

BCA-602

CYBER LAW AND INTERNET SECURITY

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Unit-1 12

Cyber Space Jurisdiction: Jurisdiction issues under IT Act, 2000, traditional principals of jurisdiction, extra-terrestrial jurisdiction and case laws on cyber space jurisdiction.

E-commerce and Laws in India: Digital / Electronic signature in Indian laws, E-commerce; issues and provisions in Indian law, and E –Governance.

Unit-2 08

Intellectual Property Rights, Domain Names and Trademark Dispute: Concept of trademarks in internet era, cybersquatting, reverse hijacking, jurisdiction in trademark disputes, copyright in the digital medium, and copyright in computer programs

Unit-3 10

Developing Secure Information Systems: Information security governance & risk management, security architecture & design security issues in hardware, data storage & downloadable devices, physical security of IT assets, access control, CCTV and intrusion detection systems and backup security measures.

Unit-4 10

Security Policies: Development of policies, WWW policies, email security policies, policy review process-corporate policies-sample security policies, publishing and notification requirement of the policies.

Text Books:

1. Prashant Mali, “Cyber Law & Cyber Crimes”, Snow White publications, Mumbai.
2. Dr. Surya Prakash Tripathi, Ritendra Goyal and Praveen Kumar Shukla, “Introduction to Information Security and Cyber Law”, Willey Dreamtech Press.
3. Sarika Gupta & Gaurav Gupta, “Information Security and Cyber Laws”, Khanna Publishing House

Remain of unit 1

Cyber Jurisdiction- National, Transnational or International

National

Jurisdiction will be national where:

- the domestic legislation grants jurisdiction to the courts within the country,
- As a national crime, the jurisdiction defines the illegality, who prosecutes the crime, and who eventually punishes individuals who violate this national law,
- Examples of national jurisdiction would be for offences under the IT Act, 2000 where the courts in India would be vested with the appropriate jurisdiction.

Transnational-

- When a crime involves more than one country
- Cyber crimes are very likely to be transnational in nature as a hacker physically present in the USA could hack a computer in London and steal data present on the device.

International-

- Cyber crimes can be international in nature and the distinction between an international and transnational crime can be hard to distinguish.
- However, cyber crimes do not come under the category of “International Crimes” under the Rome Statute for International Criminal Court.

Tests to determine Jurisdiction

Reasons why there could be jurisdictional issues in cybercrimes:

1. Material posted on the internet has worldwide audience;
2. It is easy to move website from one territory to another;
3. A website can be hosted on one area, but directed at users in another geographic location;
4. Parts of a website may be hosted in one area, while other parts of the websites are hosted in another location; and
5. It is not always possible to determine where a website or user is located.

Theories of Jurisdiction

1. Subjective Territoriality-

- Forum state will have jurisdiction if the act took place within territory of the forum state;
- Ex- section 2 of IPC provides for punishment of offences committed within India.

2. Objective Territoriality/ Effects Jurisdiction -

- When the action takes place outside the territory of the forum state, but the primary effect/consequence of that activity is within the forum state;
- Ex- Section 179 of the Code of Criminal Procedure grants jurisdiction to Indian courts based on the effects doctrine.

3. Nationality -

- The right to prescribe a law for an action based on the nationality of the actor;
- Ex- section 4 of the IPC stipulates that the provisions of the Code would also apply to any offence committed by any citizen of India in any place without and beyond India.

4. Passive Nationality –

- Jurisdiction based on nationality of victim

5. Protective Principle -

- Desire of a sovereign to punish actions committed in other places solely because it feels threatened by those actions;
- Victim is usually the government or the sovereign;
- Not a preferred principle of jurisdiction- as at cost of other nation's sovereignty.

6. Universality Principles-

- Any state to have jurisdiction;

- Pertaining to certain offences- gravity of offence.

Unit 2

Intellectual Property Right

Intellectual property rights are the legal rights that cover the privileges given to individuals who are the owners and inventors of a work, and have created something with their intellectual creativity. Individuals related to areas such as literature, music, invention, etc., can be granted such rights, which can then be used in the business practices by them.

The creator/inventor gets exclusive rights against any misuse or use of work without his/her prior information. However, the rights are granted for a limited period of time to maintain equilibrium.

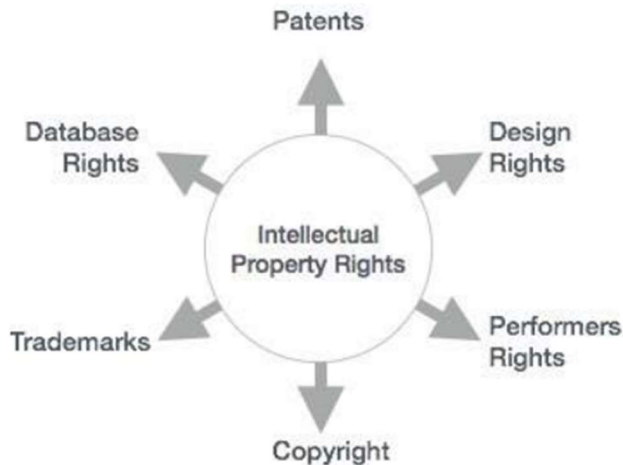
The following list of activities which are covered by the intellectual property rights are laid down by the World Intellectual Property Organization (WIPO) –

- Industrial designs
- Scientific discoveries
- Protection against unfair competition
- Literary, artistic, and scientific works
- Inventions in all fields of human endeavor
- Performances of performing artists, phonograms, and broadcasts
- Trademarks, service marks, commercial names, and designations
- All other rights resulting from intellectual activity in the industrial, scientific, literary, or artistic fields

Types of Intellectual Property Rights

Intellectual Property Rights can be further classified into the following categories –

- Copyright
- Patents
- Database Rights
- Performers Rights
- Design Rights
- Trademarks



Advantages of Intellectual Property Rights

Intellectual property rights are advantageous in the following ways –

- Provides exclusive rights to the creators or inventors.
- Encourages individuals to distribute and share information and data instead of keeping it confidential.
- Provides legal defense and offers the creators the incentive of their work.
- Helps in social and financial development.

Intellectual Property Rights in India

To protect the intellectual property rights in the Indian territory, India has defined the formation of constitutional, administrative and jurisdictive outline whether they imply the copyright, patent, trademark, industrial designs, or any other parts of the intellectual property rights.

Back in the year 1999, the government passed an important legislation based on international practices to safeguard the intellectual property rights. Let us have a glimpse of the same –

- The **Patents** (Amendment) Act, 1999, facilitates the establishment of the mail box system for filing patents. It offers exclusive marketing rights for a time period of five years.
- The **Trade Marks** Bill, 1999, replaced the Trade and Merchandise Marks Act, 1958
- The **Copyright** (Amendment) Act, 1999, was signed by the President of India.
- The *sui generis* legislation was approved and named as the Geographical Indications of Goods (Registration and Protection) Bill, 1999.
- The **Industrial Designs** Bill, 1999, replaced the Designs Act, 1911.
- The **Patents (Second Amendment)** Bill, 1999, for further amending the Patents Act of 1970 in compliance with the TRIPS.

INTRODUCTION:

The concept of the **trademark in cyberspace** has become very important as the use of technology is growing day by day and the whole world has become a connected global unit. In order to understand this concept, we first need to understand what do the two terms 'trademark' and 'cyberspace' mean.

With the growing complexities of trade and commerce in the world, the flow of counterfeit products in the market have become rampant. The importance of intellectual property is growing every day and its scope has extended across borders and has gained international recognition. If a bona fide buyer purchases a good or commodity believing it to be a product offered by a particular trader and later when he or she finds out that it was not up to the mark or the product does not belong to the presumed trader. This process often results in the bad reputation of that trader. Therefore, a need to create a unique mark which symbolize a particular trader as the source of the product becomes essential. It is important not only for the trader but also to protect the consumer from being fooled by counterfeit products.

Cyberspace in laymen terminology refers to the space created by the use of the computer technology. In other words, it refers to the virtual space created by the connection between different computers. The Merriam Webster Dictionary defines cyber space as 'the online world of the computer networks and especially the internet.' Thus, the concept of Cyberspace is intangible in nature. The cyberspace is not restricted to a particular geographic territory, it lacks any barrier of physicality and extends to the whole world, connecting anyone and everyone.

Cyberspace is a shared space where interactions and communications take place through the platform of the internet. The internet technology is revolutionizing the world and the trend of carrying out trade and commerce using the cyber platform has come into vogue. Many e-commerce websites are also developing to facilitate such kind of trade and carry out successful transactions between the consumer and the traders. The use of online platforms has boosted the economies of different countries.

There is no physical interaction between the parties of the trade. The online space becomes a preferred choice of the consumers as consumers are able to surf through the available without any restriction and time barrier, they are granted the freedom to compare prices of different products and satisfy themselves completely before making the payment for any product. The cyberspace medium has made transaction and trading much simpler and easier.

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The Cyberspace is not free from flaws. Cybercrime such as cyber fraud, cyber-attacks, cyber wars etc. are also taking place on a frequent note and the complexity of the crimes is of such a nature that it becomes very difficult to determine the jurisdiction and punish the offender who may be sitting in some other part of the world.

TRADEMARKS IN CYBERSPACE:

Traditionally the trademark law was applicable to protect those traders who had a registered trademarks, by providing them an exclusive right to carry on trade under that mark and preventing any third parties from using the same. However, with the rise of the internet and the

paradigm shift from the traditional trading process to the online platform. Many new challenges have taken birth in relation to protection of trademark.

The domain name is one of the main areas where the conflict relating to the trademark in cyber space arises. Domain name can simply mean the name used by a website, it is like an address which is used by the people to access that particular website. The domain name is very important in the identification of computers done with the use of IP address which is present in the form of some codes. But due to the complex numeric coding of the IP address; easier alternatives that can be remembered by all were developed. This alternative is a domain name, it can be a combination of words, symbols and numbers. For example: www.lawyerswork.com is an example of a domain name.

Registration of domain name is very important to establish a formal marketable existence on the internet. There is as such no trademark review of the domain names as it is burdensome work for the registrar. Therefore, there arises disputes regarding the domain name vis-à-vis trademark under four circumstances.

United States was the first country to introduce a legislation in this regard. It was called the Cybersquatting infringement act, 1999.

The second situation is the cyber parasite where the gains and profit are made by the use of the actual domain name. The method would involve using a similar or wrongly spelled domain name which is similar to that of a famous trademark. Such techniques are used to pass off products by method of deception to the innocent consumers. In the case of Rediff Communication Ltd. V. Cybertooth and Another where the defendant had registered a domain name similar to that of the plaintiff was carrying a business of similar nature. Court observed that the defendant had an intention to carry out his trade and business under the trademark or trade name of plaintiff, thereby there being an infringement of the plaintiff's right.

Use of Keywords can also sometimes lead to infringement of trademark in a cyberspace. Many times, the web pages use popular trademarks as keyword and so that their web page appears on the top during the search. The innocent buyer may be deceived by the use of trademark and this results in infringement.

Relation between Domain Name and Trademark

In modern times the online trademarks are Domain names. It also tells the quality and safe of the goodness of a company. There are different kinds of cybersquatting. Most normally utilized is typosquatting where a digital squatter registers domain names containing a variation of mainstream trademarks. Typo squatters accept that the web client will make typographical blunders while entering the domain names into their internet browsers. Such names are well-known names or catchy words of companies or individuals, for instance, 'samsung.com' or 'nokia.com'. A Domain name fills a similar need on the web, which a trademark serves in the disconnected business exchanges. It enables the clients to distinguish the wellspring of merchandise or administrations gave by the proprietor of such products and enterprises. Consequently, Domain names are of the most extreme significance in online organizations. They are significant in light of the accompanying reasons:

Cybersquatting

Cybersquatting is a kind of domain dispute which is usual in the world. It is a process where people buy domain names showing the name of an existing company, with a single intention to sell the names back to that company to attain profit when they want to set up their own website. There are different kinds of cybersquatting. Most usually utilized is the **typosquatting** where a digital vagrant registers domain names containing a variation of mainstream trademarks. Grammatical mistake vagrants accept that the web client will make typographical blunders while entering the domain names into their internet browsers.

Some common examples of **typosquatting** include:

The omission of the “.” in the domain name: wwwexample.com

A common misspelling of the intended site: exemple.com

A differently phrased domain name: examples.com

A different top-level domain:example.org

Advancement of business and working up a client base on the web and disconnected by the method of publicizing on the web.

Foundation of the validity of the site and the business on the web.

Simple access to clients and imminent clients.

What Does Reverse Domain Hijacking Mean?

Reverse domain hijacking refers to a specific kind of aggressive action to acquire a specific domain name on the Web. It is often defined and described by lawyers in contests over a particular domain in a type of legal battle that has become common and rather complicated.

Explains Reverse Domain Hijacking

In a case of reverse domain hijacking, attorneys will argue that a party, usually a trademark holder, has made false cybersquatting claims against the legitimate owner of a domain. This includes various kinds of intimidation related to trademark litigation, where a person who legitimately owns a domain may be wrongly pressured into selling it to another party. This corresponds to a very similar kind of practice called domain hijacking. In simple domain hijacking, the tables are turned, and it is not trademark holders who are found to be at fault, but those who have bought up domain names related to a trademark with the intention of putting pressure on a trademark holder. Reverse domain hijacking can also involve false changes to a domain registration.

The use of domain hijacking and reverse domain hijacking litigation has brought a number of types of cases to the forefront of the field of IT law. It has led to close observation of trends in domain ownership, domain purchase, and copyright or trademark law as applied to the Internet.

Domain Name Dispute policies

The best another way to continue a domain name dispute through the judiciary is to lead off the domain name dispute policies that have been discovered by the organization that gives the domain name. The conflicts before December month of 1999 were taken care of under the domain name dispute policy made by Network Solutions Inc. Under this much-defamed strategy, Network Solutions Inc made a system under which an outsider can challenge the privilege of a domain name proprietor to utilize a specific domain name. In the event that the test was effective, the domain name would be suspended. This norm only protected organizations that had a nationally listed trademark identical to another party's second-level domain name like Microsoft in 'www.microsoft.com'.

that the trademark proprietor claims a trademark, either enrolled or unregistered, that is the equivalent or confusingly like the enlisted second-level domain name;

that the gathering that enrolled the domain name has no authentic right or enthusiasm for the domain name; and

that the domain name was enrolled and utilized in dishonesty.

On the off chance that the trademark proprietor effectively demonstrates every one of the three focuses on the regulatory continuing, at that point the domain name can either be dropped or moved to the common trademark proprietor. On the off chance that the trademark proprietor neglects to demonstrate one of these focuses, the managerial board won't drop nor move the domain name. Among the ways that a domain name owner can prove a legitimate right or interest in a domain name is by showing:

use or arrangements to utilize the domain name regarding a genuine contribution of products or administrations preceding any notification of the question;

that the domain name proprietor has been ordinarily known constantly by the second-level domain name; or

that the domain name proprietor is making real non-commercial or reasonable utilization of the domain name, without the aim of (i) business gain, (ii) misleadingly occupying buyers, or (iii) discolouring the trademark at issue.

A trademark owner can show that a domain name was registered and used in bad faith in a variety of ways, including by showing that the domain name owner:

enlisted the name fundamentally to sell or move the domain name to the trademark proprietor or a contender of the trademark proprietor at a cost more prominent than cash-based expenses;

occupied with an example of enlisting trademarks of others to forestall the utilization of the domain name by the trademark proprietor;

enrolled the domain name basically to disturb the matter of a contender; or

is endeavouring to pull in clients to a site for business gain by making a probability of disarray with the trademark proprietor's trademark.

Copyrights and digital law:

Copyright is a term that incorporates the right given to makers for their masterful work, by and large, it covers scholarly works, for example, books, sonnets, plays, reference, paperwork, melodic pieces, etc. Copyright subsists in a work by virtue of creation; thus, it is not mandatory to register. Web copyright laws give the first creators or specialists the option to prohibit others from replicating their work or guaranteeing it as their own. While online copyright insurance doesn't ensure realities, thoughts, frameworks, or techniques for activity, it might secure the manner in which these things are communicated.

Types of Copyright Infringement on the Internet:

The peculiar element with infringement of copyright on the web is that it is difficult to find if a work is a 'duplicate' of a secured work. Infringement may not generally be purposeful. It might be because of 'obliviousness'. The infringement in Cyberspace will occur in various manners, for example:

Framing

Linking

Caching

Public Display of the Right by transferring on the Internet

Archiving

Framing

Framing is the process of permitting a client to view the content of one site while it is outlined by data of another site, like the "image in-picture" highlight offered on certain TVs. In *Future Dontics, Inc versus Applied Anagramics Inc*, the plaintiff was granted the exclusive use of a telephone number and a service mark of a business. The plaintiff later built up a site to publicize the business. The defendant imitated the Future Dontic webpage on a different frame in the defendant's site. The Court held that it adds up to the infringement of Copyright.

Linking

Linking is connecting the user from the original site to a linked site. The client is provided with access to a website through the original site. The Universal Resource Locator (URL) need not be typed separately. Linking, for research purposes, gives ease to the client. Tragically, it ascends a few legal issues. Linking might be of different types, for example, Surface linking, profound linking, and in-line linking. *Shetland Times, Ltd. v. Jonathan Wills* and others are viewed as the first "linking" case" the issue introduced in *Shetland Times* was whether the *Shetland* ("News") "deep link" to inserted pages of the *Shetland* ("Times") the site, using *Times* site's news headlines, was a demonstration of copyright infringement under British law. The matter settled on the day of trial, shortly after the court had issued a preliminary injunction precluding the deep link.

Caching

Caching is the process in which material is duplicated from a unique source to the cache. Such material would be accessible to the user for a temporary timeframe. Caching may be executed in three ways; Firstly, replicating of the record itself which is shown on the computer screen while getting to the web. Secondly, the record that is being shown is duplicated and held alongside the reports evaluated by the user in the past. Thirdly, the archives are not stored on a personal computer but on an ISP (Internet Service Provider) or on a website.

Public Display Or Rights By Posting Pictures:

When any work is published on the Internet, it can be viewed by any user without any hindrance. Thus, when Copyright material is published on the web without approval, it turns into an instance of infringement. However, the Courts have not given any guidelines to come to such an end result but they have conveyed mixed reactions subject to the realities of each case. In *Playboy Enterprises Inc v Frena*, the defendant made a BBS (Bulletin Board Service) which contained infringed content. The plaintiff sued the defendant alleging infringement. The defendant contended and stated that he was uninformed of any infringement. However, the US District Court held the defendant liable.

Archiving:

In Archiving, the process involves downloading and putting away the material of another site and incorporating the same. Regardless of whether there exists a hyperlink, the connection will take the client to another region of a similar site where the material of another site has been stored. Archiving without the authorization of the copyright proprietor may add up to infringement.

Privileges of creators under copyright system in India:

In India, **Copyright exists in the source code of a computer program.** Computer software is secured as literary work and so are computer databases according to Section 2(o) of Copyright Act, 1957. Subsequently, a unique database is similarly secured by copyright.

As indicated by Section 14 of the Copyright Act, 1957 a creator of a work has the sole and exclusive option to enjoy and abuse a few rights given by the Act for literary, dramatic, musical, or artistic work, cinematographic film, and sound recording. Rights referenced under Section 14 incorporate the option to imitate the work, to give its duplicates, perform it in public, make transformations, interpretations, selling, or rental rights in regard to various categories of work. Term of copyright is a lifetime of the author and sixty years from the beginning of the calendar year next following the year in which the author dies.

Copyright Infringement and remedies:

Where copyright is infringed, the owner of the copyright is entitled to sue for remedies including injunction, damages, the profit of accounts, and delivery of infringed goods. Section 51 states that copyright in a work is considered infringed when a person without a license from the owner or registrar of copyrights or contravening conditions of a license does anything the which is the right of the owner as per the Act or permits for a profit.

It also amounts to an infringement where a person, for sale or hire or displays or offers for sale or distributes for trade or to prejudicially affect the owner of the copyright or by way of trade

exhibit in public or import into India infringing copies of work (excluding one copy for the personal use of importer).