature of the "claims" ²⁰ determined by the patent holder in the patent document. The patent can be used to protect the idea in the program, to protect the functional aspects of the program, and can be applied against any person who implements the patented feature, whether copied or reverse engineered or developed independently.

Software patents can be very powerful economic tools. It can protect program features that cannot be protected under copyright or confidential trade laws. For example, patents can be obtained for ideas, systems, methods, algorithms and functions included in a software product: editing functions, user interface functions, assembly techniques, operating system

technologies, program algorithms, menu arrangements, screen displays or arrangements and translation methods of the program language.

Since patent rights are exclusive, any person who manufactures uses or sells a patented invention without permission from the patent owner is guilty of infringement. Severe penalties include triple damages. Once a patent is granted, the "independent" development (i.e., without access to the patented technology) of the invention by another inventor is still considered a violation.

Paragraph 1 of Article 27 of the TRIPS Agreement states that "patents shall be available for inventions, be they products or processes, in all fields of technology, provided they are new, they are an innovative and viable step. For computer software Unlike Article 10 of the TRIPS Agreement, there is no express provision obliging members to grant patent protection to computer programs, and states are free to determine the level of protection to be granted. To software treaties within its jurisdiction in basic algorithms, the appearance of entanglements as a product is subject to serious suspicion of patent protection.

In India, Section 3 of the Patent Act, 1970²¹ lists a list of things that are not considered inventions (which are no longer patentable since then). Section 3 (k) refers to a "computer program by itself". This means that you cannot get a patent for a computer program in India only. However, you can get patent software in India to invent software with hardware.

The logic behind the patent denial of the program itself in India is the promotion of innovation. If the program itself is patented, most software agreements will be owned by a minority of companies. This scenario is unimaginable in a developing country like India, where programmers should enjoy freedom of innovation. To develop better programs, programmers or programmers must be able to access OSS. In keeping with this spirit, Article 3 (k) does not permit software patents without the possibility of hardware application.

At this stage, it is important to note that Section 3 (k) does not intend to impose a general ban on patents in India. It just says that computer software itself is not a patent. The term "computer software itself" is not defined and has since been a source of some mystery.

²⁰ A claim is usually expressed in legal terms, defining the scope of the invention sought to be protected.

²¹ Section 3 of the patent act, 1970-what is not invention under the act.

7) Conclusion

The real problem created by cyberspace for IPR holders is the application of their rights. Cyberspace is necessarily operating all over the world, while intellectual property rights are still of a regional nature, although intellectual property protection has been consolidated through international conventions, in particular the TRIPS Agreement. This unification has also reduced the concept of regionalism governing intellectual property rights. An international space system must address a regional problem of intellectual property rights. Any attempt to regulate cyberspace and its interaction with intellectual property rights would face the same legal and political problems as the negotiation of any other international convention and perhaps the establishment of an international organization to monitor and monitor the Convention. But in such a context, one can try to organize cases of cyber attacks and cyber warfare through international law.