

A CRITICAL ANALYSIS OF DOMAIN NAME SYSTEM WITH INDIAN AND INTERNATIONAL PERSPECTIVE

¹Deepali Jain

¹BBA LLB,

Vivekananda Institute of Professional Studies, New Delhi, India.

ABSTRACT- *This paper aim at studying the Domain Name System, which is known to be a hierarchical and decentralized naming system for computers, services or other sources connected with internet. It associates various information with domain names assigned to each of the participating entities. The focus of the paper also points at the comparative study of domain name system of other countries apart from India. A domain name is the identification string to find your website on Internet and ask for the access by user. The paper intends to dig into various Indian law points and international conventions on Domain Name; wherein relating domain name with intellectual property rights under Indian legal system as compared to other legal system around the globe. In the current scenario the need of the hour is to protect the rights relate to domain name, as people tend to copy the same and take undue advantage to make loss of the other. Thus the paper tries to evaluate various rights and developments of domain name under Indian Copyright Act, 1975, The Trademarks act, 1999 with international perspective along with reprisal mechanism needed.*

Keywords: *Domain Name System (DNS), Internet architecture, international perspective, intellectual property rights, Internet governance, right of trade law ICANN, Trade law, perspective.*

1. INTRODUCTION

Internet has shrunk the world and brought it onto the screen of computer. There is a tremendous amount to information accessible by the user and by which can go about. By simply writing a word through web index one can have more data than one can deal with.

A simple utility of Internet is that it brings markets of world to one's doorstep. The customer can sit in peace at home while shopping everywhere in the world. Have you ever thought about the existence of such a fastest and cheapest mode of communication? Different people, governments, enterprises and associations who want to be recognized, have set up well such sites and information regarding the products in the public front. A registered "Domain Name" on the Internet can only make it possible.

Every computer, which is connected to the Internet possesses an exclusive numerical address called Internet Protocol (IP) Address. For humans they are words, but for the systems the latter is the numerical interpretation. Hence it can be mentioned that domain names are utilized as a helpful medium for finding information on the web.¹

Since its creation in the 1980s, the DNS has successfully served the needs of Internet users. It has experienced its share of issues, including those concerning its maintenance organization, technical and security troubles, structural concerns, and disagreements over how it should be governed. These issues, as well as others yet to be seen in the future will certainly impact the continued use of the DNS and the associated networks.

The Internet Domain Names have now become much more than were representing the websites of different companies on the Internet. Today, in this age of well-developed information technology and worldwide businesses through Internet, these domain names have attained the status of being business identifiers and promoters. Since the commercial activities on the Internet are to go on increasing day by day, the importance and usefulness of domain names too, are to be enhanced for the purposes of greater publicity, popularity, and profitability of businesses in all economic sectors. According to Bill Gates, the founder of Microsoft, "Domains have and will continue to go up in value faster than any other commodity ever known to man". Broadly, the functions of domain names are now quite similar to the functions of a trademark or service mark, for these purposes. Ours this very informative web-article offers rich and hugely beneficial and securing information regarding the registration and protection of the domain names as trademarks, with a view to help and serve people, companies, and professions pertaining to diverse occupational and economic fields.

1.2 Meaning of Domain Name And Domain Name System

A Mechanism- Sending Information to the Right Place

Every website is identified by a unique series of numbers called an IP address. This numeric set is what your computer users to connect to the server where the website data lives.

Numbers are great for a computer, but it's easier for people to use words they can remember. The words used to identify a website are known as the domain or URL, and like the IP address, they're unique to each website. Think of it like a mobile phone: you want to call your mother, so you simply click on your contact "Mom" and your phone dials your mother's phone number. Domains are connected to IP addresses in much the same way.

On the other hand The DNS goes by many names, including name server, domain name system server etc. Regardless of which name is used, all describe the process of making domain names alphabetical. DNS also refers to the hierarchical system used to search through the network of millions of IP addresses, to locate the exact IP of your desired website.

¹Available at : <https://www.namecheap.com/dns/what-is-dns-domain-name-system-definition/> (Last Visited on August 10, 2020).

The domain name system (DNS) connects URLs with their IP address. With DNS, it's possible to type words instead of a string of numbers into a browser, allowing people to search for websites and send emails using familiar names. When you search for a domain name in a browser, it sends a query over the Internet to match the domain with its corresponding IP. Once located, it uses the IP to retrieve the website's content. Most impressively, this whole process takes just milliseconds.²

2. LITERATURE REVIEW

“The Domain Name System: Past, Present, and Future” by Michael Brian Pope³ in his article explain the Domain Name System (DNS) is a critical component of the global Internet infrastructure. Throughout its history, its design and administration has experienced significant dynamic changes as the Internet itself has evolved. The history of the DNS is divided into six eras, based on underlying technological and administrative themes within each era. Developments in its governance, its application, and in other factors are discussed. Future directions for DNS use and abuse are explored, along with challenges in its future governance. Finally, a proposed research model is included to guide future study of the DNS evolution and its influences from political, legal, psychological, sociological, and technological perspectives.

“An Approach for Determining the Health of the DNS” by Tejaswini Yadav⁴ in his article describe the Domain Name system (DNS) is a global and decentralized system comprising of several types of nodes across geographies that are critical in resolving billions of translation queries – from IP addresses to domain names and vice versa – in the Internet at any given moment. A stable and healthy DNS is therefore important for the smooth functioning of the internet which in turn is dependent on the millions of nodes that comprise it. However determining the health of the global DNS at any given moment remains infeasible, as it will require conducting millions of probes at every level in the DNS hierarchy. In this paper, we propose a simple approach that will be able to approximate the health of the DNS, by determining the critical nodes in the DNS hierarchy, which is passively and periodically monitored. The proposed approach is evaluated with an emulated setup and the initial results are encouraging.

3. RESEARCH PROBLEM

To explain the term domain name system and linking the same with Indian laws with mixture of international conventions. Also analyze one's rights to protect from any infringement and over viewing the process of domain name. Further stating the judicial responses for the same.

²Available at : https://www.naavi.org/cl_editorial_04/praveen_dalal/pd_domain_name_nov4.htm (Last Visited on August 10, 2020).

³ Michael Brian Pope, “The Domain Name System: Past, Present, and Future”, *Communications of the Association for Information Systems* 329-346 (2012).

⁴ Tejaswini Yadav, “An Approach for Determining the Health of the DNS”, *International Journal of Computer Science and Mobile Computing* (2014).

It might be noticed that, with the course of time, domain names have advanced from being a “simple to recall name” to ‘Trade symbol’. This made domain name as important as trademarks. The distinguishment between the two is necessary through this problem.

The initiation of global information networks and digital technologies, particularly the Internet, introduces law and legal principle with new and extra- ordinary difficulties/challenges. A far-reaching and comprehensive examination of all these challenges, and the diverging ways in which they have been met, would obviously demand an investigation, however such an investigation is beyond limitation of one doctoral thesis. For this reason researcher has preferred to research only one of the most controversial and dynamic areas of cyber law i.e., domain-name dispute, and then mainly one point of view i.e., trademark law.

4. HYPOTHESIS

- 1) The domain names are identical to trademarks.
- 2) The evolution of E-commerce has affected the trade and commerce very much.
- 3) The domain names registration often infringes trademarks.
- 4) Resolution of the domain names disputes is not done appropriately in our country as well as at the world level.
- 5) Lack of a separate, direct and comprehensive legislation for the protection of domain names often results in the violation of domain names.

5. OBJECTIVES

The objective of this research paper is to deepen the horizons of knowledge of domain name systems by critically analyzing various laws under Indian and international perspective.

1. To investigate how domain names relate to trademarks.
2. To evaluate the protection given to the Domain names in the international law and the national legal system.
3. To understand under which circumstances can a Domain name infringe a trademark rights.
4. To assess the role of judiciary in this regard.
- 5.

6. METHODOLOGY

The methodology used in accomplishment of this research paper is a doctrinal one.

7. ANALYSIS

7.1 Domain Name and Trademark Law

Domain names as a legal hybrid

While trademark provides unique identity to a product, domain names can be called as Internet resource locators. Domain can also be regarded as the Internet address of a company, which after many years of use becomes the identity for their diversified products lines. Hence, the question here is that whether domain name can be regarded as trademarks and vice versa? However, there has been much fuss about the resemblance of the two within the cyber world. Company has to consider number factors while applying for a domain name, which also includes inclusion of the trademark within the domain name. Domain name can be regarded as trademark and trademark can be used while registering a domain name but it is only beneficial if the same company does so. Sometimes, well-known trademarks are used as domain names by hoaxers so as to deceive the customers. It can be concluded that both domain names and trademarks are interrelated which ultimately affects the goodwill of the company.⁵

The connection between a trademark and a domain name is crucial in the determination of the extent of protection accorded to a domain name under the Trade Marks Act in India. While the territorial laws of the country of its registration protect a registered trademark, it does not enjoy such protection in foreign jurisdictions in the absence of an independently registered mark in that foreign jurisdiction. It follows that two or more entities can register and enjoy the same or similar mark in different jurisdictions. However, a domain name belongs to a borderless realm. By its nature as a unique address, there cannot be duplication of a domain name once registered and it enjoys worldwide exclusivity.⁶

The Indian Supreme Court has noted that "with the increase of commercial activity on the internet, a domain name is also used as business identifier" (*Satyam Infoway Ltd v Sifynet Solutions Pvt Ltd*,⁷) and it has been widely acknowledged that a domain name is, at its very core, akin to a trademark. The fundamental menace posed by domain name squatting is that in the strict construction of the law, the squatters, having complied with the registration process, have validly procured the domain.

⁵ Shraddha, *Trademark issues related to Internet Domain Names*, (2018) Available at: https://blog.ipleaders.in/trademark-issues-related-to-internet-domain-names/amp/#_ftnref2 (Last Visited on August 10, 2020).

⁶ Vivek Vashi and Shreya Ramesh, Bharucha & Partners, "Domain name protection: an Indian perspective", *Thomson Reuters Practical Law* (2015).

⁷ AIR2004 SC 3540

7.2 International Domain Name Law

Network Solutions, Inc. Domain Dispute Resolution policy: July 1995

The first domain name dispute resolution policy was adopted by NSI. In mid 1990s NSI became the only registrar which registered the domain name have both registry and registrar functions. As conflicts between domain names and intellectual property rights emerged, NSI became obvious target for litigation. Under the same each domain name registrant was contractually required to represent that it has bonafide intent to use the name and that the name did not infringe any third party rights.

Moreover, the policy provided that if a complainant in a dispute over a domain name could establish that it had a trade mark in the name that was registered under united states law, NSI could suspend use of domain name provided that the domain name registrant could establish either that it owned a mark or used the name prior to the grant of the trade mark to the complainant. Unfortunately the system lacked a dispute resolution mechanism. NSI does not account for trademark litigation's confusion analysis requirement when granting registration. It simply registers a name on a first come, first serve basis.

Dissatisfaction with the current domain name system has prompted a number of governmental and non-governmental organizations (NGOs) to examine the system. The International Ad Hoc Committee (IAHC) and the Clinton administration's Green Paper and Policy Statement conducted ⁸inquiries into the current administration and management of domain names. These are not the only studies and proposals of interest. Many other organizations have entered into the field, such as the World Intellectual Property Organization (WIPO), the International Trademark Association (INTA), the U.S. Patent and Trademark Office (PTO)" and the European Union (EU).

Proposal for Reforms of Domain Name System

1. The International Ad Hoc Committee

On February 4, 1997, an international group, IAHC, issued a comprehensive plan for the regulation and governance of the domain name system. The IAHC makes major steps in resolving the trademark dilemma. In recognition of the limitations of the NSI's dispute policy, the IAHC plan acknowledges the essential role of the national courts in resolving trademark disputes. Unlike the NSI registration policy, a registrant will be required to provide detailed information about what server it will use as well as complete information for further contact.' In addition, the applicant must submit to the jurisdiction of appropriate courts in the country where the registered

⁸Available at: <http://www.globallegalpost.com/bigstories/domainnamelegaldisputeshitrecordhigh27307685/> (Last Visited on August 10, 2020).

domain is located and must appoint an agent for service of process. This procedure ensures that the trademark owner will enjoy at least a guaranteed venue in which to pursue litigation. It also envisages an on-line alternative dispute resolution procedure administered under rules of the WIPO Arbitration and Mediation Center. It would resolve the multi-jurisdictional disputes arising from domain name registrations.⁹

2. The Green Paper and the Statement of Policy

Building on the work of the **IAHC**, the **U.S.** Department of Commerce released its Proposal to Improve Technical Management of Internet Domain Names and Addresses." This document, known as the Green Paper, took a major step toward an overhaul in the management of the domain name system and opened a comment period to examine the general ideas it proposed. The resulting Statement of Policy" benefitted from the substantial comments from diverse sources, including elaborations in the Green Paper. The basic thrust of the Administration's proposals is that a coordinated basis is the best way to manage the domain name system and that a stable, reliable system guaranteeing universal connectivity requires coordination of the root server system.

The Policy Statement recommends that the U.S. Government seek international support and call on WIPO to initiate a process of resolving domain name trademark disputes and to maintain a database permitting trademark owners to obtain the information necessary to protect their trademarks.

International law adopted by Indian legislation

To help enforce the application of the Berne Convention for the Protection of Literary and Artistic Works (Berne Convention), the World Intellectual Property Organization (WIPO) addressed the increasing threat posed by copyright and IP infringers on the internet, by implementing the:

- WIPO Performances and Phonograms Treaty 1996 (WPPT).
- WIPO Copyright Treaty 1996 (WCT).

These treaties echo the global need for harmonious copyright law, and were perhaps the first significant step toward acknowledging the borderless nature of the Internet. The WCT specifically deals with the protection of authors' works and IP rights in a digital environment, and includes both computer programs and compilations of data. The WPPT protects the rights of performers and producers of phonograms on the Internet. It is telling that India is not a signatory to either of the two treaties.

Infringement of IP on the Internet is largely unchecked by national legislation in India, and is currently being dealt with by the judiciary through broad interpretation and enforcement of the existing law. The difficulty arises as the Internet is incapable of being monitored both practically and in view of legal objections on the ground of jurisdiction. While global initiatives to harmonies and implement a uniform standard protocol to govern the

⁹ *Ibid.*

World Wide Web, transcending territorial limitations, is underway, none of these initiatives have progressed beyond the scope of dialogue.¹⁰

Today, almost exclusively the Internet Corporation governs the vast proportion of the Internet for Assigned Names and Numbers (ICANN). ICANN has, since its inception in 1998, emerged as the premier body dedicated to the governance of the world wide web, particularly in the development of policy, dispute resolution, management, allocation and co-ordination of the internet's unique identifier systems, including:

- The domain name system.
- Internet protocol addresses.
- The autonomous system.

International Rules and Procedures

A) Internet Corporation for Assigned Names and Numbers (ICANN)

An international Non Profit Corporation, Internet Corporation for Assigned Names and Numbers (ICANN) formed in 1998 is the Internet's naming system and technical coordinator, responsible for developing the policy for the Internet's unique identifiers and addresses. ICANN oversees the distribution of unique technical identifiers which are used in the Internet's operations and also delegates Top-Level Domain names (such as .com, .info, etc) resulting in universal resolvability.

B) Governmental Advisory Committee (GAC)

ICANN's Organizational Structure includes a Governmental Advisory Committee (GAC) set up in 1999. The GAC has an open-ended membership driven policy, inviting nations the world over to partake in ICANN's policymaking activities. It includes Government representatives, public authorities, and several intergovernmental organizations.

C) Uniform Domain Name Dispute Policy (UDRP)

ICANN implemented the Uniform Domain Name Dispute Policy (UDRP) in 1999, which has been used to resolve more than 20,000 disputes over the rights to domain names. The UDRP is designed to be efficient and cost effective. In 2010 alone around 2696 cyber squatting cases were filed with the WIPO Arbitration and

¹⁰ Ibid.

Mediation Centre under ¹¹this Policy involving 4370 domain names across 57 countries, according to WIPO's official website.

The Rules clearly lay down:

- Under Rule 4(k) the parties to the dispute can also alternatively go before their domestic judicial courts to resolve the dispute or to contest the outcome of the WIPO Administrative Panel proceeding within 30 days of such impugned decision. Every ICANN accredited registrar has agreed to adhere to the dispute resolution policies that ICANN adopts under its established consensus procedures.
- Administrative proceedings, fees, disputes/ litigation, remedies, availability of court proceedings, cancellations, transfers, changes, transfers during disputes and policy modifications are all clearly laid out.
- They define various terms like complainant, ICANN, mutual jurisdiction, panel, panelist, party, policy, provider, registrar, registration agreement, respondent, reverse domain name hijacking and supplemental rules.
- They lay down the method and the manner of communication as well as the form and format of a complaint. They specify when and how a complaint is to be notified and to inform the complainant and the respondent if the complaint is administratively deficient for the correction of which 5 days are given.
- The time period to file a response to the complaint is 20 days of the date of commencement of the administrative proceeding.
- Manner of appointing panelists for a dispute and in what manner the fees are to be paid by the parties are clearly explained. In all cases the fees are to be borne by the complainant except where the ¹² respondent has made a request for a three member panel in which case the fees shall be shared equally by both parties.
- The parties are banned from communicating unilaterally with any panelist. The Rules are not to be amended without consent or prior notification of ICANN.

¹¹ UDRP Rule Available at: <https://www.lexology.com/library/detail.aspx?g=daaafca2-6a68-4134-bd29-27aa941a1f03> (Last Visited on August 10, 2020).

¹² Wipo Cyber Squatting Cases Hit record, available at: http://www.wipo.int/pressroom/en/articles/2017/article_0003.html (Last Visited on August 10, 2020).

Under Rule 4 the disputes are specified for which mandatory administrative proceedings are held. The proceedings are conducted before one of the administrative-dispute-resolution service providers.

Rule 4 (a) mentions applicable disputes in the events wherein:

1. The domain name is identical or confusingly similar to a trademark or service mark in which the complainant has rights; and
2. There are no rights or legitimate interests in respect of the domain name; and
3. The domain name has been registered and is being used in bad faith.

Rule 4 (b) explains the evidence of registration and Bad Faith use.

The WIPO Arbitration Rules are applicable to the arbitration proceedings wherein the powers of the tribunal, schedule of fees, conduct of proceedings, awards, costs etc. are expressly provided for. According to Article 46 of the Arbitration Rules the arbitration panel for effective remedy can also grant interim measures of protection and security for claims and costs.

7.3 Judicial Responses

- *Maruti.com et al. v. Maruti Udyog Ltd. et al.* [U.S. Dist. Ct. No. L-03-1478].

The Indian company Maruti Udyog won the complaint it made before the WIPO panel against the respondent who had registered the domain name marutiudyog.com in the United States. The respondent had been stamped as a cyber squatter 3 times by the WIPO panel in WIPO arbitration cases filed by Onida, Hero Honda and Maruti. Yet when the case went before the United States courts, the WIPO panel decisions were considered non-binding. Even the United States Anti Cyber squatting Consumer Protection Act was said not to have applied as according to the court Maruti did not manufacture or sell cars in the United States and so were not entitled to protection under the Lanham Act.¹³

- *Yahoo! Inc v. Akash Arora & Anr IIAD 229* (Delhi High Court:1999)

The defendants were using “yahooindia.com” as for providing Internet related services. The petitioner was the owner of the trademark “Yahoo!” and also had their registered domain name “yahooindia.com”. The plaintiff registered its domain name with different countries like “yahoo.ca” for Canada. Hence, the domain name “yahoo.india” could be perceived as an extension of services of “Yahoo!”. The Court treated the matter as “passing off” and did not consider the mentioning of disclaimer as a sufficient remedy. The Court granted injunction restraining the defendant under the domain name “yahooindia.com”.

¹³available at: <https://www.wipo.int/amc/en/processes/process1/report/finalreport.html> (Last Visited on August 10, 2020).

- *Rediff Communication Ltd v. Cyberbooth and Anr* AIR 272 (Bombay High Court: 2000)

A judge of Bombay High Court stated, “A Domain Name is more than an internet address and is entitled to equal protection as trademark”. The case was of “deceptive similarity” wherein the plaintiff filed the case claiming that the domain name “radiff.com” of defendant was deceptively similar to theirs “rediff.com”. The Court recognized that there was common “intention to deceive”. The Court held that the domain name is definitely an infringement of the plaintiff’s trademark and that defendants in bad faith used it.¹⁴

8. CONCLUSION

With the expanding activities within the cyber world, various thought provoking issues are being raised now and often. The jurisdictional issue being one of the most widely discussed issues. Domain name and Trademarks have become a wide part of the ever-increasing e-commerce business activities. Domain names identify a company’s presence on internet and now-a-days considered as valuable corporate assets. Domain names are generally given on “first come first serve basis” and registrars like NSI who are collaborated with National Science Foundation have got veto power towards assignment of domain name. However, these agencies can exercise the same only if the domain name in for registration is exactly similar to the other one and that the registration of this one would infringe the rights other.

The need of the present time is to harmoniously apply the principles of the trademark law and the provisions concerning the domain names. It must be noted that the moment a decision is given by the Supreme Court and it attains finality, then it becomes binding on all the person or institutions in India.

Showing any ‘statutory provision’ to the contrary cannot challenge it. This is so because no statutory provision can override a ‘Constitutional provision’ and in case of a conflict, if any, the former must give way to the latter. This settled legal position becomes relevant when we consider the decision of the Supreme Court in Satyam case (supra) in the light of the above discussion. The various landmark judgments of the Supreme Court have conferred the ‘strongest protection’ to the domain names in the world.

¹⁴Available at: <http://www.globallegalpost.com/bigstories/domainnamelegaldisputeshitrecordhigh27307685/> (Last Visited on August 10, 2020).

BIBLIOGRAPHY

Authors:

1. Michael Brian Pope, “The Domain Name System: Past, Present, and Future”, *Communications of the Association for Information Systems* 329-346 (2012).
2. Tejaswini Yadav, “An Approach for Determining the Health of the DNS”,³ *International Journal of Computer Science and Mobile Computing* (2014).
3. Vivek Vashi and Shreya Ramesh, Bharucha & Partners, “Domain name protection: an Indian perspective”, *Thomson Reuters Practical Law* (2015).

Case Laws:

1. *Maruti.com et al. v. MarutiUdyog Ltd. et al.* [U.S. Dist. Ct. No. L-03-1478].
2. *Rediff Communication Ltd v. Cyberbooth and Anr* AIR 272 (Bombay High Court: 2000)
3. *Satyam Infoway Ltd v Sifynet Solutions Pvt Ltd*, AIR2004 SC 3540
4. *Yahoo! Inc v. AkashArora&Anr IIAD 229* (Delhi High Court:1999)

Websites:

1. <http://www.globallegalpost.com/bigstories/domainnamelegaldisputeshitrecordhigh27307685/>
2. http://www.wipo.int/pressroom/en/articles/2017/article_0003.html
3. https://blog.ipleaders.in/trademark-issues-related-to-internet-domain-names/amp/#_ftnref2
4. <https://www.lexology.com/library/detail.aspx?g=daaafca2-6a68-4134-bd29-27aa941a1f03>
5. https://www.naavi.org/cl_editorial_04/praveen_dalal/pd_domain_name_nov4.htm
6. <https://www.namecheap.com/dns/what-is-dns-domain-name-system-definition/>
7. <https://www.wipo.int/amc/en/processes/process1/report/finalreport.html>