

Convergence of Intellectual Property Rights and Cyberspace

Riya Gulati^{*1}

¹*Paralegal at Law offices of Caro Kinsella and Youth Ambassador for the One campaign, Ireland*

Abstract: The persisting technology-driven world has revolutionized human development and has certainly become an integral part of everyday life. We are encircled by automated smart technologies that have transformed almost all facets of human life, be it education, business, law, financial institutions, military, transportation, healthcare and politics. The new bonanza brought by information technology is also accompanied by its tribulation i.e., new cyber-crimes. We live in a world with frontiers that are shielded but still, it can be disrupted virtually. The drawback of increased reliance on Information and Communication Technologies (ICT) and the internet is the perplexity posed in the detection and protection of intellectual property infringements in the virtual tract. Due to the ease with which the data can be retrieved, accessed, replicated and transmitted and the anonymity associated with cyberspace, in most cases infringement of intellectual property chiefly occurs in the online medium rather than offline. The autonomy provided by the internet is frequently misused in the domain of intellectual property rights. The infringement of intellectual property in cyberspace encompasses any unlicensed or unauthorized use of service marks, trademarks, trade names, music or sound, images or literary work. Ergo, this paper aims to provide the thrust of IPR violation in cyberspace by pivoting on the interface of Intellectual Property Rights and Digital Technology under the framework of Trademark and Copyright Laws of India, genres of cyber-enabled trademark and copyright offences and preventive efforts pertaining to the cyber-enabled intellectual property crimes.

Keywords: *Intellectual Property Infringements; Cyberspace; Copyright; Trademark; Domain Name.*

Introduction: With the proliferation of cyberspace, trademarks and copyrights are not only confined to conventional intellectual property systems but have elongated to intellectual property rights over the internet. The rapid upsurge in the number of globally active Internet users, in conjunction with a plenitude of multimedia application alternatives and interactivity make the Internet a perfect advertising and marketplace location. Cyberspace has indeed become a fundamental area for the contravention of intellectual property rights. The progression of technology in the business and commerce arena has posed multifarious concerns for the entities and organizations to shield their intellectual property rights online. There are numerous types of IPR related cyber-crimes that are perpetrated so as to draw traffic to their sites or make money. The infraction of intellectual property in cyberspace may comprehend any unauthorized use or copying of trademarks, service marks safeguarded under the Trade Marks Act, 1999, or original software, films, music, multimedia, artwork or literary matter shielded under the Copyright Act, 1957 [1]. The peculiar matrix of cyberspace has yielded divergent categorization of infringements encompassing web-related issues such as Meta Tags, Framing, Deep Hyperlinking, Domain Name Disputes, piracy of software, music, video and other digital copyright infringements. To boot, cyber espionage which is a type of cyber-attack that purloins classified, sensitive data or intellectual property to attain an edge over a competitive corporation or government entity, is the most pressing international problem in the globe. The spies of nefarious hackers from around the world utilize cyber warfare for political, economic, or military gain. These purposefully hired and highly valued cybercriminals have the technical know-how to shut down anything from financial institutions, government infrastructures or utility resources. Most of these attackers utilize advance persistent threats (APTs) as their modus operandi to stealthily penetrate systems or networks and remain undetected for many ages [2].

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Corresponding author details: Riya Gulati

E-mail address: riyagulati0205@gmail.com

Tel:

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The intersection of Intellectual Property Rights and Digital Technology: Intellectual Property refers to the creations of human intellect and the human mind wherein the creators are given the privilege to avert others from using their innovations, designs or other creations and to use that prerogative to negotiate payment in return for others using them. It is an incorporeal property. It relates to the segments of the information which can be assimilated in tangible items at the same time in an illimitable number of copies, at various locations anywhere in the world. The property vests not in those replications but the information reflected in those replications. Currently, IP rights are not only being used as an instrument to safeguard innovation and generate revenue but also to invigorate strategic alliances for socio-economic and technological development [3]. Cyberspace has become an elemental area for intellectual property rights contravention. The diverse practices by the cyber site operators resulted in the breach of intellectual property rights and various other prerogatives of other websites operators.

Trade Mark and Cyber Space

Overview of Trademark: A trademark distinguishes the goods of one manufacturer or trader from homogeneous goods of others and thus, it seeks to safeguard the interest of the customer as well as the trader. A trademark may comprise of a device outlining the picture of human beings, animals etc., letters, words, signatures, numerals or any combination thereof. As trademark depicts correlation in the course of trade, between trader and goods, it serves as a functional mechanism of advertisement for the goods and their quality. The Trade Marks Act, 1999 and the Trade Marks Rules, 2002 regulate the law relating to trademarks in India. The objective of the trademark law is to authorize an undertaking by registering its trademark to procure an exclusive right to use, share, or assign a mark [4].

Infringement of Trademark through Cyberspace: The infraction of the trademark is amongst the pivotal matters of Intellectual Property violations in cyberspace. In juxtapose to conventional business, where geographical distances or distinct trade sectors imply that it is plausible to use identical trademarks without disputes arising, in the global arena of the Internet a domain name can be allocated only once due to its function as an address. Ergo, various corporations coveting to register their trademarks or firm names on the Internet as domain names have been notified that their own marks, firms or other designations were hitherto being used on the Internet by another corporation or private individual. It is reported that Deutsche Bank, Rolls Royce and Toyota were coerced to refrain from registering their marks or firms as domain names as “deutsche-bank.de”, “rolls-royce.de” and “toyota.de” had already been registered as domain names by others [5]. A domain name is not per se a trademark. Rather, domain name is a word or phrase registered in the domain name registration system. A domain name may be a corporation’s expression of its trademark. The application of a trademark in a domain name, for example, is the equivalent of using the trademark in advertising, or on a billboard. Whether a word or phrase used in a domain name qualifies for trademark protection is ascertained under the conventional trademark law.

Domain Name Disputes: Oftentimes, domain name conflicts emanate when the cyber-squatters deliberately register domain names that embrace a trademarked word, name brand of a product, company name, or even names of film stars. Cybersquatting implies the domain name registration by someone who lacks a licit claim with the objective to avert the trademark holder from acquiring access to the name, selling the name, or diverting traffic. Whereas, in typo-squatting, the squatter registers a variant of a prominent trademark. Typo-squatting is done by individuals who register the domain names commingling variations of illustrious trademarks terms such as misspellings googlw.com or adding prefixes or suffixes to the existing domain name and utilize them for websites to gain an advantage of unwary internet users [6].

In India, “.in” is the top-level domain. INRegistry is the accredited “.in” registry which is governed under the dominion of the National Internet eXchange of India (NIXI). “.in” domain name conflicts are unravelled in line with the .IN Dispute Resolution Policy (INDRP) and the INDRP Rules of Procedure. The INDRP delineates the kinds of conflicts that can be brought and the yardstick that will be reckoned by the arbitrators. Whereas, the INDRP Rules of Procedure outline the procedure to file a complaint, mechanism to respond to a complaint, the fees, communications, and other procedures. The “.in Domain Name Resolution Policy” expounds the terms and conditions to settle a

conflict between the Registrant and the Complainant, accruing out of the registration and use of a “.in” Internet Domain Name. A complaint can be brought up to the .IN Registry on the following grounds:

- The registrant’s domain name is identical or confusingly indistinguishable to a name, trademark or service mark in which the Complainant has rights.
- The Registrant vests no rights or licit interests in respect of the domain name.
- The registrant’s domain name has been registered or is being utilized in bad faith [7].

Web-related issues

Meta tags (MT): MT are codes comprised within the websites that provide a delineation of the website. The tags are implanted in the source code of the website. They are embedded so that search engines (i.e., google.com, yahoo.com etc) can meticulously recognize what the website relates to. Meta tags can be classified into title, description and keywords. It furnishes information pertaining to page descriptions, keywords and other pertinent data. Initially, Meta tags were employed in search engines to explicate what the page was about. In the initial stage of the internet, Meta tags were used to succour place web pages in the precise classification. Presently, Meta tags are abused to build up fictitious page rankings for web pages that were abysmally constructed [8].

Trademark disputes can exude when someone’s trademark is put forth by his adversary in the meta tags of the contender website. The act of placing meta tags of contender corporations and brands on a website is also referred to as cyber-stuffing.

Instance: Joe sells taekwondo uniform and equipment kit that rivals the taekwondo kit sold by Nike. If Joe writes the words “Nike” in the meta tags of his website, then the search engines may inadvertently index Joe’s website as being correlated to Nike. Web-users peeking for Nike may get deflected to Joe’s website.

Framing: A webpage can be bifurcated into various frames wherein each frame can exhibit divergent content. Framing is a procedure of splitting one window into two or more screens. A web page can be interpolated into a frame, and that part of the screen will remain invariable as a user budes through other web pages. This technique is called “framing,” as it permits a webmaster to eject an individual via umpteen web pages whilst perpetuating the utility and appearance of the frame interpolated. The majority of the intellectual property in cyberspace pages make use of frames. The pages in this high-tech primer have been set to open outward of the frames. Stiffly, the frames may embody either highlighted URL addresses of other web pages that are intended to be “selected” by the framing page user or other pages within the same website [9]. Notwithstanding, framing can give rise to consumer confusion, chip away the rights of website owners, engender unfair competition and eventually lead to violation of trademark laws.

Instance: In a 1997 legal action, TotalNEWS framed news content from media outlets such as Washington Post, CNN and several other news corporations. Under the terms of a settlement agreement, TotalNews concurred to avert framing and acceded to utilize text-only links [10].

Deep Hyperlinking: Hyperlink is a reference to a document or webpage on the internet. Deep hyperlinking entails setting down a link on a site that leads to a particular page within another site, that is, other than its homepage. Deep linking permits the visitors to go directly to an internal page and bypass information and advertisements on the home page. Generally, no entity or individual objects if anyone implants a hyperlink to their homepage. The demur transpires when someone grafts a link diametrically to an inner page or document. The business entities usually don’t prefer deep links because: linked-to sites can slacken income as their proceeds are oftentimes tied to the number of viewers who pass via their homepage, and it may also erroneously engender an impression in a user’s perception that the two linked sites endorse one another. Herein, trademark violation arises when a second user’s utilization of the trademark is likely to bewilder customers as to the origin of the product or services [11]. Therefore, it is recommended to put a suitably worded acknowledgement or disclaimer that patently notifies the visitor about the correlation between the two sites.

Copyright and Cyber Space

Overview of Copyright: Copyright entails the prerogatives of intellectual pioneers in their innovation. The copyright law deals with the peculiar forms of ingenuity, connected fundamentally with mass communication. It is also involved with virtually all types and modes of public communication, not just printed publications but also with such matters as films for public exhibition, television and sound broadcasting etc. and even computerised systems for the storage and retrieval of data. Copyright assures definite minimum protection of the prerogatives of creators over their innovations, thereby safeguarding and guerdoning innovation. In India, the law pertaining to copyright is embodied under the Copyright Act 1957. The protection proffered by copyright to the endeavours of artists, writers, dramatists, designers, architects, producers and musicians of cinematograph films, sound recordings and computer software, generates an ambience conducive to inventiveness, which actuates them to innovate more and galvanizes others to invent. The social and economic development of a nation relies on creativity and hence, it is crucial to safeguard the interest of these innovators [12].

“What is worth copying is prima facie worth protecting”- Peterson J.

Infringement of Copyright through Cyberspace: The internet poses a predominant threat to the exclusive prerogatives of copyright owners. The amelioration of the Internet has given rise to various legal battles with regard to copyright violations. In a computer program, the copyright is considered to be breached when an individual without a license or in violation of the stipulations of a license: does anything, the exclusive entitlement of which is bestowed upon the holder of the copyright by the Copyright Act, or commercially allows any place to be utilized for the communication of violating work to the public. Further, selling, distributing, or hiring out contravening replicas; exhibiting violating replications in public; and importing infracted replications into India are also considered to be infringement.

Copyright and Database: A computer database is a depiction of data, facts, knowledge, notions or instructions in image, text, video, audio that is being concocted or has been composed in a formalized mode or has been developed by a computer, computer system or computer network. In brief, a database is a collection of records, each of which comprises one or more fields (i.e., pieces of data) about some entity (i.e., object). Illustration: ZY Consulting Firm has developed a computerized database of all their client corporations along with the pertinent contact persons.

Herein, the copyright can prevail under the following circumstances:

- The data included in the database may be the subject matter of copyright,
- The actual representation of this data may be the subject matter of copyright protection [13].

Section 13(1) (a) The Copyright Act, 1957 safeguards “Databases” as literary works which provides that copyright shall prevail throughout India in original literary, artistic, musical and dramatic works [14].

Online Copyright Violation

Plagiarism: It is using someone else’s notion or work without giving proper credit. Technological advancement has made replication of copyright material straightforward and facile. The technology has made it feasible to take content from one site, altering it or simply replicating it. Individuals and corporations who develop novel notions and products register for copyright protection to corroborate that they can commercially benefit from their original work. Other parties and corporations may be given authority to use those works through licensing arrangements or by buying the copyright holder’s works. But utilizing it without the owner’s authorization for any reason whatsoever counts as an infringement of copyright law which can be subject to legal actions. Copyright violations can be circumvented by cautiously reading the terms of use and citing out sources correctly [15].

Caching: It is a technical process that crucially comprehends the storage of data so that future requests for that particular data can be served swifter. Caching schemes are certainly inevitable to handle internet traffic. Albeit, Google serves the actual webpage in its search results, but it sometimes becomes imperative to serve the cached copy for the following reasons: the link gets broken, the underlying webpage has gone offline because of server load

or the webpage may have been deleted [16]. In order for caching activities to give rise to copyright liability, the materials being replicated into the cache must fall within the subject matter granted protection under the Copyright Act [17].

Prevention of cyber-enabled intellectual property crimes

“As the world is increasingly interconnected, everyone shares the responsibility of securing cyberspace.”- Newton Lee

Pragmatic panaceas to obviate cyber-enabled intellectual property offences encompass technical panaceas to curb proscribed access to intellectual property, criminal justice efforts, and conducting education campaigns [18]. Technological solutions to intercept intellectual property theft involves the encrypted transfer of intellectual property and the use of special codes and passwords to enable access to intellectual property. Digital watermarking and blockchain can be employed to fortify IP registry. Intellectual Property crime prevention efforts embrace the surveillance of online sites that share copyrighted works, undercover investigations targeting those engaging in several types of cyber-enabled intellectual property crime. For deterrence purposes, foisting criminal penalties as a way to send the message that infringements of intellectual property are severe and punishable under persisting laws. Embracing cybersecurity mechanisms to safeguard data and the systems and data where the content is stored and by dint of which it traverses. Pertaining to education campaigns, it is essential to organize numerous annual activities to elevate nations, businesses, organizations, and consumers’ awareness of intellectual property protection and the repercussions of intellectual property theft [19]. One needs to understand where the threats are coming from, discover the motive, think like a hacker while catching a hacker, identify the hacker’s techniques and lastly take a proactive approach in order to curb cyber espionage [20-21].

Conclusion: Intellectual property protection and cyber-attack avoidance need a considerable amount of attention and resources. The conventional laws for safeguarding intellectual property have been applied in cyberspace nevertheless, due to the inherent nature of the internet, new regulations are required to be framed and adopted. Every novel innovation in the field of technology undergoes a series of menaces. Internet is one such major threat that has captured the physical marketplace and has transmuted into a virtual marketplace. It is the need of the hour to establish draconian stratagems in order to outline and effectuate secure cyberspace and safeguard the intellectual property owners from the tyranny of the wrongdoers.

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References:

- [1] Karnika Seth, Protecting copyright in the cyberspace, Karnika Seth Associates, 2013.
- [2] Anonymous, What is Cyber Espionage?, VMware, 2017.
- [3] ICSI, Economic and Commercial Laws. The Institute of Company Secretaries of India, Delhi, 2012.
- [4] Ibid.
- [5] Torsten Bettinger, Trademark law in cyberspace- the battle for domain names, International Review of Industrial Property and Copyright Law. 28 (1997) 508.
- [6] Himani Makkad, Trademark Law in Cyberspace: Protection to Internet Address, Journal of Legal Studies and Research. 3 (2017) 39.
- [7] Rohas Nagpal, Intellectual Property Issues and Cyberspace- The Indian Perspective, Asian School of Cyber Laws, Pune, 2008.
- [8] Sanjana Mittal, Intellectual Property Rights and Cyber Law, LKOUNIV, 2010.
- [9] H. Sharma, M. Nemana, India: Legality of Metag-ing, Linking & Framing, Singh & Associates, 2016.
- [10] Maureen O’Rourke, Legal issues on the internet, D-Lib Magazine, 1998.
- [11] Richard Stim, Linking, Framing, and Inlining, NOLO, 2010.
- [12] Supra note 3.
- [13] Supra note 7.
- [14] IRRO, What does the Copyright Act mean exactly?, Indian Reprographic Rights Organisation, 2020.

- [15] Anonymous, What is copyright infringement?, Copyleaks, 2015.
- [16] Amlan Mohanty, Is google's caching copyright infringement?, Spicy IP, 2010.
- [17] Richard S. Vermut, File caching on the internet: Technical infringement or safeguard for efficient network operation?, Intell. Prop. L. 273 (1997).
- [18] Ernest E. Badway, Protecting companies' intellectual property from cyber-crime, Fox Rothschild, 2012.
- [19] UNODC, Cyber-enabled intellectual property crime- Protection and prevention efforts, UNODC, 2015.
- [20] Supra note 2.
- [21] Kameswara, Challenges of copyright and cyberspace, Legal Services India.