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About CIPR&T:

Intellectual Property (IP) is a creation of mind and it confers right to the creator by the law towards the exclusive use of his creation. Though this right is granted for a certain period, the exclusive nature of it makes it significant. In India IP law has undergone a significant change due to TRIPS, which has a direct impact on legal regime pertains to patents, copyrights, designs, trademarks, geographical indications etc. The existing IP laws were amended from time to time to be on par with changes internationally. In recent years Intellectual Property Rights (IPR) emerged as the most important policy instrument. With its growing presence, however, it has also been subjected to intense criticism. Moreover, the structure of the institution itself has undergone periodic changes with incorporations of newer subject matters into its ambit. It is the endeavour of the C-IPR to become the beacon in the field of Intellectual Property Rights by encouraging synthesis of knowledge and best practices cutting across academia, practitioners and research fraternity.

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CENTER FOR INTELLECTUAL PROPERTY RIGHTS AND TECHNOLOGY Volume: 1 | Issue: 1

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FOREWORD

Science, Technology and Innovation are the key drivers for economic growth and human development. The emergence of disruptive and impactful technologies poses new challenges and simultaneously greater opportunities. The COVID-19 pandemic provided a compelling opportunity for Research and Development (R&D) institutions, academia and industry to work in unison for sharing of purpose, synergy, collaboration and cooperation. Technology is making it cheaper to copy, transfer, and manipulate information and intellectual property. For example, devices such as optical disk storage systems may allow the average person to collect entire libraries of copyrighted textual, musical, and visual works in his home. Decreasing prices and increasing capabilities of information systems will permit more people to make use of more works. Consequently, enforcement efforts will have to reckon with a much larger volume of potential infringements than exists today. The technology itself is providing proprietors with ways to more tightly control the distribution of their works. Private, computerized, electronic systems can provide them with the means to enforce control by limiting and monitoring access. Policy makers may have to weigh the benefits of such control against the potential social costs of restricting public access and monitoring private citizen's information use. As technology makes the enforcement of intellectual property rights more difficult, public support for these rights becomes all the more critical. At present, however, the public has little knowledge of intellectual property rights as an issue. To the extent that citizens are aware of this issue, they draw clear distinctions between proprietors' rights to operate in the marketplace and their own rights to use information as they please in their own homes and businesses. Therefore, so long as proprietors' rights do not conflict with the public's sense of privacy and fairness, the public is likely to lend support to the intellectual property system.

The DSNLU Journal of Science Technology and Law Publishes scholarly contributions from the experts in the areas of Intellectual Property, Information Technology, Biotechnology technology transfer and business law for technology-based companies. Regarded as a leading publication at the forefront of legal-technical scholarship. The Journal will provide a Platform to publish research articles, case comments, book reviews and aims to forester legal-technical scholarship in the field of law and technology. I congratulate the team Centre for Intellectual Property Rights and Technology of DSNLU in bringing this Journal.

VisakhapatnamDt.

20.10-2021

Prof. (Dr.) S. Surya Prakash

PREFACE

The Centre for Intellectual Property Rights and Technology, Damodaram Sanjivayya National Law University was established in 2018 with an objective to promote scholarship in the field of intellectual property laws since its inception. The DSNLU JOURNAL OF SCIENCE TECHNOLOGY AND LAW published by the Centre, is a peer-reviewed, double blind and open access journal, with this first issue discussing some seminal themes of contemporary relevance. The issue explores a wide spectrum of thoughts and through its varied articulations attempts to open up dialogues in diverse domains of application of intellectual property laws.

The article authored by Khushboo soni elucidates the legal implications of creating and sharing memes under copyright laws, trademark laws and the right to publicity or personality rights in India and the United States. It highlights various gaps in the laws surrounding memes. It emphasizes on excessive dependence on judges in the determination of the validity of a meme. It also enunciates the significance of memes as a method of communication and political dissentand the need for the legal system to develop with current cultural and technological advances.

Ritika Ranka and Jiss Alphonsa Joy has presented their view on registration of hashtagsas trademarks by the World Intellectual Property Organisation (WIPO) and also discussed about Indian IPR regime relating to hashtags.

Ayan Saini discussed the uncertainty as to whether artificial intelligence will be capableof getting patents if it produces something new and unique on its own, she also addressed whatwould be the grounds on which artificial intelligence can be denied a patent right if it acquirescitizenship of a country and stands at equal footing as humans with respect to constitutional rights.

Samhitha Sharath Reddy explained that India has chosen to extend the Geographical Indication tag only to goods and not services during her discussion she presented her view by discussing the position of other countries who have extended the Geographical Indication tag to services as well, further she argues that India must provide the GI tag to services as well andby doing so, provide the tag for Ayurvedic practices in India. The author has taken the example of the Ayurvedic practices in Kerala to better put forth the arguments made herein.

Lipsa Dash & Parimita Dash explored the intellectual property right issued involved in the facial

recognition devices and data based, they also highlighted that a facial recognition device has connected bio sensors generating billions as being an IP asset for the companies. Similarly, the technology behind this is evolving with providing more accuracy to detect and hence the IP market is constantly in competition.

Kunike Khera presented her view on the current developments in the 'Mission to Mars' along with how the various Intellectual Property laws and policies can play a significant role in its triumph. The research work discusses how various IP mechanisms such as crowd funding and brand funding can be utilised to facilitate the Mars-colonisation project. The author has also attempted to incorporate the game theory in understanding the effectiveness of sharing trade secrets, among government space agencies around the world, for ensuring greater success rates of attempts at Mars exploration and settlement. The research contemplates usage of intellectual property not just to reach the planet; but also, to aid and assist in the settlement and future sustenance of life there.

Nishant Mohanty discussed a comparative analysis of patentability of medical methods in the countries which are allowing said patentability and the countries whom are prohibiting said patentability and their reasoning thereof along with the impact of patents on the medical profession shall also be discussed in detail. He opined that lack of judicial interpretation regarding the subject matter of patentability medical a procedure is a factor for not granting the patentability of medical procedures.

Priya Anuragini's article is based on the premise that Geneva Surrender epitomizes a Faustian bargain by India for India bartered its sovereign prerogative in Intellectual Property (IP) law making in return for market access. Finally, the author argues that the bargain continues to this day as the country hardly relies on the flexibilities in the TRIPS amidst U.S. demands of providing TRIPS-plus protection.

Sonal Singh's article aims to clarify the relevant provisions of TRIPS Agreement regarding submission of test data for market approval of drugs. The author has also discussed the Indian law in this regard to clarify the position of India.

Ata Hasan presented a case commentary relating to *Suzuki Motor v Suzuki (India) Ltd* judgment which deals with well-known trademark.

This Journal will cater the needs of lawyers, academicians, research scholars, professionals in helping them to understand the latest developments pertaining to Intellectual Property Rights.

Date: 18-10-2021

Prof. Dr. P. Sree Sudha,
Chair Person, Centre for IPR and Technology,
Damodaram Sanjivayya National Law University, Visakhapatnam

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Copyright Ownership and Rights Management of Literary Works under the Copyright Amendment Act 2012

Prof. (Dr.) V. Vijay Lakshmi*

Product of mind in the form of expression, like literature, music, artistic works etc. are considered as property. As these are the outcome of human intellect these are recognized as intellectual property. This property though intangible in nature, entitles its owner with rights similar to those enjoyed by the owners of any other property. Intellectual property is protected through various laws. Copyright law[1] is one among them that protects authors of literary, dramatic, musical works, works of cinematograph films and sound recordings with respect to the works[2] they have created. Briefly, the statute confers upon the authors a bundle of exclusive rights to make various uses of their creations. For instance, a story written may be reproduced, copies of it may be issued to the public, may be translated, adapted, performed, may be cinematized or may be communicated through broadcasting[3]. These acts which otherwise confers rights to the author and similar other rights as specified under the Act is designated as the 'copyright' of the author. Briefly, copyright means a right of author to reproduce his work in any material form. Along with the rights the owner of work has legal recourse to take action for the violation of his rights by a third person[4].

Rights and remedies are conferred to the owner but the question is who the owner is? Is it only the creator of a literary work or a person other than a creator also has a claim of ownership? If so, whether an ownership by other person is absolute or subject to any limitations? What provisions are introduced under the new amendment that *inter-alia* confers upon the authors with a right that deals with the digital management of works? In this brief paper an attempt is made to deal with these issues and matters related thereto.

Owner of literary works: - As a rule, it is specified that the author[5] is the first owner of a work[6].He

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[1] Copyright protection in India is governed by Copyright Act, 1957(herein after referred as the Act). The Act is amended recently in 2012. Act 27 of 2012.

[2] Works under Copyright Act has a specific meaning. It is according to Section 2 (y) and Section 13 means any of the following works, namely:-(i) a literary, dramatic, musical or artistic work;(ii) a cinematograph film;(iii) a sound recording. Such works may be created by any person either individually or jointly. Sec. 2(z).

[3] For details see Section 14 of the Act dealing with the meaning of Copyright in various works.

[4] Copyright Act, Section 51.

[5] The scope the term 'author' under the Act is not limited to mean that it is only the writer of a literature. It is provided that an author in case of a literary and a dramatic work is- the author of a work, in case of a musical work is -the composer, in case of an artistic work is- the artist, in case of cinematograph film and sound recording -the producer and in case of

enjoys the copyright in the work, so long he is alive and thereafter his successors are entitled for a period of sixty years[7]. Like any property, copyright can be transferred to any person by the author or it may be acquired by any person.[8] In either of the cases the acquisition of ownership is strictly guarded by statutory conditions and limitations. Hereunder is given an account of the various circumstances where the ownership in a literary work shifts to other persons. Broadly it can be divided into two categories: -

I. Ownership acquired in course of employment and

II. Ownership transferred to third person

I. **<u>Ownership acquired by third person</u>**: -

Under this category ownership acquired by an employer and works created for a consideration is specifically discussed. Employer's copyright ownership in literary works has two facets. One is the ownership in general and the second is an ownership with limited scope. In either of the cases following conditions shall be satisfied: - (i) work must be created in course of employment i.e., there must be an employer and employee relation between the employer and the employee author, (ii) such work is to be created in course of employment and (iii) there should not be an agreement whereby the author employee reserves copyright in his favor. All the three conditions must be fulfilled. For instance, a work may be created by an employee but if it is created in his spare time the employer cannot exercise his rights because the work though is created in course of employment but it is not created under a contract of service. Under 'contract of service' the employer is specifically appointed by the employer for the purpose and the employer will have an authority to control and direct the employee in the creation of the work. This situation may be compared with 'contract for service' where by the employee is free to work he pleases. Thus, an examination paper set by a teacher does not become the property of the university or the government. It is held by courts that though the teacher is an employee but the work the teacher has done is not under 'a contract of service'[9]. The teacher spends his own skill and talent to set the paper and it is as original as any other work[10]. Similarly, a work may be created under a contract of service and in course of employment buy if the employee author prefers and reserves his copyright in such work, the employer cannot claim any ownership.

computer generated work – a person responsible for the work to be so generate. For detail see Copyright Act, 1957 Copyright Act, 1957, Section 2 (d) .

[6] See Copyright Act, 1957, Section 17 (1) of the Act.

[7] For detail see Copyright Act, 1957, Sections 21-29 of the Act.

[8] The procedure for assignment of copyright is dealt under Sections 18 to 21 of the Act.

[9] Agawal Publishing House v. Board of Higher Education and Intermediate Education, A.I.R. 1967 All 191.

[10] Rupendra Kashyap v. Jiwan *Publishing* House, 1996 PTC 439 Del.

The other situation i.e., ownership with limited scope is available to the proprietor of newspapers, magazine or similar other periodicals. The ownership in literary works created by an employee under above stated situations belongs to the proprietor of the newspaper, magazine etc. but he will not have absolute rights in all respects. His rights are limited to the publication of the work in newspapers, magazines etc.[11]. He can prevent any other proprietor from reproducing the same work in their newspaper or periodical. Beyond this he has no right to restrain for making other uses of the work. For instance, if an employee author in course of employment and under contract of service writes a series of articles for its publication in a newspaper the employer cannot restrain the employee author if he decides to compile all articles and get it published in a book form.

Ownership in literary works for consideration: - This is also called as commissioned work or payment of fixed price for the works created. A publisher may ask an author to write a book for Rs. 10,000/. The question is would the publisher become the owner of such work and thereby would be enabled to make copies of the work? The publisher in this case would become the owner of the book as such but he will not have any copyright ownership in the work. There is no provision under which copyright in a 'literary work' can be owned by a third person in this manner. The Act has limited this mode of acquiring ownership only with regard to certain artistic works and cinematograph films[12]. For acquiring copyright ownership in any literary, dramatic, musical work the publisher or any other person has to strictly follow the assignment/ transfer or licensing procedure as provided under the Act[13]. Such rules are created purely in order to protect the interest of authors against the mighty publishers who may try to underpay the author or include unreasonable terms in agreement. It is held by Kerala High Court that mere engaging an author by a publisher to write the book for a fixed remuneration does not warrant any legal presumption that the intention of the parties was that the copyright in the book should belong to the publisher[14].

There are certain other legal entities that are allowed to claim ownership in literary works. These include, ownership by public undertakings, by government, by the international organizations provided there is no contrary agreement by the author in his favor[15] .

II. **Where the ownership in literary work is transferred to third person:** - such transfer under the Act is called assignment of copyright. It is like an outright sale of ownership in

[11] Copyright Act, 1957.See proviso (a) to Section 17.
[12] Copyright Act, 1957, proviso (b) to Section 17.
[13]Copyright Act, 1957,Sections 18-21 and Secs.30-31A .
[14] Thamakappan v. Vidyarambhan, 1968 Ker.L. J. 440
[15] Copyright Act, 1957, provisos (d) – (e) to Section 17.

favor of third person. But the owner always has a right to decide various aspects of ownership rights. The agreement must always be in writing and signed by the parties. The statute allows author/owner to transfer the whole or part of the work, either for full time or for limited duration[16].

Relevant Changes under 2012 amendments: -It is provided under the amendment that no such assignment shall be applied to any medium or mode of exploitation of the work which did not exist or was not in commercial use at the time when the assignment was made, unless the assignment specifically referred to such medium or mode. [17]This amendment strengthens the position of the author if new modes of exploitation of the work come to exist.

It is further provided that the author of the literary or musical work included in a cinematograph film or sound recording shall not assign the right to receive royalties from the utilisation of such work in any other form other than as part of cinematograph film or sound recording except to the legal heirs or to a copyright society for collection and distribution and any agreement to the contrary shall be void.[18]
In additions to above two provisos included under the 2012 amendment another proviso is added. It specifies that "the author of the literary or musical work included in the sound recording but not forming part of any cinematograph film shall not assign or waive the right to receive royalties to be shared on an equal basis with the assignee of copyright for any utilization of such work except to the legal heirs of the authors or to a collecting society for collection and distribution and any assignment to the contrary shall be void." [19]

It is also mandatory for the parties to clearly include in the transfer or assignment agreement, the amount of royalty, the right to revise and right to terminate the rights. Further, if the assignee does not make use of the rights within one year, without any sufficient reason, the copyright in such work will reverts back to the author[20]. Sub-section (3) is substituted to provide that the assignment shall specify the other considerations besides the royalty, if any, payable. Three New sub-sections are added. Sub-Section (8) to Section 19 to provide that any assignment of copyright in any work contrary to that of the terms and conditions of the rights already assigned to a copyright society in which the author of the work is a member, shall be deemed to be void. It is further provided that no assignment of copyright in any work to make a cinematograph film or sound recording shall affect the right of the author of the

[16] Copyright Act, 1957, Section 18 (1).
[17] Proviso to Section 18.
[18] Second Proviso to Section 18.
[19] See Third Proviso added to Section 18 of the amended Act.
[20] For details see Copyright Act, 1957 (2012 amendment) Section 19, sub-Sections 1-7.

work to claim royalties in case of utilization of the work in any form other than as part of cinematograph film or sound recording and that "no assignment of the copyright in any work to make a sound recording which does not form part of any cinematograph film shall affect the right of the author of the work to claim an equal share of royalties and consideration payable for any utilisation of such work in any form".[21]

Registration of copyright ownership and Advantages: - Unlike registration of immovable property copyright ownership in literary property is not mandatory. The author has an option to register his work.[22] But registration of work has its own advantage. In case of any dispute with regard to title the author with registration will have better chances to prove his title. Register of Copyrights are *prima facie* evidence of particulars entered therein.[23] Hence, it is advisable that works should be registered. Another benefit is concerned with the commercial transaction. It will be easy for the third parties to know the real owner of the copyright.

Special cases of ownership: -

Ownership in joint works- In cases where the work is a product of joint authorship, all the authors will enjoy equal ownership. A work of joint authorship means, a work produced by the collaboration of two or more authors in which the contribution of one author is not distinct from the contribution of the other author or authors.[24] It differs from a work of co-authorship, where each author's contribution can be easily demarcated. For instance, the different chapters of a book may be written by various authors. In such case all the authors of book will be called as co –authors. Each author has his own copyright and without joining or taking permission from other author, the work may be transferred or a license may be granted by each author/owner of the work.

Derivative works: - These are works that are based on an original work, for instance, translation or an adaptation of a story. Such works, though derived are treated as original works and the translator or adaptor will be treated as author will be the owner, provided the translation or adaptation is made with the consent/permission of the original author.

An interesting case with reference to academia needs special focus. Teaching community

[21] Ibid Sub-section (9) and Sub-Section (10).
[22] Copyright Act 1957, Section 45.
[23] Ibid. Section 48.
[24] See Section 2 (z) of the Copyright Act. See also Najma Heptulla v. Orient Longman, A.I.R Del. 63. It is proposed to insert an *Explanation* to the aforesaid clause under the Bill clarifying that for the purpose of the said clause cinematograph film is also to be treated as a work of joint authorship except in cases where the producer and the principal director would be the same person.

basically is involved in three kinds of assignments. Teaching, taking up examination work that includes paper setting and guidance to students and paper setting Rights in paper setting is already discussed above. With regard to lectures that are generally oral in nature whether in classrooms or else, the ownership in such oral works belongs to the person delivering or addressing the lecture, irrespective of the fact that the person is employed by any other person who arranges such address or speech or on whose behalf or on whose premises such address or speech is delivered[25]. Hence, without the authority of the author no person can record nor reproduce such work. The guidance imparted especially to the PG students includes corrections, deletions, and additions in appropriate manner and many times it requires writing a paragraph with regard to dissertation and thesis writing. Nonetheless, it is the scholar who is treated as the author of the work. The work of the guide in regarded is treated as 'copy-editing'.

Enforcement of ownership rights: -

Copyright ensures a bundle of rights to the author and two rights; *inter-alia* is considered as very vital to the authors. One is the reproduction right and another is the publication right. Both the rights enable the authors to acquire financial gain. Traditionally, the Act provided sufficient protection to authors against third person for making unauthorized use but with the advanced technologies mode of publication and reproduction has changed from simple hard copies to electronic copies. Similarly, publication has also transformed from distribution of tangible copies to communication in intangible form through cyberspace. Enforcement of copyright over the cyberspace has become very difficult because of the varied location of different players involved therein. The author or the content provider belongs to one country the web owner is from another country, the communication is made through a third country and its user or abuser may belong to a fourth country. National laws of any country are applicable within the boundaries of that country and hence it is very difficult to take action against the person residing beyond the jurisdiction of country. The Government has set up on November 6, 1991 a Copyright Enforcement Advisory Council (CEAC) to review the progress of enforcement of Copyright Act periodically and to advise the Government regarding measures for improving the enforcement of the Act.

Digitization of Works and Management of Author's Rights through 'Rights Management System' and Role of Copyright Societies - whenever a work is digitized and electronically made available through cyberspace, two remedies may be suggested in this regard to protect the works. One is the 'Management of Rights' through Copyright Societies and another is the use of 'Technological

[25] See Section 17 (cc) of the Copyright Act.

Measures'. "Rights Management Information", which means the title or other information identifying the work or performance, the name of the author or performer, the name and address of the owner of rights, terms and conditions regarding the use of the rights and the number or code that represents the above information but does not include any device or procedure intended to identify the user.[26]

The new Section 65A under the amended Act deals with protection of technological measures. Sub-Section (*1*) of the said Section seeks to provide that any person who circumvents an effective technological measure applied for the purpose of protecting any of the rights conferred by the Act, with the intention of infringing such rights, shall be punishable with imprisonment which may extend to two years and shall also be liable to fine. Sub-Section (*2*) seeks to provide that nothing in sub-Section (*1*) shall prevent any person from doing anything referred to therein for a purpose not expressly prohibited by the Act. It also seeks to provide that any person facilitating circumvention by another person of a technological measure for such a purpose shall maintain a complete record of such other person including his name, address and all relevant particulars necessary to identify him and the purpose for which he has been facilitated or doing anything necessary to conduct encryption research using a lawfully obtained encrypted copy or conducting any lawful investigation or doing anything necessary for the purpose of testing the security of a computer system or a computer network with the authorization of its owner or operator or doing anything necessary to circumvent technological measures intended for identification or surveillance of a user or taking measures necessary in the interest of national security

It is not easy for authors to manage these rights in individual capacity. Their involvement in commercial dealings may impair with the quality of their creations. Hence, assignment or providing a license to copyright society by the author/owner of the copyright is advisable. Copyright societies are professional bodies created according to the provisions of the Act[27]. The primary object of these societies is to grant licenses to various persons intending to use copyright work collect fee and distribute it among authors[28]. They also undertake to monitor the misuse of works by others. Newly added Section 65B in the Act deals with protection of rights management information.[29] The proposed Section seeks to provide that any person, who knowingly removes or alters any rights management information without authority, or distributes, imports for distribution, broadcasts or communicates to the public, without

[26] New clause (xa) in Section 2.

[27] Copyright Act, 1957, Sections 33- 36.

[28] In order to encourage accountability and transparency, new provisions have been introduced, to deal with the undistributed royalty amounts and use of electronic and traceable payment methods while collection and distribution of royalties. See Copyright Rules, as amended in 2021.

[29] In conformity to Article 12 of the WCT and Article 19 of the WPPT,

authority, copies of any work, or performance knowing that electronic rights management information has been removed or altered without authority, shall be punishable with imprisonment which may extend to two years and shall also be liable to fine. It also provides that if the rights management information has been tampered with in any work, the owner of copyright in such work may also avail of civil remedies provided under Chapter XII of the Act against the persons indulging in such acts described above.

Management of rights in works over Cyberspace: - This requires new technologies that enable the author to restrain the third person from making an unauthorized access and use of protected works. This is generally materialized by using techniques such as passwords, encryption, watermarking etc. but it is not uncommon to find that protected technological cover used by the authors is quite often broken by the unscrupulous technocrats. It is high time to take measures to regulate the unlawful acts of techno-thieves. US is the first country that has enacted laws in this regard under Digital Millennium Copyright Act, 2000. At the international level World Intellectual Property Organization (WIPO) took the initiative and convened two treaties – the WIPO Copyright Treaty (WCT) and WIPO Performers and Phonograms Treaty (WPPT). These treaties inter-alia, obliges member countries to take steps against persons who use circumventing technologies to get an access to protected work and thereby exploit the work at their will, without having any concern for the original author. Attempt to check such illegal practice is required to be undertaken by all the countries. In India rights of authors are well recognized and the Act also exhaustively deals with various aspects of enforcement. The Copyright (Amendment) Act, 2012 made certain amendments to the Copyright Act, 1957 with certain changes for clarity, to remove operational difficulties and also to address certain newer issues that have emerged in the context of digital technologies and the Internet. The new provisions of the Copyright Act, 1957 are in conformity with the two World Intellectual Property Organization (WIPO) Internet Treaties, namely, WIPO Copyright Treaty (WCT), 1996 and WIPO Performances and Phonograms Treaty (WPPT), 1996 to the extent considered necessary and desirable.

Conclusion: - Unlike ownership in tangible property ownership and management of intellectual property have different dimensions to be taken care of. The IP ownership is enjoyed more by the third person than the creator himself. Digitization of works and cyberspace no doubt have availed new opportunities for the authors/owners of copyright but at the same time it has also engendered new challenges. It may be expected that provisions to regulate cyber- theft of protected works under the amended Copyright Act and membership to WCT will provide wider protection to our authors/owners

of copyright at national and international level as well. At the same time, it is essential for every author/owner to be aware of his rights to understand the potential value of his work.

Legal Implications of a Meme in India and EU

Khushboo Soni*

Abstract

A Meme is an image, a video, a piece of text, etc. that is passed very quickly from one internet user to another, often with slight changes that make it humorous. They are communicative expressions used as a source of entertainment, marketing, and commercial gains. They are easily accessible and widely distributed without any supervision. They might be used for private consumption or for generating monetary benefits. It is an element of a culture or system of behavior passed from one individual to another usually by imitation. This paper seeks to analyze the legal jurisprudence surrounding memes and elucidates legal implications of creating and sharing memes under copyright laws, trademark laws and the right to publicity or personality rights in India and the United States. Memes may include copyrighted images, artwork or videos of another without the consent of the author. The use of a copyrighted work as a meme can be regarded as an unprotectable idea or as a parodic fair use expression. Creators of meme may also desire copyright protection. A meme may also include a trademark of another. In such instances, a trademark owner can raise legal claims for dilution or infringement against unauthorized use of the mark. Trademark protection may also be accorded to the creator of a meme as a source indicator in certain circumstances. Often memes include images of people and thereby violate an individual's right to commercially use and exploit their name, likeness or persona by infringing their right of publicity or personality rights. In such situations, the outcome of a claim may vary depending on whether the person involved is a celebrity or a common person. The article highlights various gaps in the laws surrounding memes. It emphasizes on excessive dependence on judges in the determination of the validity of a meme. It further enunciates the significance of memes as a method of communication and political dissent and the need for the legal system to develop with current cultural and technological advances.

Introduction

A meme is defined as "an image, video, piece of text, etc., typically humorous in nature, which is copied and spread rapidly by internet users, often with slight variations".[1] With a substantial amount of time and resources spent by users on social media,[2] these memes are often used as a source of entertainment, communication, and even marketing.[3] Memes are freely accessible, unsupervised and widely distributed. Some users utilize memes for private consumption and others generate memes for monetary benefits. Though memes gain recognition and attention for a very short period of time, they can infringe intellectual property of others. They often can either be created from scratch or use trademarks, copyrights or pictures or likeness of another. The legal implications of such use vary. In the present society, memes act as an "artistic expression of symbolic or visual speech." [4] They provide not only entertainment and social and political commentary but at times are also defamatory or malicious. This article seeks to analyze the legality of consumer behavior in the creation and sharing of memes and seeks to highlight the gaps in law and limited available jurisprudence concerning memes. Part I of the paper elaborates on the copyright law concerns pertaining to memes. The section further enunciates and distinguishes the legal regime in India and the United States. Part II explores the trademark law legal regime applicable to memes in India and the United States. Part III delves into the legal implications of a meme when it uses likeness or pictures of individuals under the right of publicity or personality rights in India and the United States. Part IV concludes by highlighting the multiple gaps in the law, excessive dependence on the judges in the determination of the validity of memes and the trends of the "golden age of modern parody."[5]

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[1] MEME, OXFORD ENGLISH DICTIONARY (7th ed. 2012).

[2] *Average digital time spent online by teenage and millennials worldwide*, STATISTA (May. 4, 2019) https://www.statista.com/statistics/736727/worldwide-teen-average-online-time-devices/.

[3] Riley C. & Mohaghegh D, *Leveraging trademark Law to Commercialize A Meme*, LAW 360 (May. 4, 2019), https://advance.lexis.com/api/permalink/94482a4c-9429-4816-b14c-3651096bedb6/?context=1000516.

[4] Steiner C, *Intellectual Property and the Rights to Culture*, WIPO (Nov. 9, 1998), https://www.wipo.int/edocs/mdocs/tk/en/wipo_unhchr_ip_pnl_98/wipo_unhchr_ip_pnl_98_2.pdf.

[5] William McGeveran, *The imaginary parody crisis (and the real one*), 90 WASHINGTON LAW REVIEW 713, 713

Memes and Copyright

Memes incorporate pictures, artwork or videos which can be either the meme maker's creation or more often than not, are derived from another's copyrighted work. "Copyright law is generally tricky for contents over the computer including memes."[6] There are several ways to analyze the implications of copyright law in the present situation. Memes can be determined as unprotected ideas[7] or permitted under the fair use exception. Considering memes as mere ideas and not expression undermines both the rights of the original author and the creative expression of the meme creator. Whereas when analyzing a meme from a fair use perspective, the meme is automatically assumed to be an infringement and permissibility of the use is assessed. Fair use of a copyrighted work in the United States is determined through a four-prong inquiry. The purpose and character of the use, nature of the copyrighted work, the amount and substantiality of the portion used and the effects of the use on the potential market for the copyrighted work. Memes can be analyzed as a parody under the fair use doctrine. "A parody conveys two simultaneous and contradictory messages." [8] It reminds the reader of the original work but also adds parodic expression (distinguishing itself from the original work). The fair use analyses of a meme as a parody have been stated below. The purpose and character of a work is regarded as the determinative factor while analyzing fair use.[9]

Courts predominantly determine whether the use of the work is transformative, i.e., whetherthe work adds something new with a further purpose or different character, making it a new expression. Memes can be considered parodies of the original work or even a new method of communication. In *Campbell*, the court regards a parody as a humorous form of criticism, a work that comments on or criticizes the work used.[10] In a parody, it is essential that the reader recognizes the work to be ridiculed and adds the transformative element of humor. If a meme is critical of the work used, it will be regarded as a parody. However, if it seeks to criticize or comments on another

[6] Lantagne S, *The famous on internet: internet memes and legal challenges of evolving the methods of communication*, 52 U. Rich. L. Rev. 387, 387 (2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2944804. In Sony Corp. v. Universal City Studios 464 U.S. 417 (1984).

[7] *Id.*

[8] Cliff Notes v. Bantam Doubleday Dell Publishing Group 886 F.2d 490 (2d Cir. 1989).

[9] Barton Beebe, *An Empirical Study of the Multifactor Tests for Trademark Infringement*, 94 CAL. L. REV. 1581, 1581, 1595 (2006), https://www.jstor.org/stable/20439078?origin=crossref.

[10] Acuff-Rose Music, Inc. v. Campbell 510 U.S. 569 (1994).

work, the "use of the work must be justified."[11] Though the distinction between parody and satire often blurs when a work is established to be transformative, the tedious task of determining the same has been left to the courts. Another method for establishing transformative use of a meme is to regard them as a method of communication. Millennials often use memes to express themselves. Such use can be regarded as a constructed language, conveying a specific idea which cannot be expressed as effectively in other ways.[12] As stated by the court, the nature of the work is not the determinative factor in analyzing parodies as they borrow heavily from the core expressive work.[13] For the amount and substantiality of the copyrighted work used, the courts have dictated both a quantitative and qualitative analysis, permitting variable degrees of copying in accordance with the purpose, character and the transformative use of the work. Memes associated with the pop culture often reproduce quantitatively insubstantial bits but the heart of the work. When reproducing a certain artwork or picture, it can be arduous to determine whether the work is mere imitation or includes creative expression. A parody while using the old work must inform the audience of the new work and must have substantial comments or criticisms. This establishment of creative expression for memes can be extremely difficult and requires the judges to be aware of the pop-culture. The creative expression used is not always obvious. There can be implied meaning, explanation or no criticism but just expression of relatability or appreciation of a situation.

Thus, making such expression another form of communication. The judges need to understand the reason behind the use and determine the transformative use not via additional visible expression supplanted. The judges must consider the use as another method of communication prevalent in social media. For the fourth factor, it must be noted that memes often increase the marketability of the previous use rather than harm it. It is not a substitute for the original copyrighted work. Copyright owners often judge not to take any actions against such memes as the use of such memes provides for a symbiotic benefit of promoting their works.[14] Such copying generally tends to have positive effects on their potential markets. However, leniency is

[11] *Id.*

[12] LANTAGNE, *supra* note 6.

[13] *Id*

[14] Clare Martin, *HBO addresses Trump Tweeting Game of Thrones Meme in Response to Mueller Report,* PASTEL MAGAZINE (Apr. 18, 2019), https://www.pastemagazine.com/articles/2019/04/trump-mueller-report-game-of-thrones-meme.html.

granted only for commercial benefits accrued due to the making and dissemination of memes and not merchandising their works.[15] The commercial use of a meme might be a factor considered against the creators as it uses another work to generate revenues.[16] Commercial speech often accords less First Amendment protection than non-commercial speech.[17] Thereby, sharing memes on social media accounts or within peers might not be actionable. The same cannot be said so for websites or Instagram handles which generate revenue by creating memes or sharing memes created by others. The courts in the US have been particularly mindful of the First Amendment implications while analyzing fair use of a work. They have permitted parodic works even in spite of their offensive nature.[18] Prohibiting memes can act as a mean of censorship and restriction on social dialogue.[19] It can be stated that the social value derived from such usage is substantially high and in the public interest. The culture of the wide dissemination of another's meme is still contentious. Parts or entirety of such memes can be copyrighted by another. The legality and limitations of such use is yet to be determined. Section 52 of the Indian Copyright Act, 1976 provides for certain acts which are not an infringement of the copyright.[20] Courts have regarded the fair dealing provision as a balance between Freedom of Free Speech guaranteed under the Constitution and copyright law.[21] It is noted that while the law doesn't explicitly establish a parody defense, the courts recognize both parodies and satires do not amount to copyright infringement.[22] To constitute fair dealing under the act several factors are analyzed by the court. One of the main criteria is that the intention of the new work must not be to compete with the copyright owner.[23] The use must also not be improper and lastly, the court explores the purpose and contributions

[15] In Grumpy Cat Ltd. v. Grenade Bev. LLC, No. SA CV 15-2063-DOC (DFMx), 2018 U.S. Dist. LEXIS 91342 (C.D. Cal. May 31, 2018).

[16] Rocha Elizabeth, *Y U No Let Me Share Memes?!- How meme culture needs a definitive test for non-commercial speech*, 28 DEPAUL J. ART TECH. & INTELL. PROP. L. 37 (2019).

[17] Deborah J. Kemp, *Lynn M. Forsythe & Ida M. Jones, Parody in Trademark Law: Dumb Starbucks Makes Trademark Law Look Dumb*, 14 J. MARSHALL REV. INTELL. PROP. L. 140, 143 (2015), https://repository.law.uic.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1348&context=ripl.

[18] Shaw v. Dallas Cowboys, 604 F.3d at 206.

[19] Caitlin Dewey, *Russian just made a ton of Internet memes illegal,* THE WASHINGTON POST (Apr. 10, 2015) https://www.washingtonpost.com/news/the-intersect/wp/2015/04/10/russia-just-made-a-ton-of-internet-memes-illegal/?utm_term=.fa29f751bd26.

[20] The Indian Copyright Act, 1957, § 52, No. 14, Acts of Parliament, 1957 (India).

[21] Wiley Eastern & Ors v. Indian Institute of Management, 58 (1995) DLT 449.

[22] Super Cassettes Industries Limited and Ors. v. Chintamani Rao and Ors, 2012 (49) PTC1 (Del).

[23] Blackwood and Sons v. A.N. Parasuraman, AIR 1959 Mad 410.

made by the subsequent work.[24] Determining the legal validity of a meme in the Indian scenario is an onerous task and has been left at the hand of the court.[25] Intent to compete is considered as one of the most important factors. It validates a meme created by the use of another's work but not a meme which draws from another meme. A meme is often based on fads prevalent in social media. Creators often copy memes of another and tweak parts of it. This part of the test allows for copying of another's copyrighted work as the intention is to ridicule or criticize and not compete in the market of the original work. It implicates use when there are subtle changes to another's meme and then both works compete in the market. The analyses whether of the use is improper leaves much to a court's discretion. Such analysis by the court can be tainted by conservatism and political influence or sympathies.[26] Thereby, substantially curtailing Freedom of Speech and Expression. The third factor, which analyses the extent of matter taken, can have varied outcomes depending on whether the court considers the meme completely dependent on the copyrighted work and as a means to attain publicity or it realized the hidden expression added to the copyrighted work. The courts have also noted that the purpose of reproduction shall not be considered fair dealing unless the criticism is fair and justifiable.[27] Memes as a parodic reproduction fail miserably as it incorporates implied humor, necessitates contextual understanding and entertaining nature than fair and justifiable comment, irrespective of commercial exploitation of another's goodwill.

Memes and Trademark

Memes often ridicule or are accompanied by non-economic comments passed on brands.[28] They incorporate the trademarks of the brands with or without any modifications. The owner of a trademark must tediously police its use by others to maintain and assert its intellectual property and to avoid acquiescence or abandonment.[29] Widespread use of the mark with minor modifications can render it generic. Memes also undermine one of the primary incentives to

[24] Civic Chandaran v. Ammi Amma, 996 (16) PTC 670.

[25] Tata Sons Limited v. Greenpeace International Limited, (2011) 1 MIPR 107 (Del).

[26] Leeza Mangaldas, *How a Meme of Indian PM Modi with Puppy Ears Provoked Police Complaints in India,* FORBES (Jul. 17, 2017), *https://www.forbes.com/sites/leezamangaldas/2017/07/17/how-a-meme-of-indian-pm-modi-with-puppy-ears-provoked-police-complaints-in-india/#79741b846570.*

[27] C Civic Chandaran v. Ammi Amma, 996 (16) PTC 670.

[28] Myers C, *Protecting online image in digital age: how trademark issues affect PR practice*, 3(1) RESEARCH JOURNAL OF INSTITUTE FOR PUBLIC RELATIONS (Aug. 16, 2016), https://instituteforpr.org/protecting-online-image-digital-age-trademark-issues-affect-pr-practice/.

[29] RILEY C. & MOHAGHEGH D, *supra* note 3.

maintain a trademark, which is to maintain the image of the brand.[30] Unlike copyright law which seeks to prevent unauthorized copying barring certain circumstances, the trademark law aims to prevent consumer confusion.[31] Even if there is confusion regarding sponsorship or affiliation with the use of a trademark, unauthorized use can be prevented. A trademark owner can raise claims for either dilution or infringement for unauthorized use of the mark in a meme. Trademark protection can also be asserted by creators of a meme when the object or the 'keystone' in certain memes are constant and acts as an indicator of source, especially for merchandising[32]. At the same time, trademark protection cannot be accrued when a creator has used someone else's identity, work or trademark while creating the meme.[33] A meme creator who seeks to trademark a 'keystone' which is similar to someone's copyright or trademark is likely to be denied as the USPTO is not authorized to determine whether a certain mark heavily influenced by other, falls under the fair use while granting registration.[34] In the United States, the use of another's mark is infringing if it's likely to cause consumer confusion. A mark must be used in commerce under the Lanham Act to substantiate liability.[35] Such use might not establish if the meme is shared between individuals as entertainment. However, for websites generating memes for revenue, the use in commerce requirement can be established as "there is sufficient nexus between the usage of the trademark with servicesprovided."[36] In such cases, the rights of the trademark owner must be balanced with the First Amendment rights in the creation of memes. Early case laws prohibited use by the defendant "if adequate alternatives were available to communicate a message".[37]

However, while using a mark in the meme, the mark is used as a communicative expression and not as an indicator of source. There exists no likelihood of confusion as periodic use of the mark does not confuse consumers regarding the source of a given product. To determine the likelihood of confusion, the court analyses several factors.[38] The first factor analyses the strength of the mark which works in favor of parodies and for memes as the consumers are unlikely to be

[30] MYERS, *supra* note 30.
[31] MC GEVERAN, *supra* note 5.
[32] RILEY C. & MOHAGHEGH D, *supra* note 3.
[33] JUSTIA TRADEMARKS, https://trademarks.justia.com/858/36/grumpy-85836805.html, (last visited Mar. 5, 2018).
[34] Riley C. & Mohaghegh D, *supra* note 3.
[35] The Lanham Act 15 U.S.C. §§1051(a), 1053.
[36] Radiance Foundation v. NAACP ,25 F.Supp.3d. 865 (2014).
[37] Shaw v. Dallas Cowboys, 604 F.3d at 206.
[38] Polaroid Corp. v. Polaroid Inc, 319 F.2d 830.

confused. In determining the similarity of the mark, memes can use just the mark or modified mark. Even when memes use the mark itself, it distinguishes itself as an expressive communication and not a source identifier. The products in the present case are dissimilar and so are the facilities and advertising channels. Also, the determination of intent sides towards the meme owners as they lack any intent to confuse the consumers. Both commercial and non-commercial parodies are permitted if they pass the likelihood of confusion test. However, certain types of parodies are not permitted if they are too proximate to commercial use.[39] The interpretation of whether the use is parodic, satire, or permissible has not been uniform. Another cause of action available to the trademark owners is infringement through dilution. Such protection is only accorded to marks that are famous and often used by the creators of the meme. The trademark owner first must establish that it is widely recognized by the "general United States consuming public" and then establish whether the use by the defendant dilutes the mark by either blurring or tarnishing it.[40] To establish blurring the "trademark owner must establish an actual association between the marks".[41] Such "association must impair the distinctiveness or the link between mark and goods or services"[42] offered.

To establish garnishment, the trademark owner must establish that "use is likely to harm itsreputation" and whether the portrayal of the mark is in a "disparaging or derogatory manner".[43] Sexually explicit or drug references are often upheld for dilution.[44] A meme which is based on a brand definitely establishes an association between the marks. Memes are also unaccompanied by unsolicited humor which can harm the reputation of the mark and may portray the mark is a disparaging or derogatory manner. However, the use of a mark for criticizing and commenting is non-actionable. In the case of *Rogers* v. *Grimaldi*, the court established a test balancing the right of the trademark owner and First Amendment rights involved in an expressive work.[45] The test first analyses "whether the work is expressive".[46] Commercial speeches are might be at a certain

[39] Coca-Cola Co. v. Gemini Rising Inc, 46 F. Supp. 1183 (E.D.N.Y. 1972).
[40] Section 2 Trademark Dilution Revision Act of 2006 (H.R. 683).
[41] Louis Vuitton Malletier S.A. v. Haute Diggity Dog, LLC; 507 F.3d 252 (4th Cir 2007).
[42] *Ibid.*
[43] *Ibid.*
[44] *Ibid.*
[45] Rogers v. Grimaldi, 875 F.2d 994, 999 (2d Cir. 1989).
[46] *Ibid.*

disadvantage but are not prohibited.[47] The second question is to consider "whether the use is artistically relevant to the work, irrespective of the amount contributed".[48] Lastly, the court considers "whether the defendant's use explicitly misleads consumers."[49] The memes as a method of communication are definitely expressive works. The creation and use of such memes irrespective of their commercial nature are protected as it is artistically relevant, adds expressive content beyond the mark and does not mislead the consumers. Like the United States, the Indian Trademark Act is also based on the first use system. However, the requirement of 'use' is not as stringent and is satisfied by first use anywhere accompanied by cross border reputation.[50] In order to accord protection, the mark must have goodwill or reputation in Indian which can be even fulfilled via advertisements.[51] Section 29 of the Indian Trademark Act, 1999 illustrates various acts that amount to infringement of a registered trademark.[52] Unregistered trademarks may have a valid cause of action under 'passing off' provisions.[53] The three elements of 'passing off' are 1) "the mark owner has 'established goodwill'"; 2) the "defendant misrepresents and demonstrate its goodsto be plaintiff's" and 3) "such use causes Plaintiff damages".[54]

The Apex Court in *Cadila Health care Ltd.* v. *Cadila Pharmaceuticals Ltd.*, has also analyzed the Polaroid 'likelihood of confusion test' to determine a case of 'passing off'.[55]Also, dilution is governed under Section 29 (4) of the Act. It provides a cause of action for 1) "identical or similar" use of, 2) well-known or "mark that has a reputation in India" and 3) "in relation to goods or services which are not similar".[56] The use of such mark must be "without due cause" taking "unfair advantage of or is detrimental to, distinctive character or repute" of the mark".[57] Section 30 of the Act provides for exceptions to the use of a registered trademark.[58] Section 30 (1) of the Act says that "is in accordance with honest industrial practices or doesn't take unfair

[47] Dogan S. & Lemley M, *Parody as Brand*, 105(5) THE L. JOURNAL OF INT'L TRADEMARK ASSOCIATION *See* Myers C, *supra* note 30.
[48] Rogers v. Grimaldi, 875 F.2d 994, 999 (2d Cir. 1989).
[49] *Ibid.*
[50] Kabushiki Kaisha Toshiba v. TOSIBA Appliances Co. & Ors. MANU/SC/2223/2008.
[51] *Ibid.* The Indian Copyright Act, 1957, § 52, No. 14, Acts of Parliament, 1957 (India).
[52] Trade Marks Act, 1999, § 29, No. 47, Acts of Parliament (India).
[53] Trade Marks Act, 1999, § 27(1), No. 47, Acts of Parliament (India).
[54] Reckitt & Coloman v. Borden (1990) RPC 341 (HL)
[55] Cadila Health care Ltd. v. Cadila Pharmaceuticals Ltd. AIR 2001 SC 1952
[56] Trade Marks Act, 1999, § 29(4), No. 47, Acts of Parliament (India).
[57] Trade Marks Act, 1999, § 29(4), No. 47, Acts of Parliament (India).
[58] Trade Marks Act, 1999, § 30, No. 47, Acts of Parliament (India).

advantage to the detrimental character or repute of the mark."[59] In the progressive judgment of *Tata Sons Ltd.* v. *Greenpeace and Anr*., the Delhi High Court upheld the validity of the parody of trademarks.[60] The Court, in its analysis, emphasizes on the Constitutional 'Freedom of Speech and Expression'[61] and holds that Section 30 of the Act "enables the use of a mark when it's with due cause and non-commercial".[62] It has been argued that the Indian Courts use "good cause for the use of the mark in furtherance of public domain requests."[63] Therefore, owners of the mark can essentially raise two types of cause of action against meme, i.e., claims for infringement of a registered mark or dilution of a famous mark. Passing of claims available to unregistered (not famous) marks are unlikely to succeed because memes do not use a mark as a source indicator. A meme maker does not "misrepresent and demonstrate the Plaintiff's goods as his own".[64] The emphasis on Freedom of Speech and Expression by the court renders any legal actions against the creator of the memes highly improbable.[65]

Memes and Right of Publicity

Memes often contain pictures or videos of individuals irrespective of their status as celebrities. In fact, there are instances where people attain public recognition as their images turn viral in memes. Such images often implicate the right of publicity of an individual. An individual has the right to commercially use and control their name, likeness or persona.[66] In the United States, the right of publicity comes under the ambit of state laws and common law. In principle, these rights belong to all celebrities and commoners alike. A 9th circuit judgment elaborated a test balancing right of publicity and First Amendment rights of an individual.[67] The test emphasizes on whether the work adds "significant creative element so as to be transformed into something more than mere likeness or imitation", "whether the likeness of a person is one of the ingredients or the very substance of the work" and "whether the marketability and economic value of the work

[59] Trade Marks Act, 1999, § 31(1), No. 47, Acts of Parliament (India).
[60] Tata Sons Limited v. Greenpeace and Anr, 178 (2011) DLT 705.
[61] INDIA CONST. art. 19.
[62] Tata Sons Limited v. Greenpeace and Anr, 178 (2011) DLT 705.
[63] *Study of Misappropriation of Signs Committee on Development and Intellectual Property (CDIP)* CDIP/9/INF/5, WIPO (Mar. 14, 2012), https://www.wipo.int/edocs/mdocs/mdocs/en/cdip_9/cdip_9_inf_5
[64] Trade Marks Act, 1999, § 27(2), No. 47, Acts of Parliament (India).
[65] CDIP, *supra* note 65.
[66] *In re* NCAA Student Athlete Name and Likeness Licensing Litigation 724 F.3d 1268 (9th Cir. 2013).
[67] *Ibid.*

is derived primarily from the fame of the celebrity".[68] Analysis of this test for memes can be very tricky and is highly dependent on the judge. A meme with an individual's photograph can include just the picture, a picture with some phrase related to the individual or a picture with a phrase in a different context. It can be argued that a picture in a descriptive phrase in a different context had creative elements included, rendering the image to be transformative or more than the likeness or imitation of someone's personality. However, memes that include just the images or images with a saying or dialogue of a celebrity might not have some observable added creative element and arguably is an imitation or mere likeness of an individual. The celebrities in all such memes are the main substance of the work and the economic value or marketability is derived primarily from the reference to such person. Courts in their analysis have realized the importance of excluding parodies from the right of publicity even when an individual is mocked for profit.[69] It is essential to remind the public of someone in order to have a successful parody and therefore, the use of name or likeness is permitted.[70] The Supreme Court dictates a stringent test for public figures to recover from intentional infliction of emotional distress.[71]

The public figure must not only prove that the published material consists of a false statement but such statements must also be made with actual malice as well.[72] The court provides expansive scope to the First Amendment right by forbidding suppressions of materials based on offensiveness.[73] Such views of the court encourage political dialogue in society. One of the major concerns or uncertainty in law involves memes including ordinary people. One of the 'Dancing with the Stars' celebrities posted a meme commenting that obesity must be considered as child abuse.[74] It was later found that the child in the meme had Down's syndrome and the picture was taken without her consent.[75] Her parents filed a suit under the state laws for misappropriation of likeness and image, false light, invasion of privacy and intentional infliction of emotional

[68] *Ibid.*
[69] White v. Samsung Electronics America 971 F.2d 1395 (9th circ. 1992).
[70] *Ibid.*
[71] Hustler Magazine v. Falwell, 485 U.S. 46 (1988).
[72] *Ibid.*
[73] *Ibid.*
[74] Larry Flowers, *'Dancing with the Stars' pro posts meme of Springfield teen with Down syndrome*, WKRN (May. 4, 2019), https://www.wkrn.com/news/dancing-with-the-stars-pro-posts-meme-of-springfield-teen-with-down-syndrome/1091590447.
[75] S.E. v. Chmerkovskiy, 221 F. Supp. 3d 980 (M.D. Tenn. 2016).

distress.[76] The court held the defendant accountable by stating that the child had a visible mental disability and her condition was not due to parental neglect.[77] In another similar case, a picture of a child with down syndrome was altered with defamatory messages.[78] The negative popularity attached to the meme allegedly made the child physically sick.[79] Eventually, the parents filed a suit against the radio broadcaster who popularized the meme, owner of a user-generated meme website and a user who generated a meme which received significant views.[80] The court ruled in favor of the Plaintiffs and awarded damages.[81] The right of publicity or personality rights in India is not governed by any legislation and has been established by judicial precedents under Article 21 of the Constitution.[82] The development of such a right is still at a nascent stage. The basis of such right stems from the right to privacy wherein the court focus on an individual's right to their identity. The court has observed that personality right vests on celebrities and a "celebrity must be identifiable from the defendant's unauthorized use".[83] "Infringement of such right does not require proof of falsity, deception, confusion if the celebrity is identifiable."[84] However, the meaning of celebrity and methods or extent of identifiably is yet to be determined by the courts and may vary. An exception has been carved for the right of publicity against public figures. It provides that a parody which aims to criticize or satirize the personality of a public figure and uses the identity must be permitted. An artist's expression is permitted unless it "affects public order, decency, morality, defames or incites offenses".[85] A meme in India reproducing the personality of a public figure should ideally be permitted even if the celebrity is identifiable as the parody seeks to satire or comment on the personality of the public figure or celebrity. However, one must note that such rights are only applicable when a celebrity is involved. The use of the likeness of an ordinary person would probably be liable under the right to privacy and is yet to be determined.

[76] *Ibid*.
[77] *Ibid*.
[78] COURT LISTENER, https://www.courtlistener.com/docket/4383563/85/holland-v-lalevee/, (last visited May. 4, 2019).
[79] *Ibid.*
[80] *Ibid.*
[81] *Ibid.*
[82] ICC Development (International) Ltd., v. Arvee Enterprises & Anr. MANU/DE/0053/2003.
[83] *Ibid.*
[84] *Ibid*.
[85] Ashwani v. State of Bihar, AIR 2005 Pat 101.

Conclusion

Memes help integrate the original author's work to culture.[86] They do not cause any direct economic loss to the holder of the intellectual property and often promote their work to the public.[87] The trend creators constantly generate new ideas deriving elements of other's work. Often such usage is without authorization due to the short attention span for online content and ever so evolving trends.[88] As argued, parodies usually win in court.[89] However, parodists including meme makers are not always aware of the law, nor do they possess high incentives, leverage, and investment to pursue their cause.[90] Such use often lacks litigation and is prevented by mere cease and desist notices.[91] Also, like parodies, legality of memes is almost left at the mercy of the courts. Interpretation of what is parodic, satire or obscenity by the courts can be uncertain. For memes, there are additional burdens as the judges need to realize the latest trends, accompanied by unstated expression and context of the work.[92] The decisions of the court can be influenced by the judge's notion of morality, political afflictions and conservatism. However, we must recognize that the sole purpose of memes is not to entertain. Memes act as one of the most efficient forms of dissent provides a non-economic commentary, make people much more socially aware and promote dialogues in society. The adeptness of the current legal system is not at par to deal with the multiple actors and intellectual property rights associated with memes.

[86] *Do memes violate copyright law?*, THE LAW TOG (May. 4, 2019), https://thelawtog.com/memes-violate-copyright-law.

[87] Jamie Condliffe, *Warner Brothers is Being Sued for Using Nyan Cat Without Permission,* GIZMODO (Mar. 5, 2013, https://gizmodo.com/warner-brothers-is-being-sued-for-using-nyan-cat-withou-488315498.

[88] Vatsal Raval, *Marketing with the Memes: A Double-Edged Sword*, AARASH (May. 4, 2019) https://medium.com/aarash-bk/marketing-with-memes-a-double-edged-sword-aarash-vatsal-raval-7064e56d5bc7.

[89] McGeveran, *supra* note 5.

[90] *Ibid.*

[91] Twin Hwang, *How Copyright is killing your favorite memes*, THE WASHINGTON POST (Sep. 8, 2015), https://www.washingtonpost.com/news/the-intersect/wp/2015/09/08/how-copyright-is-killing-your-favorite-memes/?utm_term=.2a21ce6cdb41. Steve Schlackman, *How to Respond to a Getty Extortion Letter,* ART LAW JOURNAL (Jul. 25, 2014), https://alj.artrepreneur.com/respond-getty-images-demand-letter/

[92] Lantagne, *supra* note.

COPYRIGHT FOR HASHTAGS: FACT OR FICTION

Ritika Ranka and Jiss Alphonsa Joy*

Abstract

All of us have said these words to our closed ones several times; 'In a world of algorithms, hashtags and followers, know the true importance of Human connections.' This may not seem too relevant here but the statement clearly captures the feeling that hashtags and its viral usage is indeed an important part of our lives. Which brings us to another important question, as to whether there is a need to regulate hashtags and if yes, how? The authors have tried to answer these questions through this article leaving it to the readers to decide and interpret and categorise hashtags as part of Intellectual Property Rights. Hashtags, these days have become insanely popular for commercial purpose as well as for providing a social message. The trend of hashtags has finally emerged in India owing to large scale participation by the general public to support a cause or message. This makes it an issue of concern as to who gets a right over this symbol and the wordplay created with it. This article tries to analyse the question of whether hashtags are intellectual property and if so, how exactly they will be considered as intellectual property. The article also discusses the current intellectual property laws that are applied in India and its comparative analysis with the United States of America to address the issue of hashtags with special reference to the United States Patent and Trademark Office (USPTO). The authors have also tried to look into the outlook that is presented by the World Intellectual Property Organisation (WIPO) when it comes to the registration of hashtags as trademarks. The article finally concludeswith the discussion on hashtags as intellectual property in India as a matter of fact and not fiction by providing an appropriate conclusion to enable the readers to understand what follows and research further.

Introduction

Hashtags are a word or a phrase that follows the symbol hash (#) and are a popular social media tool that is used in order to identify a post easily.[93] Hashtags are primarily used in social media platforms like Facebook, Instagram and Twitter. It is a kind of metadata, i.e., a set of data that describes and gives information about other data. So, what it basically does is to form a link between all related data in a particular social media platform. A specific hashtag, for example, #sunrise will link all the pictures that have the same hashtag on Instagram, which makes it easy for the user to search all the pictures of the sunrise on Instagram. The use of hashtags has increased manifold over the past decade. The use of hashtags has also increased as it effectively makes the post more attractive in the eyes of others. Such usage has also attracted the practice of use of hashtags as an advertising tool by many.

i) Under what category of Intellectual Property will hashtags fall under?

The question of what amounts to Intellectual Property is constantly evolving. With the constant evolution technology and the seemingly never-ending advancements, the question of what exactly can be included as an intellectual property comes to the forefront. The question of what kind of an intellectual property hashtag will be under is to be found out through an analysis of different kinds of intellectual property rights.[94] Intellectual property can be divided into three.[95] They are: Copyrights, Patents, and Trademarks. The first kind of Intellectual Property that we will analyse is copyrights. Black's Law Dictionary defines copyright as the right in the literary property as recognized and sanctioned by law. It is an intangible right provided to the author or creator of certain literary or artistic work whereby he is entrusted with the singular and exclusive right of publishing and distributing copies of it for a specific period of time.

Section 14 of the Copyrights Act, 1957 defines copyright. The Section provides the right of copyright over literary, dramatic or musical work, artistic work, cinematograph film, and in case

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93 Claire Jones, *Hashtag Trademarks: What Can be Protected?* WIPO (Oct 2017), https://www.wipo.int/wipo_magazine/en/2017/05/article_0009.html.

94 Kashish Khattar, *Can A Hashtag be Protected under Trademark law?* IPLEADERS (May 31, 2018), https://blog.ipleaders.in/hashtag-trademark-law/.

95 CORNISH, LEWLYN & APLIN, INTELLECTUAL PROPERTY: PATENT, COPYRIGHTS, TRADEMARKS & ALLIED RIGHTS (8th ed. 2013).

of sound recording. A proper perusal of the Section 14and the definition that is given above makes it crystal-clear that hashtags will not fall under copyrights. The second group of Intellectual property that needs to be analysed is 'Patents'. Patents refer to a grant of some privilege, property or authority made by the Government or the Sovereign of a country to one or more individuals. The instrument by which such grant is made is known as Patents. Section 2(m) of the Patent Act of 1970 defines what a patent is. So, a patent put plainly can be understood as an invention which is the combination of capital and labour with intellect to create something new and useful. This invention becomes the inventor's exclusive property when a patent is granted. The patentee's exclusive proprietary right over the invention is an intellectual property right. So, for a patent to be granted, there needs to be an invention. In the case of hashtags, no invention is taking place. So clearly hashtags do not come under Patents.

The third group of intellectual property is a trademark. Article 15(1) of the TRIPs agreement defines trademark. It says that any sign or combination of signs capable of distinguishing one goods or services from those of other entities may constitute a trademark. According to Section 2(1) (zb) of the Trade Marks Act of 1999, a trademark is defined as a label capable of being graphically depicted and competent of identifying one person's goods or services from others, including the nature, branding and colour variant of goods. A hashtag is a hash symbol that is followed by a word or a phrase. The criteria that need to fulfil for something to be considered a trademark is given above. The features that constitute hashtags can be fit into these criteria. The analysis as to how exactly hashtags are Intellectual property under trademarks will be discussed in detail further ahead in this article.

The Analysis of Trade Marks Act, 1999 with Relation to Hashtags

The Trade Marks Act, 1999 was enacted in view of developments in trade and trade practices, increased industrialization, the need to foster investment flows and technology transfer, the need to simplify and harmonize trade mark management systems and to give effect to important judicial decisions. The Trade Marks Act, 1999 is a statute which is very extensive and elaborate. In the Act, the term 'Mark' is defined under Section 2(1) (m). It states that, Mark includes a product, a brand, a heading, a logo, a stamp, a sign, a phrase, a symbol, a number, a merchandise type, a manufacturing process or a colour or any variation thereof.

In a subsequent Section 2(1) (zb), the term 'Trademark' is defined as follows, A trademark is defined as a label capable of being graphically depicted and competent of identifying one person's goods or services from others, including the nature, branding and colour variant of goods. Both the terms are well defined and increase the ambit of what can be considered as a trademark. So here let's examine exactly how hashtags will come under the title of trademarks. The term 'Mark' in its definition includes word or numeral, or a combination of the word and numerals. Hashtag clearly fulfils the criteria to qualify as a Mark. When it comes to the definition of 'Trademark' on the other hand, the definition can be split into two parts for better understanding. The first part of the definition says that for something to be constituted as a trademark, it should be competent for graphic representation. The second part of the definition says that the mark should be capable of distinguishing the goods or services of a person from another, i.e. it should lead to identification. The first part of the definition is easily satisfied by hashtags, i.e. a graphical representation of hashtags can be made. The second part of the definition, which states that the mark should enable the goods to be identified is the tricky bit. Hashtags are common in the present world. Rarely so something is posted in a social media platform without the use of hashtags as it is considered as essential by the millennials if they want their post to gather more attention and positive remarks.[96] Moreover, the time period for which a certain hashtag is used is often short. In India, for instance, the trademark is granted for a period of 10 years. But the question comes in why to trademark a hashtag if only it is going to last for a small period. According to the second part of the definition, the mark should enable the customer to identify the source. So, if a hashtag enables a customer to identify the source, then it will fulfil the second part of the definition and can be given the tag of the trademark. And when the question of shelf life of the hashtag is put forward, if a certain hashtag enables the customer to identify the source, then such a hashtag will remain in usage with the continued existence of the social media platform. Another aspect that needs to be looked into before hashtags can be taken into consideration for trademarks is whether such a hashtag is distinctive. The factor that contributes to identifying a trademark is its distinctiveness. So, it can be understood that distinctiveness is a contributory factor if the hashtag must be recognized as a trademark under the second part of the definition.

[96] Himanshu Sharma, *India: Trending In IP: #Hashtags,* MONDAQ (April 7, 2017), http://www.mondaq.com/india/x/583710/Trademark/Trending+In+IP+Hashtags.

Additionally, the Trade Mark Act states that,[97] Trademarks which do not have any unique identity, i.e., which may not differentiate between goods or services of one person with those of another, shall not be registered. Here, the usage of 'shall not' must be noted. This will amount to be an absolute prohibition on the registration of a trademark if it cannot be distinctive. So, if it canbe shown that a hashtag is distinctive, then it can be registered under the Trade Marks Act, 1999. **The United States Patent and Trademark Office (USPTO)**

According to the USPTO,[98] a trademark is a name, expression, emblem or design that defines and distinguishes the source of a product from that of another product. So, in order for a hashtag to be registered in the United States, it should be a source identifier and also distinctive. The registration of hashtags is now a common practice in the United States of America. But the criteria, as stated above, must be strictly satisfied. The decision of which hashtags need to be granted trademark will be decided on a case-by-case basis. In the US, the process to get a trademark registered lasts up to a period of 8 months. So, before applying for a trademark for a hashtag, the shelf life of that will have to be investigated as normally hashtags don't have long term validity.[99] An important judgment that was given out in the US in relation to hashtags was *Eksouzian* v *Albanese.* [100] This decision created uncertainty as to whether hashtags registered has any enforceable value. In this case, the Court held that the use of a certain hashtag by one of the parties did not amount to a breach of the settlement agreement "*because hashtags are merely descriptive instruments, not standardized or otherwise identifiers, in and of themselves"*. The Court faced criticisms because it failed to consider whether a hashtag may function as a source identifier within the USPTO standard. The decision rendered by the Court in this matter has led to confusion as to the function of the hashtag as a trademark and the validity of it.

World Intellectual Property Organization (WIPO) ON HASHTAGS

The WIPO, in an article published on its official website, mentioned that according to recent research, there had been a substantial increase in the applications for trademark-specific

[97] Trade Marks Act, 1999, § 9, No. 47, Acts of Parliament, 1999 (India).

[98] *Trademark, Patent, or Copyrights?*, USPTO https://www.uspto.gov/trademarks-getting-started/trademark-basics.

[99] Carrie L. Kiedrowski & Charlotte K. Murphy, *Are Hashtags Capable of Trademark Protection under U.S. Law?* (Feb 1, 2016), INTA, https://www.inta.org/ INTABulletin/Pages/AreHashtagsCapableof TM Protection under US Law-.aspx.

[100] Eksouzian v. Albanese, CV 13-00728-PSG-MAN, 2015 U.S. Dist.

hashtags over the past decade. In the year 2010, the number of such applications was seven, and in the year 2016, the number of such applications was around 2200. So, it can be noted that within a short span of 6 years, the number of trade-mark-specific hashtags has increased drastically. The WIPO has attributed to this drastic increase in the application to the extensive usage of hashtags on the various social media platforms. The fact that hashtags play a specific role in promoting interest and reactions to a product or service cannot be overlooked. The usage of the symbol by a large population which mainly comprises of the younger generation, which forms a significant portion of the current market has also contributed to the rise in the trademark-specific hashtags. Such a symbol would facilitate the younger generation who are constant social media users to identify a certain product or service with the assistance of these hashtags. So, hashtags are a very important marketing tool in today's world.

Conclusion

The authors would like to point out that the usage of hashtags as a marketing tool by certain enterprises is a good idea to boost sales as it gives the product or service lots of coverage in various social media platform. The trademarking of certain hashtags to ensure that they only point to a certain product or service seems necessary in some situations since the role played them in promotion is quite large. But the question on how to ensure that only those hashtags should be trademarked comes with a plethora of other questions. Numerous factors need to be considered when an application is presented for trademarking a hashtag. This will include the distinctiveness of the hashtag, the source-identifying capability, the shelf life of the hashtag etc. Hashtags have a short life commonly. So, if at all a hashtag needs to be registered also comes into question. In answering this question, a thorough investigation must be conducted. For example, Nike put up its tagline as its hashtag, i.e., #justdoit. The tagline has been used by Nike since 1988. So, the use of such a tagline as its hashtag has made it unique, and such a hashtag clearly points out to Nike. Since this phrase has been used by Nike for a long time, it can be reasonably presumed that it will keep using it in the future as well. So, clearly, that phrase is not going anywhere. And this guarantees a long shelf life to that hashtag. So, all these factors must be kept in mind before a hashtag is registered as a trademark, and it being a trademark has to be protected under the law both nationally and internationally.

INVENTIONS BY ARTIFICIAL INTELLIGENCE, SHOULD THEY BE GRANTED PATENTS

Ayan Saini*

Abstract

Artificial intelligence is a set of coding that is designed to do productive thinking and work for the better and efficient functioning of human works in order to comfort human lives. Artificial intelligence technology is new to humankind and recent developments in the technology made it a point of attraction for humans when humans knew that something could be made by the way of coding which could learn things on their own like humans. This article will discuss upon whether artificial intelligence can be provided a patent right? Presently we are not at a stage where artificial intelligence got developed enough to a level where it would start making something new of their own, but we cannot deny the possibility of happening same in the future considering the recent developments in the field of artificial intelligence. There is an uncertainty as to whether artificial intelligence will be capable of getting patents if it produces something new and unique on its own. Simultaneously, what would be the grounds on which artificial intelligence can be denied a patent right if it acquires citizenship of a country and stands at equal footing as humans with respect to constitutional rights. Sophia (humanoid) has been given citizenship of Saudi Arabia, which in a way specifies that she has rights which cannot be taken away from her. Now, can she be granted patent if she develops something new because as a citizen of Saudi Arabia she has a freedom to exercise her rights similar to other citizens? Now, present patent laws as well as constitutional laws doesn't discuss about this problem because few years later no one had even a tetchiest of idea as this could also happen and such questions started arising only after Sophia got citizenship. Surely, if artificial intelligence of future would be capable of thinking then would also be capable of breaking laws as a result of same thinking abilities. In the end the article proposes that for solving this problem a new idea or set of laws from scratch has to be brought which could solve all the problems.

Introduction

Artificial intelligence is a system of computer program that is designed to think in a way in which normal person thinks and automatically learn from their previous mistakes. This programming system is a new concept and is in the developmental phases across the world. It is supposed that its continuous development would lead the world towards a better future where such artificial intelligence would help humans in solving their problems[101]. Now the question comes is whether artificial intelligence can be provided a patent right. As of now we don't have such artificial intelligence which is involved in finding something new, but if in future artificial intelligence invents something unique then should that artificial intelligence be provided a patent right. On what basis an artificial intelligence can be denied a patent right if it has really invented something unique in the future, as a result of scientist's upcoming developments regarding thinking capacity of a humanoid artificial intelligence. Sophia is a humanoid robot which is designed by a Hong Kong based company and is capable to see, sustain eye contact, speak, think before responding, answer questions, understands others feelings by facial recognition and can also show her own feeling, all by computer algorithms[102]. Also, she has been given citizenship of Saudi Arabia, which in a way specifies that she has rights which cannot be taken away from her. Now, can she be granted patent if she develops something new because as a citizen of Saudi Arabia she has a freedom to exercise her rights which in a way is related to the right of having a patent on the basis of quality? Can she be deprived from some of her rights even after getting citizenship and being capable of performing human like functions? Artificial intelligence of future, if would be capable of thinking then would also be capable of breaking laws. Now if they break laws relating to patents or constitution then what could be done, can they be punished for the wrongs done by them? Punishment is a method of deterring others from doing same wrong but such deterrence doesn't seem to work against artificial intelligence because of its robotic and arithmetic software nature and inability to feel pain and suffering like humans.

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[101] Clocksin & William F, *Artificial Intelligence and the Future* 361 PTMES. 1809, 1721 (2003), www.jstor.org/stable/3559219.

[102]Michael Greshko, *Meet Sophia, the Robot That Looks Almost Human*, NATIONALGEOGRAPHIC (Oct. 25, 2019), https://www.nationalgeographic.com/photography/proof/2018/05/sophia-robot-artificial-intelligence-science/.

Unique Relation of Artificial Intelligence and Inventions in Future

According to Oxford dictionaries Artificial Intelligence means "The theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages."[103] Artificial intelligence in today's world is seen as an invention which can be patented. In today's world technological advancements of artificial intelligence is in its early phase of development. Artificial intelligence in modern world is evolving as an alternative to productive thinking and efficient working manner in different kinds of industries, which are in a way helping industries in better and cost effective functioning.[104] Surely at some time in the future, artificial intelligence doing smart works and also inventing something new from the scratch won't be a farfetched reality, considering the developments in the particular field in recent years where artificial intelligence incepted learning things on their own and helping humans in solving problems as well as pioneering interactions with humans in a same way as humans do with each other all because of the newly developed humanoid technology. Till now 3,40,000 Artificial intelligence related patent applications have been filed out of which 40% of all artificial intelligence patent mentions machine learning which is incredibly growing at the rate of 28% every year, along with this the mentions of deep learning in the patents in astonishingly increasing at the rate of 175% annually.[105] Section 2(1) (m) of the Indian Patent Act, 1970 defines patent as "patent means a patent for any invention granted under this Act."[106] Concept of giving patent arose from an intention of giving some exclusive rights to the one who has invented something different, new and useful. A patent gives a sense of belongingness and ownership to the inventor with respect to their invention considering arduous efforts involved in the process of invention. Having a sense of ownership, inventor can also earn money by using his invention in a legitimate manner as prescribed by law. The culture of presenting patents appreciates and awards the inventor of a

[103] *Artificial intelligence*, OXFORD DICTIONARIES (Oct. 27, 2019), https://en.oxforddictionaries.com/definition/artificial_intelligence.
[104] Rossi Francesca, *Building Trust in Artificial Intelligence*, 72.1, JOURNAL OF INTERNATIONAL AFFAIRS. 127, 134, (Oct. 27, 2019), www.jstor.org/stable/26588348.
[105] Francis, *The Story of AI in Patents*, WIPO (Oct. 28, 2019), https://www.wipo.int/tech_trends/en/artificial_intelligence/story.html.
[106] The Patent Act, 1970, § 2, No.39, Acts of Parliament, 1970 (India).

particular invention with an aim to encourage inventions in the society.[107] Encapsulating the samein a simpler manner, why would anyone invent something without getting any benefit out of the same for his hard work? What if in the future artificial intelligence starts thinking more creativelyand as a result of it starts inventing something new which could fit into the category of inventive step and fulfills all the criteria that are needed for terming something eligible of patents? Artificialintelligence is built to think and do something innovative or to learn from present things and correctits mistakes in the future; in simple words it could be a copy of human mind and could imitate thethings which a human mind is capable of in the coming times[108]. Even though it's not a reality but we cannot deny the fast developmental steps taken by technicians and scientists in recent years to show that developing a robot which can think and behave like humans is not a farfetched reality. When in the future such artificial intelligence technology would develop, one of the problems that ensue will be related to the issue of intellectual property rights. New inventions by artificial intelligence may bring a lot of inventions and discoveries unknown to the humans, which would enable artificial intelligence as a contender for demanding patent(s) of their invention(s). The stumble of artificial intelligence technology seems impossible in the future because of their benefits to the human race rather we need to take measures to face upcoming problems due to rise in artificial intelligence technology and their constantly developing thinking ability.

Right of Artificial Intelligence to Demand Rights

Robots having enough artificial intelligence to behave like humans would automatically develop an instinct to have rights. We can't say whether it would be similar to human rights or not but consciousness of being alive like all other humans would certainly emerge into need of rights for survival, equal and fair treatment. Should artificial intelligence be given rights, is a major issue because providing rights to someone according to the concept of Jural Relations of jurisprudence enlightens us that rights also bring certain kind of duties with it and there must be a person who understands its duties towards other being in order to lead a proper society.[109] Rights are hard to be given to someone who has not yet proved or can never prove that one is obliged to someone

[107] Kremer Michael, *Patent Buyouts: A Mechanism for Encouraging Innovation*, 4 THE QUARTERLY JOURNAL OF ECONOMICS 1137,1167, (Oct. 21, 2019), www.jstor.org/stable/2586977.

[108] Kurzweil Raymond, *What Is Artificial Intelligence Anyway? As the Techniques of Computing Grow More Sophisticated, Machines Are Beginning to Appear Intelligent—but Can They Actually Think*, 73 (3) AMERICAN SCIENTIST 258, 264 (Oct. 25, 2019), www.jstor.org/stable/27853237.

[109]Corbin Arthur L, *Jural Relations and Their Classification*, 30 (3) THE YALE LAW JOURNAL. 226, 238 (Oct. 19, 2019), www.jstor.org/stable/786527.

else and would perform its duty towards others in a same way as human do. Sophia is a humanoid and is a part of artificial intelligence system. "Sophia is structured like humans, can make number of facial expressions, can see hear and analyze activities around it and more importantly it is designed to improve with time and can learn things from the surroundings."[110] Sophia is a step towards more such humanoids which would be much more capable than Sophia. Sophia recently got citizenship of Saudi Arabia, which means that something new has been done for the first time in the history which could have unascertained consequences in the future if other countries also start giving such citizenships to the humanoids.[111] Whether Sophia has rights or not or whether she would be treated as normal citizens of Saudi Arabia, remains an unanswered question till now. In coming times if other countries also start giving citizenship to humanoids then the humanoids like Sophia will demand all the rights that a normal human being has because if a humanoid is given citizenship then according the constitutions of most of the countries humanoids must also be given rights guaranteed by the constitution of that country.[112] If we take example of India, then in the preamble of the constitution itself it is written that "We, the people of India, having solemnly resolved to constitute India into a sovereign socialist secular democratic republic and to secure to all its "citizens"- justice, liberty, equality, fraternity."[113] Now after getting citizenship it is responsibility of the government to follow what is written in the constitution and it becomes responsibility of the constitution to protect everyone who has citizenship. Now subsequent question comes, Can someone be denied of certain rights or be given some extra privileges after getting citizenship? The answer lies behind the concept of exceptions to certain rights; this can be seen clearly in our constitution too in the form of certain privileges or extended rights like in the cases of parliamentary privileges or special provisions to north east states under Article 371.[114] Also the rights and freedom of people can be restricted to a certain extent by imposing curfew, emergency etc. or by having reasonable restriction on using rights to an extent where it infringes

[110] *About Sophia*, HANSON ROBOTICS (Oct. 19, 2019), https://www.hansonrobotics.com/sophia/.

[111] Zara Stone, *Everything You Need To Know About Sophia the World's First Robot Citizen*, FORBES (Oct. 24, 2019), https://www.forbes.com/sites/zarastone/2017/11/07/everything-you-need-to-know-about-sophia-the-worlds- first-robot-citizen/#1ac5137b46fa.

[112] Cygan Adam, *Citizenship and Fundamental Rights*, 58(4) THE INTERNATIONAL AND COMPARATIVE LAW QUARTERLY 1002, 1012 (Oct. 28, 2019), www.jstor.org/stable/25622254.

[113] IND. CONST. Preamble.

[114] Nirmalendu Bikash Rakshit, *Parliamentary Privileges and Fundamental Rights*, 39(13) ECONOMIC AND POLITICAL WEEKLY 1379,1383 (Oct. 26, 2019), www.jstor.org/stable/4414828.

someone else rights e.g., Defamation. But for extending or restricting rights, one must necessarily have strong reasoning behind it, as constitutional rights cannot be fully denied and especially when something is clearly mentioned in the preamble itself which is known as heart and soul of any constitution. Artificial intelligence after getting citizenship, according to constitution must have right to equality same as it is applied for normal human beings and must be free from any kind of discrimination. This sense of anti-discriminatory nature will come from the sole nature of human like behavior of humanoid and presenting citizenship to humanoids would automatically enable humanoids from being treated indifferently.[115] Whenever artificial intelligence or humanoids would apply for patents in the future then would they be eligible to get patents? According to lawthey must be treated equally like any other national of that country without any discrimination andshould be given patents, but will it really serve the purpose of getting patents? Patents encourage inventions and gives financial support to that inventor along with a sense of belonging to that invention. Do humanoids really need money and perquisites to encourage research in the same wayas humans need? I think they don't need all of these money and perquisites because money is needed to fulfill daily human needs and comfort. Sense of belongingness is a natural instinct of a human that cannot be separated but humanoids don't need all these to work, humanoids are like machines and even if they get human like senses, human like desires and comfort wouldn't be of any use for them because ultimately they are robots with intelligence achieved with the help of coding and not humans who needs money and comfort for survival and use it as a tool of personal encouragement for continue doing the work. Till humanoids don't have human like intelligence, we can restrict humanoids from getting patents but we can't do it when they will start having intelligence to a level where they would know rights and have desire to be treated equally like humans. Even though it seems as a farfetched reality but in science and technology you never knowabout the pace of future scientific developments which exists only to make impossible tasks possible. Providing patents to humanoids won't do any good as it doesn't fulfill the actual core cause of giving patents which acts as an encouragement for humans to work further with passion.The further question arises as whether present constitution can be applied on the humanoids? Theanswer is of course not because the intent of the constitutional committee while drafting the constitution was to give equal rights to the citizens which were humans and never thought about

[115] Robert, *Democracy and Equality*, 603 THE ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE 24, 36 (Oct. 23, 2019), www.jstor.org/stable/25097755.

giving citizenship to humanoid or anyone other than humans. The application of preamble and constitution on one who was never in the mind of constitutional committee seems a bit unfair. Simultaneously, it was never thought before that humanoids can also be given citizenship where the concept of being a citizen only applied to humans and no one else earlier.

Infringement of Patents and Its Consequences

Infringement is a term that explains wrong done or law not followed in a way in which it is meant to be followed and such act of infringement of laws lead to the further consequences in terms of punishment.[116] The concept of punishment existed in the society since humans had consciousness of committing something wrong or analyzing that something wrong needs to be corrected. The concept of punishment in ancient period was seen as a concept of eye for an eye[117] and later in other periods of time it gradually developed into the concept of deterrence used not only to punish the person for its crime but also deter others so that other people won't do such act in the future and the balance between what is wrong and what is right would be maintained in the society.[118] Main essence of the concept of punishment is some kind of suffering and showing others that such thing can happen if you do or abstain from doing the same thing in the future. The core concept of punishment cannot be applied on humanoids as effectively as on humans because human feels pain, suffering and a sense of losing freedom and that instinct of suffering stops a person to do something against the law which can't be induced in an artificial intelligence. Humanoids cannot have a sense of pain or suffering because their body is robotic, which could surely sense the damage done to the body but cannot feel pain or suffering of any kind even though they can have a sense of confinement in prison but confinement without any suffering or pain won't serve the ultimate purpose of punishment, also in the era of internet it would be difficult to cut humanoids off their internet access which is their actual freedom completely different from human freedom. Along with this the whole artificial intelligence is just a set of codes which cannot in any way be punished till some changes are made in those codes or disabling such codes, which would lead us to another question as whether life of a citizen be taken for serving the purpose of punishment which is considered as hardest form of punishment considering the fact that capital

[116] Ferguson Pamela R, *In Breach of the Peace,* EDINBURGH UNIVERSITY PRESS 23, 64 (Oct. 20, 2019), www.jstor.org/stable/10.3366/j.ctt1g09xxm.8.

[117] Rowan Brian, *Eye for an Eye*, 8 FORTNIGHT 322 (Oct. 22, 2019), www.jstor.org/stable/25554277.

[118] Viscusi & Kip, *the Risks and Rewards of Criminal Activity: A Comprehensive Test of Criminal Deterrence,* 4(3) JOURNAL OF LABOR ECONOMICS 317, 340 (Oct. 27, 2019), www.jstor.org/stable/2535056.

punishment is also banned in a lot of counties.[119] If sometime in future humanoids start breaching the patent laws then there is no effective measure to stop them from doing this because humanoids can't be treated and punished like humans. We have to admit the fact that if patent rights are givento humanoids then they are capable of breaching the existing laws just like humans, without any fear or lesser fear of being punished for the same.[120] We can't give patents to humanoids because patent laws are not designed to be given to anyone other than humans according to the core concept of giving intellectual property rights to an individual discussed in Para 6. Also, legislative intent must also be kept in consideration as the patent laws were made by legislature having in mind humans and not humanoids which are completely different from humans. It is also not feasible to have patents in the name of artificial intelligence which would make it difficult for laws to be applied on them and against whom we don't have any method of deterrence.

Is there anything wrong in the Concept of Patents

Whenever the laws are made, they take care of the present situation of the society and givessolution to the problems of that particular time when the laws are enacted. Laws cannot foresee thechanges in the society with growing period of time.[121] For such kind of changes in society laws givean option to amend the present laws according the changing society and its acceptability[122] e.g., Acceptability of homosexuals in society.[123] But in the case of giving patents to artificial intelligence the whole concept of patents looks a bit inappropriate because it was designed for humans and not humanoids. Humanoids are capable of inventing something which can be patentedbut the concept of giving patents to humanoids doesn't fit according to present patent laws. The amendments in the present law doesn't seem to solve the future problems because patent laws were made for humans to support them financially, encourage more inventions and to provide inventorwith sense of belongingness to his own invention in its core concept by giving some rights upon that invention. Now after this, another question arises as to whether the person or company who

[119]*Death Penalty*, AMNESTY INTERNATIONAL, (Oct. 26, 2019) https://www.amnesty.org/en/what-we-do/death-penalty/.

[120] Meyer Joel, *Reflections on Some Theories of Punishment*, 59 (4) The Journal of Criminal Law, Criminology, and Police Science 595, 599 (Oct. 24, 2019), www.jstor.org/stable/1141839.

[121]Horváth Attila, *Tradition and Modernization: Educational Consequences of Changes in Hungarian Society*, 36 (2) INTERNATIONAL REVIEW OF EDUCATION 207, 217 (Oct. 19, 2019), www.jstor.org/stable/3444561.

[122] Manfredi Christopher, *Why Do Formal Amendments Fail? An Institutional Design Analysis*, 50 (3), WORLD POLITICS 377, 400 (Oct. 28, 2019), www.jstor.org/stable/25054046.

[123] Misra Geetanjali, *Decriminalizing Homosexuality in India*, 17 (34) REPRODUCTIVE HEALTH MATTERS 20, 28 (Oct. 23, 2019), www.jstor.org/stable/40647442.

created that humanoid will be able to get patent? Now this is a matter of debate because by this a person or company without doing anything can have number of patents in its name which is in a way against concept of patents because patents give all rights and privileges to one who have invested its sweat in the particular invention.[124]

One cannot and should not get any patent without doing anything productive, making humanoid which can invent something new should not make the person or company who made that humanoid capable of getting patens on that invention done by humanoid because if a person builds something which can do inventions for them would make people to get endless source of income without making any efforts. Simultaneously, the humanoid which company or a person designed from his efforts can get patent on that particular invention of humanoid only and not on the inventions done by such humanoid. The concept of giving rights to the artificial intelligence comes into picture with the concept of providing citizenship to artificial intelligence. Once citizenship is given, constitution comes to the rescue of that citizen and causes problems as the same concept could not be made applicable on humanoids in the case of patents because it breaches its core concept intellectual property rights. For solving this problem, a new idea or law from scratch has to be brought which could solve all the problems, one of which could be a ban on citizenship given to humanoids which seems to cause majority of problems discussed in the article. By banningthe process of providing citizenship to humanoids, we can develop an environment for intellectualproperty laws to go hand in hand with existing constitutional laws and further be able to think on laws fit to deal with the situation in future according to the changing time and technology particularly in the field of artificial intelligence.

Conclusion

Artificial intelligence is growing at a rapid rate in the present society. In recent years we have done a lot of growth in this particular sector and produced humanoids like Sophia, which can walk, talk, show expressions and most importantly learn from past experiences. Sophia in particular got citizenship of Saudi Arabia and got all the rights that a citizen must get. In future if humanoids like Sophia will claim patents on the basis of their right to be treated equally with respect to other citizens of the country, then this situation would cause a lot of problems because of the fact that neither the constitution nor the patent rights were enacted keeping in mind anyone

[124] Hall Bronwyn Hetal, *Recent Research on the Economics of Patents*, 4 ANNUAL REVIEW OF ECONOMICS 541, 565 (Oct. 24, 2019), www.jstor.org/stable/42949948.

other than humans, application of present laws on humanoids would be like applying laws on one which were not even though about while enacting the laws and is completely against the concept of legislative intent. Even if humanoids invent something, they won't become eligible to get patents because the core purpose of providing patent to inventions gets defeated as the law of patents is made for humans and not humanoids. Another thing is that the humanoids can't be punished after any kind of patent laws infringement because the concept of suffering and pain can't be applied on humanoids, simultaneously the deterrence techniques might not work as effectively as it works on humans. Therefore, there would be a need in future to frame new set of laws from scratch regarding patent rights, constitution and all other related laws which could apply on both humans and humanoids because the present laws are not capable enough to deal with problems which would arise after the further advancements in artificial intelligence. It is necessary to change the policy of giving citizenships to humanoids or restrict other countries from doing as what Saudi Arabia did because citizenship automatically brings a lot of rights with it and the concept of citizenship is solely for humans because when concept of citizenship was formed humans were the only species for whom it was made and who understands one's rights and duties towards each other according to the constitution and follow the same with a fear of being punished on the failure of the same. Present set of laws are not capable of handling the future problems because earlier problems were never thought from such perspective which is needed to be thought in coming future. For sure at some time in future we will face such problem, therefore we need be prepared as to what needs to be done when such problem will occur.

AYURVEDA AND GEOGRAPHICAL INDICATIONS

Samhitha Sharath Reddy*

Abstract

The article aims to answer two main questions of 'whether the intellectual property rights bestowed upon Ayurveda medicine is sufficient to protect the centuries' old traditional knowledge, and the other is how can the hurdles preventing Geographical Indication tags being granted to services be overcome?' Ayurveda is an ancient Indian practice that is a result of traditional knowledge and the culture of certain specific communities of certain states. There is no proper documentation of such ancient knowledge and the practice is slowly dying down. While the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) does not limit geographical indications to only goods, India has chosen to extend the Geographical Indication tag only to goods and not services. There are other countries who have extended the Geographical Indication tag to services as well, which the author has briefly discussed in the article as well. This article argues that India must provide the GI tag to services as well and by doing so, provide the tag for Ayurvedic practices in India. The author believes that services can also be unique to a place, much like the practice of ayurvedic medicine and massages. Hence, by providing the Geographical Indication tag to services as well, such an action would greatly help the region and the practioners of such services. The author has taken the example of the Ayurvedic practices in Kerala to better put forth the arguments made herein. The author has followed doctrinal and an analytical research methodology to better understand the intellectual property rights attributed to Ayurveda in India as well as a thorough study of numerous journal articles as well as newspaper articles to gauge the uniqueness of Ayurvedic treatment in different parts of India so as to argue that the GI tag must be bestowed upon the service i.e., Ayurvedic treatment.

Introduction

Ayurveda is a word that is derived from two Sanskrit roots: '*Ayuh'* and '*Veda'.* The meaning of the term is 'Science of Life'.[125] It is the traditional knowledge that is passed down from the previous generations through the millennia to not only cure ailments of the mind and body but also prevent them. Local herbs, plants and massage techniques are used to aid the human body to become healthier. India is a pioneer in this form of traditional knowledge which is mainly practiced in parts of Kerala. Over the years, certain intellectual property rights have been associated with this form of traditional knowledge. Due to the growing usefulness of the Ayurvedic herbs and formulations, there are an increased number of patents and trademarks being filed based on these herbs and formulations. Section 2 (e)[126] defines Geographical Indication. While patents protect the drug formulations of Ayurvedic medicines, trademarks protect the goods and services rendered, registered under a particular name or mark, geographical indications aim to protect products that are produced in specific geographical areas with specific characteristics due to its production in a specific geographical location.[127] Geographical Indications are given only to products as they have special characteristics, reputation or qualities that are attributable to a particular area or territory. The rationale behind geographical indications is the need to protect traditional knowledge and the culture of the local and indigenous communities.[128] Therefore, the researcher argues that Geographical Indications must be granted to services as well; services that is unique to a specific geographical origin and is a part of the culture and tradition of the people of that place i.e., Ayurvedic massages and treatments in India, specifically, parts of Kerala. Through this article, the researcher does not aim to provide an alternative framework for the granting of GI tag for services but instead argues that the existing Indian framework of Geographical Indications in India must be expanded to also include services.

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[125] *Ayurveda at a Glance*, TRADITIONAL KNOWLEDGE DIGITAL LIBRARY (Mar. 08, 2018, 3:30 PM), http://www.tkdl.res.in/tkdl/langdefault/Ayurveda/Ayu_Ayurveda-Glance.asp?GL=Eng.

[126] Geographical Indications of Goods (Registration and Protection) Act, 1999, § 2(e). No, 48, Acts of Parliament, 1999 (India).

[127] *Geographical Indications*, WORLD INTELLECTUAL PROPERTY ORGANIZATION (Mar. 08, 2018, 4:00 PM), http://www.wipo.int/geo_indications/en/.

[128] SUMIT MALIK, INTELLECTUAL PROPERTY RIGHTS MANUAL 54 (1st ed. 2013).

Geographical Indications and Protection of Traditional Knowledge

Traditional knowledge is considered to be the ancient knowledge of communities.[129] It is a well settled fact that Geographical Indications aim to protect the age-old traditions and indigenous culture of a community of people in a specific geographical expanse and indirectly, also help improve the economic value of the region. Geographical Indications are often viewed as an effective instrument to protect traditional knowledge. Geographical Indications are considered the best way to protect and incentivize traditional knowledge of the communities due to the following unique features inherent in the GI system:[130]

(i) *The knowledge remains in public domain*—As no individual person or organisation has exclusive property rights pertaining to the knowledge of the geographical indication, the knowledge continues to be present in the public domain.

(ii) *Rights shall be held in perpetuity*—The protected geographical indication remains so as long as the link between the good in question, the place where it is produced and its quality is maintained.

(iii) *The scope of protection is consistent with cultural and traditional rights*—Geographical Indications are a collective right that is open to all producers of the said good in the region that observe the specified requirements for the production of the said good and produce in the demarcated geographical region. Also, the underlying link between good and place for the GI protection essentially prohibits producers from outside the specified region from benefitting from the production of the good that has the GI tag."

It is argued[131] that the unique characteristics that are specific only to GIs make it reasonable and apt for the protection of traditional knowledge than other forms of intellectual property rights such as trademarks or patents etc. As GIs are collective rights, it is therefore more appropriate to be granted for region-specific goods than TMs for the protection of the traditional knowledge held by the particular community as it is the very essence of geographical indication that the link with the territory be maintained.[132] Further as the protection of geographical indications involves the

[129] The Convention on Biological Diversity, 5 June 1992, Art.9 (j), 3 I.L.M. 818.

[130] Dwijen Rangnekar, *The Socio-Economics of Geographical Indications: A Review of Empirical Evidence from Europe*, 8 UNCTAD-ICSTD 1, 6 (2004).

[131] *Geographical Indications as Trade Related Intellectual Property*, UNDP DISCUSSION PAPER, (Mar. 08, 2018, 5:00 PM), http://www.snapundp.org/elibrary/Publications/GeographicalIndications.pdf.

[132] Babcock B & Clemens R, *Geographical Indications and Property Rights: Protecting Value Added Agricultural Products*, MATRIC BRIEFING PAPER 04-MBP 1, 7 (2004).

collation of traditional practices and favour the local producers of the goods in the region, it prevents the misuse, unauthorized profiting and the gaining of control of the said knowledge by any entity or individual. Further, the rights granted for geographical indications can be held for an unlimited period of time as long as the link between the products, its origin and its quality are maintained.

Ayurveda and Geographical Indications

(a) Ayurveda in Kerala, India

Ayurveda is that traditional knowledge which is not written down. It is passed down orally through the generations. It is only in recent times that efforts are being made to codify this vast area of untapped knowledge. Due to the lack of codification, so much of this knowledge is forever lost. It is only in few parts of India, that the practice of Ayurveda is prevalent in its many forms i.e., Ayurvedic formulations, massages etc. Ayurvedic services i.e., massages also consist of traditional knowledge passed down from ancestors rather than from some kind of codified material. Kerala is often known as the 'Home of Ayurveda'.[133] This age-old system of healing is still prevalent today. Ayurveda is considered to be a healthier alternative to healing as compared to allopathy.

The Vaidyas, who are considered to be the traditional practioners of Ayurveda – especially the world-renowned Ashtavaidyas who are known for their avid knowledge and consistent practice of Ayurveda have played a pivotal role in maintaining, sustaining and propagating the knowledge of Ayurveda in the State of Kerala.[134] This traditional knowledge has developed over the years on the basis of extensive research conducted by the practioners on the medicinal plants available in Kerala. Of the original 18 Ashtavaidya families, a few still remain in practice in the State.[135] Due to the rich alkaloid content of the Kerala soil, the medicinal plants in Kerala are considered to be more potent and hence the treatments and medicines are proven to be more effective. Kerala is also known for its oil massages which are often used to treat muscle and bone ailments. The oils that are used in such massages are prepared with the help of the traditional knowledge of the practioners that has been passed down from the older generations.[136]

[133] *Kerala: Home of Ayurveda*, (Mar.09, 2018, 12:45 AM), https://www.keralatourism.org/ayurveda/kerala-home-of-ayurveda.php.
[134] Ibid.
[135] Ibid.
[136] Ibid.

(b) Why Geographical Indication must be conferred on Ayurvedic treatment

The defining characteristic of geographical indications is the link between the product, the quality and the territory in which the product is produced.[137] Correlating Ayurvedic with the definition of a geographical indication as enumerated in the GI Act, the Ayurvedic treatment/services originate mainly in specific parts of Kerala. The quality and reputation of these services are attributable to its geographical origin as, it is mentioned earlier that the products required for these treatments and services are formulations or natural products that are specifically grown or found in the surrounding local forests. From the growth of the products required to for the treatments, to the making of the special Ayurvedic formulations or medicines, to the actual rendering of these services by locals who have gained this knowledge from the previous generations of their families, every aspect of the definition of a GI as specified in the Act is satisfied, save one; it is not a good. It is a service rendered. Geographical Indications are not bestowed up on services. But in recent years, there has been an increase in the correlation between Geographical Indications and protection of traditional knowledge. GIs are often considered to be a tool that is used to promote as well as the same time protect archaic traditional knowledge.[138]

In the era of allopathy, the art of Ayurveda and its affiliated knowledge is dying. The number of Ashtavaidya families are decreasing and slowly, the knowledge, tradition and culture that has been passed down from generations is getting lost in the sands of time. There is an imminent need to identify and acknowledge this form of traditional knowledge and services provided by relying on this knowledge to provide impetus for people to continue with and keep such a wondrous culture and traditional knowledge from dying out. In 2001, the Government of India set up the Traditional Knowledge Database Library (TKDL) that is the result of the collaboration between the Council of Scientific and Industrial Research (CSIR) and the Ministry of Ayush (till March 2012). The objective of this library is to protect ancient and traditional knowledge of the country from unethical use and exploitation. But this knowledge remains in the public domain and is therefore, open to misappropriation.[139] In light of this, it can argue that the

[137] Felix Addor & Alexandra Grazioli, *Geographical Indications beyond Wines and Spirits- A Road Map for a Better Protection for Geographical Indications in the WTO TRIPs Agreement*, 5(6) J.W.I.P., 865, 865 (2002).

[138] RUCHI PANT, PROTECTING AND PROMOTING TRADITIONAL KNOWLEDGE IN INDIA: WHAT ROLE FOR GEOGRAPHICAL INDICATION, WORKING PAPER, (Indian Institute for Environment and Development, 2015).

[139] Vrunda Kulkarni and *Viren Konde, Pre- and Post- Geographical Indications Registration Measures for Handicrafts in India*, 16 JOURNAL OF IPR, 463, 463 (2011).

knowledge pertaining to Ayurvedic products and formulations is public knowledge but the services of the Ayurvedic massages and other treatments and the people who render such services must have the right to protect their traditional services from being copied by others or misappropriationin any form. More importantly, traditional knowledge is provided with GI tags. Ayurvedic treatment i.e., massages in particular are forms of Traditional Cultural Expressions (TCE).[140] Communities that practice Ayurveda do not do so as a means of livelihood alone. It is a way of life. The people practice the same on a day-to-day basis and have done so for generations. TCEs have been discussed further by WIPO at the Intergovernmental Conference.[141]

Ayurvedic treatments are an integral part of the culture of the communities in Kerala and other parts of India that practice it. It is tradition that is being followed for centuries. Lately, this knowledge has slowly begun to die. Similar to the reason for the dying of other arts and traditions in India, the younger generations of communities that provide Ayurveda as a service are choosingto move onto other avenues which seem more 'respectable' or well-paying according to modern standards. Hence, the numbers of practitioners have reduced drastically and this knowledge is slowly dying with the older generations of practitioners. If the Geographical Indications tag can bebestowed on Ayurvedic treatments and massages, this would prove to be an impetus for the peopleof the said communities to continue in their line of work thus protecting a major part of India's cultural and traditional heritage.

The initiatives taken by the GoI to protect the traditional knowledge of Ayurveda is insufficient. All the information that is collected is codified and published in the public domain. But the information so published does not include Ayurvedic services. The knowledge of Ayurvedic treatments via massages is not public knowledge. It lies only with the practitioners and their families. Another aspect that must be taken into consideration is the authenticity of services provided in the market. One of the purposes of a GI tag is so that consumers and/or the buyers and other customers are aware of the pioneers, the origin and the authenticity of the product. In the Ayurvedic services industry, in recent times, there are numerous 'Ayurvedic massage and treatment' ventures coming up, but not all of these ventures are authentic. For an interested consumer of the said services, it is difficult to identify the authenticity of all the ventures in the

[140] *Traditional Cultural Expressions*, WIPO (Mar. 10, 2018, 1:00 PM) http://www.wipo.int/tk/en/folklore/

[141] Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, Fifth Session, Geneva, July 7-15, 2003. Consolidated Analysis of the Legal Protection of Traditional Cultural Expressions, Document prepared by the Secretariat, WIPO document WIPO/6RTKF/IC/5/3 (2003).

market. Also, the granting of a GI tag for these services would serve as a method to create awareness regarding the same. As of today, due to lack of awareness, most people are unaware that there are such remedies to their medical issues. Even if there are some people who are aware of this, they are unsure of where to go to avail such services and treatment. As of today, the advertisement of the existence of such avenues is based purely on word of mouth. In such a competitive market, there is a need for the consumers to be aware of the authenticity of the services. This in turn would indirectly help the communities of the practitioners.

Critical Analysis

There is a need to expand the scope of the GI Act in India to include services with the sole reason being protection of culture and tradition of the bygone eras. For example, the definition ofGI in the TRIPS agreement refers only to goods in general but the Indian definition of the phrase varies to the extent that goods are specified to be "*either agricultural goods or natural goods or manufactured goods"* that can qualify as a GI. This shows that the Indian definition is much more restrictive when compared to the definition as stated in the TRIPS agreement.[142]

The main hurdle stopping Ayurvedic treatments and massages to be bestowed with the GI tag is that Ayurvedic treatments and massages are services and GI tags are only provided for goods. This hindrance is causing India to forego a major portion of its traditional knowledge, culture and tradition. Ayurvedic treatments and massages fulfil all the prerequisites to be granted a GI tag except that of being a good. Now, there is no explicit provision stating that a GI tag must not be granted to a service. In fact, the TRIPs Agreement only specifies the minimum protection that every signatory country must provide for every aspect of IPR but every country, if it so chooses, may provide for IPR at any level higher than what is provided by the Agreement. The WTO, while explaining the provisions pertaining to Geographical Indications, states the same. The Agreement only prescribes a minimum level of protection for GIs but the members have the autonomy to enlarge the scope of the protection of GIs. The same may be extended to the same to include services under the ambit of GIs.[143] Owing to this, it can be argued that the GI tag may be granted to services as well. There are numerous countries such as Azerbaijan, Bahrain, Croatia, Singapore etc. that have legislations for the provision of the GI tag for services as well as goods. India also

[142] Kasturi Das, *Protection of Geographical Indications: An Overview of Select Issues with Particular Reference to India*, 8 CENTAD, 1, 5 (2007), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1587372.

[143] WORLD TRADE ORGANIZATION, https://www.wto.org/english/tratop_e/trips_e/ta_docs_e/modules4_e.pdf (last

visited Apr. 04, 2018).

can adopt a GI protection regime of a similar manner. Article 1 of the TRIPS Agreement provides some flexibility in the implementation of the provisions of the agreement.[144] This provision can be interpreted to mean that a member country can enact its own specific legislations for furthering IPR so long as it is not in contravention to the TRIPs Agreement. Hence, specific legislation to protect traditional knowledge or protect services which are a part of our culture and tradition (GI tags for services) may be enacted. Also, the TRIPs Agreement has provided its signatory countries the freedom to enact legislation to protect non-patent intellectual property rights. Art.27.3 (b) provides for the members to be able to enact their own *sui generis* regimes. This is an opportunity that India can utilize to enact legislation to effectively protect traditional knowledge and other services inherent in our culture such as Ayurvedic treatments and massages.

The TRIPs Agreement in itself does not protect traditional knowledge or traditional and cultural services but the flexibility of the Agreement can be utilized and each signatory country may take the initiative to do as it sees fit to protect the culture and heritage of said country. If India were to incorporate services under the umbrella of the GI Act along with goods, all the registered proprietors and authorized users under the Act, once such license is approved, shall have exclusive right to use the GI with respect to the service for which it is obtained and the right to obtain relief for the infringement of such Geographical Indication by unauthorized users. This shall prevent the traditional services such as Ayurvedic massages from disappearing in the sands of time or being lost due to lack of authenticity. Another aspect which can be taken into consideration for the protection of Ayurvedic treatments is the efficient legislation for the protection of traditional knowledge itself. Very few countries have specific legislation for the protection of traditional knowledge; China being one of them. India does not have any such legislation. China has a specific legislation to protect Chinese Traditional Medicine (CTM) which includes medicine, massages, treatments etc. namely The Law of the People's Republic of China on Traditional Chinese Medicine, 2016. This statute actively aims to set up Government institutions and hospitals to study and improve traditional Chinese medicine and treatments.[145] India could come up with such a legislation to actively promote and protect traditional knowledge which not only includes

144 PAUL GOLDSTEIN, SELECTED STATUTES AND INTERNATIONAL AGREEMENTS ON UNFAIR COMPETITION, TRADEMARK, COPYRIGHT AND PATENT 436 (The Foundation Press, Inc 1997).

145 LAW OF THE PEOPLE'S REPUBLIC OF CHINA ON TRADITIONAL CHINESEMEDICINE, http://en.pkulaw.cn/display.aspx?cgid=287286&lib=law (last visited Apr. 08, 2018).

medicines but also treatments and other services such as massages. Currently, all the traditional knowledge is merely being put into the public domain through the TKDL but there is no effort being made to protect the same.

A specific legislation is required to protect such ancient traditional knowledge. The one aspect the researcher believes to be not covered by the Chinese legislation is the protection of the traditional knowledge on a territorial basis, thus giving the original practioners an impetus as a tool to not only promote and protect but also improve the livelihood of the communities that have inculcated such knowledge into their lives and is also a source of income to them. Hence, the researcher believes that in India, not only is there a need for a specific legislation for the protection of traditional knowledge but the same must also be done in the form of bestowing the GI tag on goods and services so that there can be protection of such knowledge on a territorial basis. Protection on a territorial basis will not only help protect such ancient and valuable knowledge but will also help improve the economy by providing incentives for the practioners of such knowledge and improving their means of livelihood. Hence, India must come up with a *Sui Generis* system to protect traditional knowledge effectively; preferably on a territorial basis too.

Conclusion

Ayurveda, to be more specific, Ayurvedic treatments, medicines and massages are an integral part of the rich cultural heritage and traditional knowledge of India. There is an immediate need to protect this knowledge in any form that it is found, be it a good or a service. To better understand the arguments put forth, the researcher has taken an example of the traditional knowledge of medicines, treatments and massages in Kerala. But this does not mean that that is the only example for services that deserve to receive the GI tag in India. There are numerous such practices all over India that are a part of our rich cultural heritage and hence deserve protection. To conclude, the researcher would like to state that the IP rights currently present in India is not sufficient to protect traditional knowledge. Protection of Ayurvedic medicines, treatments and massages cannot be covered under any single one existing protection mechanism. There is a needfor a much stricter, *Sui Generis* regime such a special legislation for the specific protection of traditional knowledge in India as well as the inclusion of services under the existing GI regime inIndia. It is only in recent times that the IP laws in India are slowly developing. It will take time butit is a necessity that India protects her own tradition and culture and in doing so, the citizens and the economy shall benefit. It has already been stated that the steps being taken to protect traditional

knowledge at the moment is insufficient. There is a need for a specific legislation to do the same. Also, it has already been proved that GIs are one of the best and most efficient forms of IP protection for traditional knowledge as not only does it protect such knowledge but it also aids in the improvement of the economy. Hence, the researcher firmly believes that there is a need to reform the GI laws in India to include services just like numerous countries of the world already do and there is also a need to take more efficient steps to protect the traditional knowledge of our vast, culturally and traditionally rich country from misappropriation in the public domain.

FACIAL RECOGNITION DEVICES: DEVELOPMENTS AND ISSUES - AN IPR PERSPECTIVE

Lipsa Dash & Parimita Dash*

Abstract

Technology has shifted the paradigm to digital based life from real life. The world of online transactions, ATM's, finger print based attendance system etc. demand a step ahead for identification of the authorized user giving rise to biometric recognition system. The Physiological biometric system which includes facial recognition system has grown. The last few years have witnessed the developments, use and the issues in relation with the technology due to the databases created to store the images and the personal information of the individual for future recognition. The article shows the working and implementation of the service. The article also shows the values and unfortunate lacuna of the software and different sectoral use for its reliable nature. Surveillance cameras are used at border control, prison visitor system, computer and mobile applications security, ATMs becomes easier as it doesn't require a human assistance. This development demands the development of awareness as well as the existing laws for regulating the use of sensitive personal data and other sensitive information. A few other technologies have also curbed up like assisting the experts in sketching the faces of suspects with the help of witnesses. The intellectual properties involved in the devices are maximum patents. A facial recognition device has connected bio sensors generating billions as being an IP asset for the companies. Apart from phones these devices are attached to drones and other surveillance cameras assisting in search and checks. It helps the enforcement officials to police the populace. They create a template of target faces and then searched in different databases to connect. Similarly, the technology behind this is evolving with providing more accuracy to detect and hence the IP market is constantly in competition.

Introduction

Every human has a unique face and it is the unique identification to the race. The devices which were earlier a fantasy are incorporated in our everyday lives now. Starting from companies to residence people have started using it for personal interests and issues. The development of the technology has increased and the growth in the commercial sector has been witnessed increasingly with all kinds of services. Biometric systems are quickly becoming a standard part of modem life as commercial and governmental entities rapidly embrace a technology that promises enhanced security and improved identification.[146] The use of the device should be done in a responsible manner which helps is protect and respect customers privacy and ensure own security too. This device every now and then has helped the society in catching hold of the culprits starting from bank robbery to shop lifting. Earlier the shoplifters after being identified were caught by the security, pictures were clicked and database was updated to list them in the list of probable rouges, but these days a system that scans the face of everyone entering the stores, and suspected shoplifters and alert the store security on their mobile phones.[147] Few companies also use facial recognition software programs to keep their photos organized and secure their devices instead of passwords.[148] Most of the investigation agencies have their way of keeping a record of the faces and the related information that shows their associations with people. The past few years have seen the reliance of people on the technology.[149] A technology has been one of the utilities and backs the nation for its security. Facial recognition is the automatic processing of digital images which contain the faces of individuals for the purpose of identification, authentication/verification or categorization of those individuals. "Facial recognition is variably used starting from photo tagging to social networking sites to security authentication. These technologies have evolved and raise

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[146] Langenderfer J, & Linhoff S, *The Emergence of Biometrics and Its Effect on Consumers*, THE JOURNAL OF CONSUMER AFFAIRS, 39(2), 314-338 (2005).

[147] Jeff John Roberts, *Walmart's Use of Sci-fi Tech to Spot Shoplifters Raises Privacy Questions,* FORTUNE, *(*Nov. 24th, 2019), http://fortune.com/2015/11/09/wal-mart-facial-recognition.

[148] *Future of Privacy Forum*; Working Paper; (Nov. 24th ,2019) https://fpf.org/wp-content/uploads/2015/12/Dec9Working-Paper-FacialRecognitionPrivacyPrinciples-For-Web.pdf.

[149]Tana Ganeva, *What You Should Know About Face Recognition Technology Used by Police and Spy Agencies Like the NSA*, ALTERNET (Oct. 17, 2019) http://www.alternet.org/what-you-should-know-about-face-recognition-technology-used-police-and-spy-agencies-nsa.

few major privacy concerns as it stores the sensitive personal information about people." [150] Facial recognition systems take a facial image; the algorithms measure nodal points creating a numerical code representing the face in the database.[151] The face of every human has approximately 80 nodal points on the face such as the distance between the eyes, the length and width of the nose, the angle of the jaw, depth of the eye socket or the shape of the cheekbones which helps identify the person using the technology.[152] The facial recognition devices carry series of algorithms which analyze the input and distinguish particular facial characteristics using different approaches like the Geometric approach, Photometric approach, Biometric approach and other ways where it calculates the facial features and matches it using a map to get identifiable information. These approaches help the private as well as public sector for arrest, as evidence, identify and track visitors, track the citizenship of students and persons who seek to study, live or work in the specific country, and to depot undocumented immigrants, and secure the facilities available.[153] The increase of dependency due to its accuracy in the facial recognition technology has developed in years. This technology has integrated into online and mobile services for identification, authentication, verification or categorization of individuals.[154] Even Social networks and other mobile devices use this system.

Developments

According to survey the facial recognition systems have higher accuracy and faster in terms of technology. It can trace correctly up to 92% of individual data from the database of criminals. The software uses complex mathematical formulas to match the faces with the criminal database.[155] Giant companies like Facebook, Google and Apple have offered automatic facial recognition or detection as a part of their services. For example, Facebook prompts to tag the picture as soon as we upload the picture. The rest privacy is controlled in the privacy setting which asks him approval of the person before allowing it in the timeline. The same goes with the Google+

[150] Dr. Joseph Lorenzo Hall, *Facial recognition & Privacy: An EU-US Perspective,* CENTER FOR DEMOCRACY & TECHNOLOGY (Oct 20, 2019), https://www.cdt.org/files/pdfs/CDT_facial_recog.pdf.

[151] Gurpreet Kaur, Manbir Sandhu & Purnima, *Facial Recognition: Issues, Techniques and Applications;* I.J.A.R.C.S.E, (Oct. 23, 2018) http://ijarcsse.com/docs/papers/Volume_6/2_February2016/V6I2-0267.pdf.

[152] *Id.*

[153] Electronic Frontier Foundation (Nov. 24th, 2019), https://www.eff.org/sls/tech/biometrics/faq.

[154] *Supra* note at 5.

[155] Taslitz, A, *The Fourth Amendment in the Twenty-First Century: Technology, Privacy, and Human Emotions. Law and Contemporary Problems*, 65(2), 125-187.JSTOR (Nov. 24th, 2019), http://www.jstor.org/stable/1192242 doi:1.

photos which when updated in the Picasa photo editing software links to the user's profile and make clusters of the picture to tag the names instead of going into each picture individually. "The Google+ tags although request for permission to link it to the profile of the user. Facebook reportedly possessed an estimated 60 billion photos by late 2010 (up from 15 billion as of April 2009), with tens of thousands of photos in an average individual."[156] Companies like Facebook, Flickr other online image hosting services use 3rd party software programs like Polar Rose, Riya, Photo Tagger, and Face.com., for identifying faces. Apple bought Rose in 2010 and purchased face.com in 2012 whereas and Google brought Riya.[157] Patenting mobile applications allows developers to prevent others from developing, using or selling the mobile applications without the consent of the developers. [158]

Patent application for example for the celebrity facial recognition was published whose target was for launching of Face Recognition apparel for mobile devices. The application titled *automatically Mining Person Models of Celebrities for Visual Search Applications.* The technology works using an intra model analyzing different combination technologies and precisely identifies amongst the database of the celebrities. The removal of non-face images is an add on. The Chinese State Intellectual property office also applied for a facial recognition technology automatically recognizes multiple known faces in photos or videos on a desktop or mobile device.[159] One of the features enables clustering the face together for easy tagging. The first product of this applied device was Fotobounce which was successful on its performance when tested on Picasa, Microsoft's photo gallery and Apple i-photo. The device was efficient, accurate and the application had speedy stroke. [160] This device helps the companies to ensure the entry of only authorized employees and helps channelizing the person who has access to the confidential information's and holding he/she liable whenever there is a leakage of information. A similar protection and attraction lie with the biometric recognition devices. On 2011, Google created a Face recognizing app which would show the contact details of the person in the picture which was considered very unhealthy and illegal. Every technology has its merits and demerits. Google was

[156] *Supra* note at 6.
[157] *Supra* note at 6.
[158] Legasis Newsletter, LEGIST (Nov. 19th, 2019) http://legasis.in/Legist/April2014/html/ipr_mobileapplication.html.
[159] Justin Lee, *Applied Recognition receives two face recognition patents;* BIOMETRIC UPDATE, (Oct. 18th, 2019) http://www.biometricupdate.com/201508/applied-recognition-receives-two-face-recognition-patents
[160] *Id.*

also granted patent on device based on facial recognition on a computer. The facial recognition devices at different traffic pints, vehicle accessing premises, linking license plate with owner, authorized drivers etc. can help identify the drivers in using the surveillance cameras to check through its carriage. The potential of the biometrics ace recognition technology has received significant attention in past several years. [161] The facial recognition device has a unique feature of being able to capture the face from a distant location without any actual physical contact. The identification doesn't require a real time interaction and doesn't leave an ambit of ambiguity in recognizing the face when it comes to deterrent purposes. Fundamental shifts in technology and in the economic landscape are rapidly making the current system of intellectual property rights unworkable and ineffective.[162] Sectors starting from banking, finance, travel and online gaming industries ensure the physical presence of the person. Service of online and offline transactions like the ATM's use Facial recognition devices to reduce fraud. With the increase in multiple unauthorized accounts being opened worldwide, multi factor authentication system is a must. [163] At a point where all the forensic evidences leave off the facial recognition technology comes into play by identifying a person based on a photograph or video still. Technologies such as Google Glass, closed circuit television (CCTV) systems, camera phones, other wearable devices make data collection easier.[164]

The conventional way of visitor system during entry and exits are now replaced with Face Recognition Solutions.[165] In India, ensuring beneficiaries for health services in remote places (rural and semi-rural areas) use facial recognition devices to make sure the reach of services in the right time and right place through the on-field employees. A number of new techniques like the Smart Attendance, mobile based face recognition and tracking solution now collects bio metric data along with GPS and a time stamp to detect and identify different people at meeting venues and know their exact presence in the venues enabling the organization to track, monitor and audit the data coming from service locations across the country. The visual dashboards have eased the Salary

[161] *Overview of Facial Recognition Solution,* NEC TECHNOLOGIES INDIA PVT LTD, (Nov. 18th ,2019) http://in.nec.com/en_IN/products/public-safety-security/technology/overview-facial-recognition-solution.html

[162] Lester C. Thurow, *Needed: A New system of Intellectual Property Rights*; HARV.BUS.REV (Nov. 20th ,2019)https://hbr.org/1997/09/needed-a-new-system-of-intellectual-property-rights

[163] Ian Barker, *Adding facial recognition to mobile helps reduce fraud,* BETA NEWS, (Nov. 23rd ,2019) http://betanews.com/2016/10/24/mobile-facial-recognition.

[164] *Id.*

[165] *Supra* note at 7.

calculations, productivity analysis and auditing.[166] Even Church's around covers the premises with CCTV cameras for surveillance and check the attendance of the members especially during events. Different ATMs in India use high resolution cameras with a notice that his/her photograph will be taken for security purpose. It stores the data in its database. At various voting booths the database of all voters is created, it can be recommended that a facial recognition system should beequipped at booths to prevent any kind of disturbance. The photograph will permit access after matching with the database. India looks forward to Passport and visa verification using the technology.[167] Further developing facial recognition devices to grant driving license can be used. It can be suggested to install these technologies at different public places. These technologies are already installed at different defense and security stops. Verification and Identification of different criminals at any place with an alert service can be expected in the coming few years. The vaults and lockers in banks can be modified with facial recognition devices and authorization would depend on alternative biometric services. Surveillance cameras are used at border control, prison visitor system, computer and mobile applications security, ATM's becomes easier as it doesn't require a human assistance.

Issues

The issues which can be identified on such effective devices are like not being able to trace the face when there is a poor lighting condition, masks covered, sunglasses etc. lowering the resolution and accuracy of image capturing. The effectiveness gets a little compromised if the resolution of camera is not much good which decreases the image quality, size, face angles, lacuna in case of identifying identical twins as finger prints and iris scanning gets more authentic. Few cases were reported where the inability of capturing dark skinned people was highlighted. As per a newspaper report the mismatch of facial recognition led to the detention of a man who was already busy at a different place all together. [168] The arrest was done on basis of a recorded clip from the CCTV camera which stated that he robbed. Many persons also see CCTV as an invasion to privacy.[169]

[166] *World's Top 10 Usage of Face Recognition Technology*; AINDRA (Oct. 24th 2019) https://aindrasystems.wordpress.com/2015/08/26/worlds-top-10-usage-of-face-recognition-technology-2015. [167] *Id.*

[168] Ava Koffman, Losing Face; *How a facial recognition mis-match can ruin your life,* THE INTERCEPT (Oct. 24th 2019), https://theintercept.com/2016/10/13/how-a-facial-recognition-mismatch-can-ruin-your-life.

[169] Taslitz, A, *The Fourth Amendment in the Twenty-First Century: Technology, Privacy, and Human Emotions. Law and Contemporary Problems*, 65(2), 125-187, JSTOR (Oct. 24th 2019), http://www.jstor.org/stable/1192242

Similarly, there are few concerns that have been raised and a proposal[170] was made in the Leadershipconference at The American Civil Liberties union which suggested for investigations by police with the use of facial recognition technology. Few laws have been evolved like the Patriot Act of 2001, was passed that enhances the powers of government bodies and the police with respect to the gathering of information, arrest and imprisonment, while bypassing the courts.[171] These databasessometimes lead to concerns like wrongful matches leading to wrongful detention, non- reliability of the technology where the data might get compromised which may lead to identity theft, impersonation etc., it doesn't have to always do with criminal justice system,[172] sometime the datais collected by the authorities or heads when they are managing big companies and decide to storethe details of their employees to combat any loss of data or identify the person who tries to get access or destroy important information which he/she is unauthorized. Any leakage of data of suchkind might bring a loss to the reputation and privacy of the person.

Many theorists and signatories also do not favour the accelerated use of the technology as they feel it threatens the privacy and rights of millions.[173] The letter explains "Face Recognition systems are powerful but they can also be biased". Within every human society, one of those common concepts that are to be understood is Privacy. Due to variable nature of privacy, it's really difficult to reach at a final definition. According to socio-historical context, the connotations of privacy and the social bonds surrounding it differ dramatically.[174] Privacy has been progressively invoked in cases that involve the protection of reputation, information and civil liberties.[175] The surveillance tool of Facebook, twitter and Instagram helped to arrest protestors creating a map to the authorities at California.[176] An article from the independent student newspaper at the Boston University also

[170]Vanita Gupta, *Coalition Letter To The Department Of Justice Civil Rights Division Calling For An Investigation of The Disparate Impact Of Face Recognition On Communities Of Color,* A.C.L.U (Nov 5th 2019), https://www.aclu.org/letter/coalition-letter-department-justice-civil-rights-division-calling-investigation-disparate.
[171] Debbie V. S. Kasper, *The Evolution (Or Devolution) of Privacy,* SOCIOLOGICAL FORUM, 20(1), 69-92; JSTOR (Oct. 24th 2019) http://www.jstor.org/stable/4540882.
[172] *Supra* note 12.
[173] Ava Koffman, *Losing Face, How a facial recognition mis-match can ruin your life*; THE INTERCEPT (Oct. 24th 2019) https://theintercept.com/2016/10/13/how-a-facial-recognition-mismatch-can-ruin-your-life/.
[174] Debbie V. S. Kasper, *The Evolution (Or Devolution) of Privacy. Sociological Forum*, 20(1), 69-92. (Oct. 24th 2019) http://www.jstor.org/stable/4540882 (2005).
[175] *Id.*
[176] Rusell Brandom, *Facebook, Twitter & Instagram surveillance tool was used to arrest Baltimore protestors*, THE VERGE, (Oct. 24th, 2019), http://www.theverge.com/2016/10/11/13243890/facebook-twitter-instagram-police-surveillance-geofeedia-api.

stated how the police use facial recognition devices and if at all it's a threat to the innocent as they profiling of the database also include the pictures that are never involved in a crime but can very well be targeted. [177] The evolvement of smart security cameras will be able to capture the persons who are texting while driving which can be appreciated as a development which helps the law enforcement officials to spot them. The facial recognition systems are perfectly designed to capture the pictures and keep a record of all the activities I different multiplexes, airports and other public places without actual knowledge of the passersby. The unique way of mass identification is not possible by other biometrics like fingerprints, iris scans, and other speech recognition devices etc. There has been a recent law the Biometric Information Privacy Act in the U.S which has been a hindrance to Facebook and Google's face scanning acts for popular products like Facebook Moments and Google Photos.

This law has given rise to a spate of lawsuits that allege companies failed to obtain consumers' consent before scanning and storing images of their face.[178] The Indian Ministry of Communication and Information Technology framed a new rule under the Information Technology Act, 2000 namely Information Technology (Reasonable security practices and procedures and sensitive personal data or information) Rules, 2011. India has come up with its privacy laws and is also implemented. Previously India had no law to deal with privacy issues. The new laws have given new dimension to directing companies and other entities to start using "reasonable security practices and procedures" while handling "sensitive personal data or information." It has introduced both civil and criminal provisions for respective actions. "Sensitive personal data information" (SDPI) includes physiological condition as well as biometric information which indirectly deal with facial recognition devices. Section 42-A of the IT Act talks about the acts and Section 72-A deals with the imprisonment and damages applicable. Few other developments are the provision of consent for collection, the details provided to the individual for its purpose of collection, rights provided so as to right to access, correct and withdrawal of information etc. These rules aren't applicable to the government. What draws the attention is its

[177] Kaitlyn Olivier, *Is current police use of facial recognition a threat to the innocent?,* THE DAILY FREE PRESS (Oct. 24th, 2019), http://dailyfreepress.com/2016/10/23/olivier-current-police-use-of-facial-recognition-a-threat-to-the-innocent.

[178] Jeff John Roberts, *Facebook and Google Really Want to Kill This Face-Scanning Law,* FORTUNE (Nov. 26th, 2019), http://fortune.com/2016/06/30/facebook-google-facial-recognition-lawsuits.

comparison with EU directive which has set high standards plus flexibilities and exceptions for the use of such information.

Conclusion

The authors agree to one of the observations made after the reviewing a few literatures is that a rule which has combined effect of the technological approach can give the consumer a greater measure of control over how to use the technology of facial recognition and detection without unduly limiting and creating a balance between rights and benefits.[179] Sensitive data information should not be shared or linked to the profiles which may lead to troublesome to people. A person who is victim of being traced just by a picture and gets the address to harm becomes easy. Every individual has the right to have information about the privacy and to prevent the disclosure of personal information.[180] Time to time update of the person's profiling should be done. There should be laws for governing the use of such technologies, ensuring its accuracy and to curb biasness, i.e., regulates the use in both public and private sector. There should be true preservation of privacy. The governing principles should take care of taking the consent of the people and individuals should have a choice to how their information is used and distributed.[181] It is concluded that the right of the individual to be free from unwanted and unwarranted governmental intrusion in matters affecting fundamental rights should not narrow or restrict their utility. India has few technologies which were listed in the World Top 10 Usage with respect to face recognition.[182]

[179] *Supra* note at 6.

[180] Debbie V. S. Kasper, *The Evolution (Or Devolution) of Privacy*. *Sociological Forum*, 20(1), 69-92 (Oct. 24th 2019) http://www.jstor.org/stable/4540882.

[181] Langenderfer J & Linhoff S, *The Emergence of Biometrics and Its Effect on Consumers*. The Journal of Consumer Affairs, 39(2), 314-338 (2005).

[182] *World's Top 10 Usage of Face Recognition Technology*, AINDRA (Oct. 24th 2019) https://aindrasystems.wordpress.com/2015/08/26/worlds-top-10-usage-of-face-recognition-technology-2015.

INTELLECTUAL PROPERTY LAW IN THE COLONIZATION OF MARS

Kunika Khera*

Abstract

Mars is one the eight planets in the solar system and is telluric in nature. Owing to its atmospheric lining, gravity and other resources, the researchers and astrophysicists believe 'the Red Planet' to be capable of sustaining life and, as probably the best shot to colonize any another astronomical body in the universe at the present moment. In the light of the current endeavours and developments, the same is no longer a distant dream. But as the several space agencies and institutes around the globe are making this a reality, a major issue remains undebated: The absence of intellectual property (IP) law in the expedition and how it can assist the whole mission in becoming a success.[183] The present articles shall deal with the current developments in the 'Mission to Mars' along with how the various Intellectual Property laws and policies can play a significant role in its triumph. The research work discusses how various IP mechanisms such as crowd funding and brand funding can be utilised to facilitate the Mars-colonisation project. The author has also attempted to incorporate the game theory in understanding the effectiveness of sharing trade secrets, among government space agencies around the world, for ensuring greater success rates of attempts at Mars exploration and settlement. The research contemplates usage of intellectual property not just to reach the planet; but also, to aid and assist in the settlement and future sustenance of life there. The concepts of Three-Dimensional Printing and international patenting regime are suggested in that regard. To summarize, this whole new arena of space and intellectual property law has remained untapped for the longest time. The author has attempted to combine the two in the spirit of advancing technological development through theoretical and juridical assistance.

"I have always dreamt of humans leveraging science and technology to break the shackles imposed by the speed of light and spreading to every corner of the known universe. Colonising Mars is the first baby step towards it."

-Ramgopal Vallath

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[183] Dr. Amir H. Khoury, *Intellectual Property and the Red Planet*, 1 NORTH CAROLINA JOURNAL OF LAW & TECHNOLOGY 337, 392 (2017).

Introduction

The human mission to the Red Planet is no longer an issue of 'if' but more of 'when' and 'how soon.'[184] Since the 19th century, the space experts and academicians have been developing proposals to utilize the resources of the planet and eventually, settling there. The reason behind that the space agency's does believe that Mars is the best option for settlement is its similarity to the Earth. It is almost half its size, has microgravity as well as some traces of water on its surface.[185] A day on Mars is also almost the same as the Earths'. Apart from the physical conveniences, the technological advances and the uncertainties with regard to future of humanity on Earth also act as driving forces behind this expedition. The same would also help in answering the biggest question; that is, can life exist other than on our planet Earth? Wernher von Braun was probably the first man who headed detailed research on humans to Mars in his publication, *Das Marsprojekt*. The book described a comprehensive and meticulous plan of around 70 members going to Mars for a period of 443 days in 10 spacecrafts.[186] The plan may not have materialised as envisioned by Braun; however, it started a chain of events that has shaped the space exploration as we know today. From 1960, there has been 56 missions organised all over the world; and only 26 have been successful.[187] Out of the 56, the Mars spacecraft attempts to explore the planet have been 48 as per the statistics released by National Aeronautics and Space Agency (NASA).[188] This clearly indicates towards the difficulty in reaching and gaining access to the planet. The NASA as part of its goals under the NASA Authorization Act, 2010 and the United States Space Policy Act, 2010[189] has targeted to send humans to Mars by the 2030s.[190] The Agency aims to organize a robotic mission, the Orion spacecraft launched by Space Launch System (SLS) to study the asteroid in the 2020s and return back with samples. [191] Apart from NASA, there are several other

[184] *Ibid.*
[185] *Mars: In Depth* (Feb. 20, 2019), https://solarsystem.nasa.gov/planets/mars/in-depth/.
[186] Wernher von Braun, *The Mars Project*, 3 UNIVERSITY OF ILLINOIS PRESS (Feb. 20, 2019).
[187] Ed Oswald, *All past, present and future missions to Mars* (Feb. 20, 2019), https://www.digitaltrends.com/cool-tech/future-mars-missions/.
[188] Siddiqi Asif, *A. Beyond Earth: A Chronicle of Deep Space Exploration*, NASAHISTORY PROGRAM OFFICE (Feb. 20, 2019), https://lccn.loc.gov/2017058675.
[189] *Presidential Policy Directive 4 (PPD-4*), HOMELAND SECURITY DIGITAL LIBRARY (Feb. 20, 2019), https://www.hsdl.org/c/help/citing-resources/.
[190] *Policy Documents*, NASA (Feb.20, 2019), https://www.nasa.gov/offices/olia/policydocs/index.html.
[191] *Ibid.*

institutions around the world, both the Governmental and Private, endeavouring to make the operation a reality. SpaceX was founded by tech entrepreneur, Elon Musk with the goal of colonializing Mars in the next 50 years. According to Musk, the plans for settlement of Mars, goes beyond the SpaceX projects and would require participation from various financial partners including men, companies and governments.[192] Various other governmental institutions such as Russia's Roscosmos, China National Space Administration, European Space Agency and Indian Space Research Organisation have been making several strides in pursuance of making Mars more accessible and reachable. However, it is humbly submitted that the operation to Mars would be very difficult, if not impossible, unless all of these organisations collaborate on an international forum to bring this scientific ambition into motion.

The Role of IP Laws in Aiding Colonization of Mars

The Intellectual Property Rights, as defined by the World Trade Organisation, means rights that a person has over "creations of his mind." [193] Thus, IP Laws ensure the protection of enforcement of these rights over one's ideas, inventions, designs, discoveries and other technological developments. From one perspective, the scope of IP Laws may be believed to be restricted to promoting individual self-interest for financial gains. However, another way of looking at the IP system highlights the role it plays in expanding the reach of new innovations and findings. Considering the latter view, the IP system can have a huge part in assisting the mission to Mars. The following sections delve deeper into how intellectual property can find a place in operation of settlement on the Red Planet.

Financing the Mission

One of the biggest challenges that the project faces is the financial expenses. While the technology required to reach Mars in itself would cost billions, the amount and resources vital for settlement itself would be humongous. According to Pascal Lee, the operation for sending a single person to Mars could reach up to $1 trillion, spread over the next 25 years. The colonization would require several resources for making the planet livable. Great strides in technology and infrastructure would be essential for this. For example, an excessive volume of fuel would be needed; that wouldessentially require protection against the temperature variabilities regularly to prevent any

[192] Eric Berger, *Musk's Mars moment* (Feb. 20, 2019), https://arstechnica.com/science/2016/09/musks-mars-moment-audacity-madness-brilliance-or-maybe-all-three.

[193] *What are IPRS?* WTO (Feb.20, 2019), https://www.wto.org/english/tratop_e/trips_e/intel1_e.htm.

explosion.[194] Another major challenge is the colony sustainability itself. Lack of basic resources such as water, oxygen, gravity and other resources make the task of settling tougher.[195] Thus, we can conclude that the dream of reaching Mars is far from easy, and definitely not cheap. Following this realisation, the question arises how the government or the private institutions can accumulate such a sum?

A solution to this issue can be found in two concepts: (A) Crowdfunding and (B) Brand-funding.

Crowd-Funding

Crowd-funding refers to the process by which people finance a particular operation by accumulating money through various modes such as online websites, fundraisers etc. This machinery aids the founders of various ventures to find economic backing for their efforts by drawing small payments from a large number of people, without the involvement and intervention of financial intermediaries.[196] According to Freeman and Nutting, the concept of crowd-Funding is nothing new and has been used for several years in exchange for equities in the company or the venture for which the contributions are being raised.[197] Mars exploration and eventual, colonization would result in great technological advancements and discoveries. These developments would not only result in scientific benefits, but also yield commercial profits for the people on Earth in form IP rights. Thus, the citizens can be encouraged to contribute to the operation as an investment opportunity (in lieu of certain IP benefit) for ensuring financial patronage to the whole mission.

Brand-funding

Brand-funding is another mode of raising revenue. It could be considered an indirect method of crowd funding. This involves owners of certain brands sponsoring a particular venture in return of visibility of their brand on the final produce. The idea of brand-funding could really help in collection of massive amounts of finances. The kind of exposure that the mission would help the products receive is incomparable. For example, a product could find place on the spaceship *en route* to the Red Planet. This level of advertisement is what any product and its brand owner could

[194] *supra* note 1.

[195] Donald Rapp, *Mars Life Support Systems*, THE INTERNATIONAL JOURNAL OF MARS SCIENCE AND EXPLORATION 72,82 (2006).

[196] Ethan R. Mollick, *The Dynamics of Crowdfunding: An Exploratory Study*, 29 JOURNAL OF BUSINESS VENTURING. 1, 16 (Feb.20, 2019), https://www.sciencedirect.com/science/article/pii/S088390261300058X.

[197] David M.Freedman & Matthew R. Nutting, *A Brief History of Crowd funding* (Feb.20, 2019), http://www.freedman-chicago.com/ec4i/History-of-Crowdfunding.pdf.

ask for. This mechanism is not only limited to taking off but also to actual settlement on Mars. We must realize that the whole idea of the expedition has been to ensure another planet for human settlement. Thus, Mars is a new territory altogether and must be treated as such for various commercial enterprises and commodities. Licensing agreements on lone usage and shipment of goods and products to Mars would ensure a "planet-wide exclusivity" for the brands and protection of other IP rights and privileges for decades. The idea of being the first soap/shoes/or any other product to be used on Mars would tempt many huge corporations to back the endeavour. Hence, it is a rational and realistic assumption that product owners would compete to participate in the mission.[198] Brand auctioning can also be used to increase the money raised, where different corporate houses could bid for the top position. This idea is very much in line with patent auctions as well. Both the mechanisms of crowd and brand-funding, as powerful marketing and publicity tools, would not only bring enormous sums of monies, but also help in ultimately sharing the risk of what is probably the biggest project undertaken in the scientific history of mankind.

International Collaboration

The present section seeks to put up an alternate IP trade policy in pursuance of aiding the process of taking human to Mars. As mentioned before, the goal of reaching and settling on Mars cannot be done in isolation. It requires vast resources and technologies; which would be far easier, if the players would all join hands at an international level. Instead, numerous administrative and commercial organizations from all around the world are independently focusing on their respective Mars mission. As an outcome, it is not a surprise that they are all involved in a sort of what may be called as a 'space-race'. Each is trying to outdo the other in hopes of being the first one to colonize the planet. In such a power struggle, it is predictable that a sense of secrecy is being created; that is to say, no institution would like to disclose their information and knowledge in fear of losing the 'race'. This is where the concept of trade secrets comes in. Trade secrets refer to classified business information that a corporation seeks to protect against disclosure for a competitive edge. It includes all kinds of information such as commercial, production and business secrets.[199] The main aim behind trade secrets is to thwart unfair competition and the same is regulated by the legal system or case-laws decided in the respective countries.[200] However, it is

[198] Robert Copeland et.al., *Understanding the Sport Sponsorship Process from a Corporate Perspective* 32,48.
[199] *What is a Trade Secret?*, WIPO (Feb.20, 2019), https://www.wipo.int/sme/en/ip_business/trade_secrets/trade_secrets.htm.
[200] John Richard Brady & Ors. v. Chemical Process Equipments., AIR 1987 Delhi 372.

humbly submitted that in respect to mission to the Mars, this approach would cause more harm than good. Adopting this method would diminish the possibilities of the expedition. The mission would be successful only with full cooperation and collaboration of everyone involved in the research. In relation to this, it is suggested we must adopt the idea of sharing of "negative trade secrets." Negative trade secrets refer to the information about failures and mistakes of the experiments and research. They act as guide of what not to do.[201] The financial implications and risks involved in the project Mars is far-reaching and wide. The whole project is complex and could impact those involved negatively on any failure.[202] Thus, disclosure of information pertaining to what one should not do shall prevent great losses that people may suffer for the same mistakes. As Amir Khoury said, "Placing such negative trade secrets in the public domain would essentially revitalize and invigorate entrepreneurship, research, and development."[203] To explain the point further, we could apply the game theory.

The Application of Game theory

The Game Theory is a tool, used in economics, to understand the future consequences through evaluation of different outcomes. It uses numerical patterns of dispute and agreement between intelligent reasonable decision-makers.[204] Whether the theory works or not, it is an insightful way of reaching at logical solutions and predictions. In the present illustration, we shall take the example of two organizations involved in the research and development of the human colonization of Mars: Company X and Company Y. Now, both the companies have two choices: either share their negative trade secrets or not share them. The outcome would be different in varied scenarios. The game is explained in the following payoff matrix.[205]

	COMPANY X:	
COMPANY Y:	Not Sharing Negative Trades Secrets	Sharing Negative Trade Secrets

[201] Michael Rosen, *The role of 'negative trade secrets' in the Uber-Waymo settlement* (Feb.20, 2019), http://www.aei.org/publication/the-role-of-negative-trade-secrets-in-the-uber-waymo-settlement/.
[202] Fredric Taylor, *The Scientific Exploration of Mars*, 253 CAMBRIDGE UNIVERSITY PRESS (Feb.20, 2019), https://assets.cambridge.org/97805218/29564/frontmatter/9780521829564_frontmatter.pdf.
[203] Amir H. Khoury, *The Case Against the Protection of Negative Trade Secrets: Sisyphus' Entrepreneurship*, 54 THE INTELLECTUAL PROPERTY LAW REVIEW 432 (Feb.20, 2019) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2964707.
[204] 1, ROGER MYERSON, *The Game Theory: Analysis of Conflict* HARVARD UNIVERSITY PRESS (1st ed. 1997).
[205] Amir Khousry, *Intellectual Property and the Red Planet*, 1(2) NORTH CAROLINA JOURNAL OF LAW & TECHNOLOGY 337, 392(2017).

Not Sharing Negative Trades Secrets	0,0 (**D**)	8, -2 (**B**)
Sharing Negative Trade Secrets	-2,8 (**C**)	4,4 (**A**)

This illustration shows that if both the companies do not share their negative trade secrets, both do not suffer any loss or profit (0,0), which would mean the research would be stagnant and both would have to learn from their mistakes, risking many financial and other assets. If one company shares the information, the one sharing shall suffer a loss, while the other shall benefit from it [(8, -2), (-2,8)] and would protect its resources from not doing experiments that have already resulted in failure for the other company. And finally, if both companies share the information, they would profit from the disclosure (4,4) as their time and funds would be prevented from being wasted and there are higher chances of success.

Thus, the decision taken by the companies would produce following different combinations:Outcome A: Good for both Company X and Company Y.

Outcome B: Good for Company Y, but bad for Company X.

Outcome C: Bad for Company Y, but good for Company Y.

Outcome D: Bad for both Company X and Company Y.

Considering the aforementioned results, we can conclude the following:

- Outcome A is best for both the companies. Thus, both must share the negative trades secrets. If there is full collaboration, this would ensure that no one is at a loss and both companies can benefit from the disclosure.
- Outcome B and C is hardly possible since no company would agree to divulge information about their failures without getting anything in return.
- Outcome D is not favourable for both companies as none of them would gain or lose from the bargain. Hence, they would have to find their way through a trial-and-error method which could result in huge costs and risks.

The theory concludes that the best results would be possible if the approach of sharing of negative trade secrets is adopted by all parties. It would be counter-productive for the researchers to replicate the mistakes of others. From the perspective of single business owner, not sharing data may seem like a more rational and convenient choice. However, the scientific costs cannot be overlooked. No secrets should be allowed when the aggregate social benefit is at risk. According

to Lemly, protecting information that is for the welfare of the public defeats the purpose of the concept of trade secrets as an IP right.[206] It must be accepted that utmost importance is to be given to the Mars project and human progress, as one community, should be a priority over the personal interests of different countries and ventures. The operation requires adoption of a more inclusive IP regime than an exclusive one.

Development for Better Sustainability On The Planet

The real challenge of the human mission to Mars is the sustainability on the planet. This can be countered in two methods: easy access to technologies and inventions as well as ability to build infrastructure for survival on Mars. And IP laws can help in achieving both in the following ways:

Establishment of an International Patenting Regime

When humans would finally settle on Mars, they would be greatly be dependent on the machineries and discoveries back on Earth. Such new ideas and innovations would be communicated from time to time and thus, would make the colonization more convenient and speedier. However, the current patent system tends to make the whole process supremely intricate. As we know, patents refer to an intellectual property right whereby a person obtains a license issued by an authority (generally, the government) bestowing the right of exclusivity over manufacturing, utilizing and selling of an invention.[207] The present patenting system is different in different countries. Each nation has a National Patent Office (NPO)[208] of their own, which is the regulatory body in respect to issuance, revocation and other matters relating to patents. Though the NPOs have been reasonably successful in regulating IP rights in their respective countries, it is humbly submitted that they have over the years hindered the growth of inventions and innovations. The standard form of business of the institution is no longer viable in todays' world where global interdependence is the solution to social harmony and progress. We must realise that collective knowledge makes the knowledge more equitable and accessible.[209] To make technology easily accessible in the long run, it is proposed that a fresh international patenting regime must be introduced. As Margaret Chon in her

[206] Mark, A. Lemly, *The Surprising Virtues of Treating Trade Secrets as IP Rights*, 61(2) Stanford Law Review, 311.

[207] *What is a Patent?*, WIPO (Feb.20, 2019), https://www.wipo.int/patents/en/.

[208] *Country Profiles*, WIPO (Feb.20, 2019) https://www.wipo.int/directory/en/.

[209] Gregorio Giménez, *The impact of the patent system on the social welfare: A critical view*, 14 INTANGIBLE CAPITAL (Feb.20, 2019), http://www.intangiblecapital.org/index.php/ic/article/view/789/707.

paper proposed for a system of global IP laws "that is responsive to development paradigms that have moved far beyond simple utilitarian measures of social welfare."[210] Already comprehensive and detailed treaties are in place i.e., TRIPS and PCT. The PCT is the treaty that aims to accept and decide on applications of patents for members all around the world. Currently administered by the World Intellectual Property Organization (WIPO), the PCT allows citizens of any member state to get patent protection that would be recognized in all other member nations. The PCT has provided a cheaper and more efficient alternative to national patenting regime as it ensures exclusivity internationally. It has wider scope and affords the owner an opportunity to test the potential of the invention. The present statistics also show the rising trend of countries opting for PCT in recent years. In 1978, the PCT started off with mere 18 contracting nations; but now as of February 2019, the number has increased to 152 including India.[211] The growing shift towards the national interest and resistance towards the global patent system would be a huge blow to the evolution and ever-increasing character of new ideas, industries and technologies. The international patent regime would definitely contribute to social welfare. Though the PCT is a great step in this regard, it still suffers from major lacunas.[212] A new international patent system, that is more organized and harnessed with power to enhance consistency and regularity in the patent system, would aid in increasing the range of knowledge. And ultimately, would support the existence of life on Mars.

Manufacturing Through Three-Dimensional (3-D) Printing

Infrastructure is probably one of the first and foremost prerequisite for starting a new community and would also prove to be a hurdle for survival of life on Mars. A solution to this can be the technology of three-dimensional (3-D) printing. The technology of 3-D printing refers to a manufacturing process in which three-dimensional structures are made through digital records and files.[213] This involves an additive process; whereby successive layers of material are laid down till the object itself is produced. These layers are usually "thinly sliced horizontal cross-sections"[214] of the ultimate object. They not only replicate the structure of the object but also its functioning

[210] Margaret Chon, Intellectual Property and the Development Divide, 27 CARDOZO L. REV. 2821 (Feb.20, 2019), https://digitalcommons.law.seattleu.edu/faculty/558.
[211] *List of PCT Contracting states*, WIPO (Feb.20, 2019), https://www.wipo.int/export/sites/www/pct/en/list_states.pdf.
[212] Vivek Wadhwa et al., *U.S.-Based Global Intellectual Property Creation*, KAUFFMAN FOUNDATION (2007).
[213] *Supra* note 26.
[214] *Ibid.*

powers. In respect to use of 3-D printing for space exploration and endeavours, NASA has been using the technology to develop various parts of space launch system, which have proven to be more dependable and tougher than those developed by conventional modes of manufacture.[215] Though 3-D printing has been successfully used for manufacturing of objects on Earth, the real challenge is to reproduce the same result in the orbit in the absence of gravity. A US-based company, Made in Space, funded by NASA, has developed the first 3-D printer called *Archinaut*, that could function to produce large structures in space.[216] According to Mark A. Lemly, the concept of 3-D printing along with the internet, the engineering and the artificial biology can create a world without scarcity.[217] The process provides special machinery that ensures manufacturing of new objects is uncomplicated, affordable and expeditious. Various scholars have voiced their fears that 3-D printing may have a negative impact on IP rights.[218] The process of 3-D printing allows for unauthorized replication of structures and designs that violates copyrights, patents etc. This in turn is believed to impact incentives for investing in businesses and innovations.

In light of this, it is humbly suggested that with intention of cultivating a sustainable life on the Red Planet, formulation of necessary regulations and laws must become a priority. The exploits of this vital tool for evolving infrastructure on a different planet altogether, where there is negligible gravity and almost zero resources, outweighs the minor, though legally recognized and significant, IP rights of people on Earth. Hence, encouraging 3-D printing for facilitating the colonization of Mars would prove to be highly beneficial and advantageous in the long haul.

Conclusion

Buzz Aldrin called the expedition to Mars "not as a destination but more a point of departure, one that places humankind on a trajectory to homestead Mars and become a two-planet species."[219] It is just a matter of time when the Red Planet becomes colonized by humans. Technology and science are regarded as the two planks for its triumph; and law is believed to have taken a backseat. A change in the legal system, especially in the IP policies, may have a negligible effect in totality;

[215] Catherine Jewell, *3-D Printing and the Future of Stuff*, WIPO MAGAZINE (Feb.20, 2019), https://www.wipo.int/wipo_magazine/en/2013/02/article_0004.html.

[216] Archinaut, MADE IN SPACE (Feb.20, 2019), http://madeinspace.us/archinaut.

[217] Mark A. Lemley, *IP in a World Without Scarcity* SSRN (Feb.20, 2019), https://ssrn.com/abstract=2413974.

[218] Ruth Jianga et al., *Predicting the future of additive manufacturing: A Delphi study on economic and societal implications of 3D printing for 2030*,117 TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE 84, 97(2017).

[219] Buzz Aldrin, *The Call of Mars, Opinion* THE NEW YORK TIMES (Feb.20, 2019), https://www.nytimes.com/2013/06/14/opinion/global/buzz-aldrin-the-call-of-mars.html.

however, the same can support the mission in the long run. The present paper seeks to suggest ways by which the IP law and rights would act as an instrument to increase the odds of success of this interplanetary vision. With the rising evolvement of technical know-how and scientific discoveries, a complete transformation and development of IP legal system would be a step towards societal welfare and health which is the ultimate end of the whole plan. The Mars Mission shall face many hurdles; but the inquisitive, intelligent and ever-agog minds of the scientists, astrophysicists and scholars will overcome them all and make the colonization of the Red Planet a reality.

PATENTABILITY OF METHODS OF MEDICAL TREATMENT IN INDIA

Nishant Mohanty*

Abstract

There is exclusion of diagnostic, therapeutic and surgical methods from being patented i.e.,medical procedures in India cannot be patented for various reasons. There are criticisms to the exclusion of patentability related to any medical procedure or pharmaceutical or surgical process.The article focuses on why it is restricted in India and will provide reasons as to why it should notundertake a more liberal view and allow said patentability of the medical procedures. The usual justification by countries is that the allowing of medical procedures' patenting will lead to violationof the freedom of the doctors and medical practitioners and hinder their working to help a patient. The doctors must have the freedom to practice and apply the latest medical technology whether patented or not without fear or any infringement. The mindset of the practitioners may not be at par or very different compared to the physicians practicing abroad. The idea of getting a medical procedure patented should be justified and read up upon by the doctors. If patented, many doctors,to prevent infringement might refuse treatment. Further, the differences between the developing and developed countries which permit and prohibit patentability are discussed. A comparative analysis of the countries allowing said patentability and the countries prohibiting said patentability and their reasoning thereof along with the impact of patents on the medical profession shall also be discussed in detail. The lack of judicial interpretation regarding the subject matter ofpatentability medical a procedure is a factor for not granting the patentability of medical procedures. If there were any judicial decisions or precedents to rely upon the law can be amendedbut it might be too early for India to amend its law. As for countries like USA and Australia, they have had judicial decisions on the said subject matter and therefore have established the practicebut India hasn't had any. IPR in India is still developing and has bloomed wonderfully yet remainsthe fact that it has to grow and catch on a lot further from where it is now. TRIPS agreement or be it any other international agreement, it should give specific reasons as to why a member state may choose to exclude the patentable matter and if so, it should provide sufficient rational grounds as to why it is doing so that countries when applying such rules can justify their actions, in this scenario, granting/disallowing medical procedures' patentability.

Introduction

Preamble

According to the Indian Patents Act, section 3(i), the section prohibits and excludes medical procedures and methods being patented from the purview of patent eligibility subject matter. The basis therefore being the patents will affect the patients' rights negatively by restricting the access to treatments and also restrict the doctor's freedom to operate. All types of procedures mentioned in section 3 (i) for treating a patient which gets rid of the illness is no invention in the eyes of the Patents Act. Any sort of operations that are performed on the patient, requiring the proficiency and competency of a surgeon is excluded from being patented along with therapy methods practiced on humans.

Interpretation of Section 3(I) Of Patents Act, 1970

The provision doesn't include any invention for the medical or therapeutic use for the treatment of any person or patient or animal. What it does include is the apparatus and devices used in such medical procedures like surgeries and therapies. The said apparatus, if found to be novel (the criteria an author has to satisfy for the acceptance of being granted a patent) will be patentable and their patentability will not be affected by the exclusion and restrictions on patenting the methods of treatment. The scope of the provision hasn't been put to the test judicially.

Ambit of Section 3(I) With Respect to Diagnosis & Detection Methods:

Diagnosis refers to the recognition of the nature of the illness in medical terms; it is summated by the help of the investigation made into the patient's history and previous and current symptoms and also through tests. Diagnosis by a doctor is used to determine the illness or disease a patient is suffering or not suffering from. The said provision does not include detection tests; a screening test is a method of detection of potential diseases in patients who might not show any symptoms of the disease. The primary objective is to detect the anomaly in the body early in order to use preventive or curative medicine. Therefore, the screening tests/ detection tests for detection of illnesses in patients differ from diagnostic methods of treatment.

Trips Agreement & Barring of Patents:

Article 27 of the TRIPS Agreement states the patentable subject matter and exclusions the members may deem fit at their discretion. The subject matter bars are:

(1) The exclusion required to protect the morality, intended to protect human, plant or animal health and life or to also prevent injuries to the environment. The only necessity being the requirement is at stake and not up to the convenience of anyone.

(2) Secondly, it talks about the methods of treatment of humans or animals or plants which may be diagnostic or surgical. The agreement states that the products used during treatments are patentable in their own right, the reasoning behind it being that they don't fall under the category of methods of treatment.[220]

It is still debated whether the patenting system present in countries allow for more efficient ideas and to what extent.[221]The underlying question here is whether the countries would benefit more from the exclusions rather than the enabling clauses. India being a developing country has adopted wide interpretations of the exclusions, showcasing their national considerations. In India, patentability not just identifies with the progressions and the developments but the idea of access to the technological goods i.e., the pharmaceuticals and public wellbeing.[222] It is the duty of the state of a developing nation to stabilize the inconsistent issues of patent rights, *order public* (morality), social standards and the fundamental rights of the constitution.[223] The issue here is whether one is to protect the patent rights or the right to health. A common ground has to be evolved, a concept that connects the distance between the two.

Exclusion of Medical, Diagnostic & Therapeutic Methods:

The goals of medical law and patent law are different from each other, which is giving rise to the conflict that we know of. It has become a complicated issue because medical law is based on the concept of the Hippocratic *Oath* and the goal being preservation of human life. Patent law on the other hand, its objective is to motivate and encourage inventors by rewarding them, the end goals are too distinct when compared to each other. The issue here becomes of a public policy kind as so as to guarantee the most ideal treatment to the patient, physicians should consistently be free in their decision of treatment.[224] The reason for the exclusion of said procedures is based on the principles of human rights. The fundamental right to life to be given the most attention and is of the highest priority. The right of any person to get sufficient and genuine methods of treatment in

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[220] O. Mitnovetski & D. Nicol, *Are Patents for Methods of Medical Treatment Contrary to Order Public and Morality or "Generally Inconvenient"?* 30 J. OF MED. ETHICS 470, 477 (2004).

[221] Hall Bronwyn H, *Patents and Patent Policy*, 23 (4) OXFORD REV. ECON. POLICY 568, 587 (2007)

[222] Hestermeyer Holger, *Human Rights and the WTO: The case of patents and access to medicines*, 20 (1) EUROPEAN JOURNAL OF INTERNATIONAL LAW 236, 236 (2009).

[223]Basheer Shamnad, et al., *Patent Exclusions that Promote Public Health Objectives,* WIPO REPORT 1,5 (2010), https://www.wipo.int/edocs/mdocs/scp/en/scp_15/scp_15_3-annex4.pdf.

[224] Pila J, *Methods of Medical Treatment within Australian and UK Patents Law*, 24 (2) THE UNIVERSITY OF NEW SOUTH WALES L. JOURNAL 421, 462 (2001).

case of an illness is the top priority of the doctors and it is the benchmark of medicine. The reasonbehind said exclusion is to make sure that the patents would never effect or influence the doctors from performing their jobs and executing their duties properly.[225] Since the TRIPS agreement has given the freedom of exercising the exclusion at the country's discretion, the interpretation of the idea for the exclusivity having a capitalist outlook has an outcome where some countries are divided on allowing said methods to be patentable and some countries prohibiting said methods from being patentable and India is one of them. The international and domestic legislation referring to the exclusion clauses from patenting, medical procedures in particular, many developed nations haven't provided patentability prohibitions to medical and therapeutic procedures.

Patentability of Medical Procedures; Comparative Analysis of Countries:

India

Indian Patents Act, 1970 prohibits the patentability of medical, surgical, curative, prophylactic, diagnostic or therapeutic treatments of humans or animals[226] to render them free of disease or illness they might be suffering from. The nature of interpretation is strict; meaning the literal rule of interpretation is applied. The importance of public health and welfare in reference to improvement in biotechnology and in general highlighted in the constitution are thrown a light upon and shown relevance in the exclusion clause of the act.

United Kingdom

As accepted practice with reference to the prerequisite for a patent was that an invention should be industrially applicable and was also stated that medical treatments practiced on a human or animal is not industrially applicable therefore not patentable. In 2004, the Patents Act of UK amended the act of 1977, introducing Section 4(A) with reference to the European Patent Convention, it focused on the implementation of patentability but not through the patentability of medical methods with industrial applicability. These provisions allow the patentability of the medical usage of an officially recognized substance.[227]

[225] Kanakanala Kalyan C, *Diagnostic Method Patent Model- Patent Incentives and Socio Ethical Concerns*, 12(1) J. INTELLECT. PROP. RIGHTS 104, 110 (2007).
[226] The Patents (Amendments) Act, 2002, § 3(1)(b), No. 38, Acts of Parliament, 2002 (India).
[227] The Patents Act, 2004 of UK, art 4(A).

Republic of Korea

The patenting of medical, therapeutic and medical procedures has been interpreted as actions that could potentially fetter and hinder public health, according to the Article 32 of the Korean Patent Act that regulates that any action or patent that shall violate the public order or prove to be injurious to public health and morale shall be non-patentable. [228]

Germany

The German Patent Act, 1981 allows patentability for inventions that are genuine and new, have a factor of inventive steps embedded and are industrially applicable. Methods for medical procedures on human or animals are not considered inventions that are in any way vulnerable to industrial application.

Malaysia

Malaysia prohibits the patentability of medical procedures on humans and animals as according to Section 13 (d), which states that the procedures involving the treatment of human or animals by any means practiced are hereby not patentable. The Malaysian Patents Act, 1983 states the usual requirements for granting a patent like novelty, industrial application, and genuine idea, inventive in nature under Part IV.

United States of America

The scope of the subject matter relating to patentability in the USA according to the Section 101, Title 35 of the United States Code "is very wide as it states that any invention is patentable if it is genuine, novel and has utility, keeping the conditions of Title 35 in mind." The provision doesn't lay down any sort of prohibitions or said exclusions with regard to medical procedures. But under the *Morton doctrine*, the practice was banned in the country even though no statute bars the practice of patenting medical procedures. [229] In *Morton v. New York Eye Infirmary* the doctrine was reinforced and was stated that said procedures are not patentable. In the *Pallin case*, where the *Omnibus Consolidated Appropriations Act* for the protection of doctors and physicians relying on patented procedures to treat patients was drawn up by the US government. The current law doesn't restrict the patentability of medical procedures instead states the exception for the doctors and physicians in situations where patented procedures that are violated, is restricting the imposition of patent rights on medical procedures. In summation, the US concept of exclusions from patentability of medical procedures is very indifferent as they grant patents to the medical

[228] The South Korean Patent Act, 2005, art 32. [229] Morton v. New York Eye Infirmary, 17 F. Cas. 879 (1862).

methods but they limit the scope of the said patents by engaging certain defenses in favor of doctors who have the patent.[230]

Australia

The High Court in *Joos v The Commissioner of Patents* in 1972, "which was regarding the restorative and cosmetic method for treating bald patients with a hair weaving procedure, awards of patents have been accessible for procedures for medicinal treatment. The first case where a court needed to judge whether this contention was right was in the Federal Court case, *Anaesthetic Supplies Pty Ltd v Rescare Ltd (Rescare)*, which was regarding an invention for treating snoring disorders in patients and a procedure as well, for its treatment. From the outset occurrence, the judge held that it was not generally inconvenient that such innovation is given a patent. The courtwas of the opinion that the outcome would be illogical if the products used to treat humans were patentable and the method of treating humans weren't Sheppard J disagreed, contending that awarding a patent for a method/procedure of treatment would be "generally inconvenient" by quoting Section 6 of the Statute of Monopolies. Following the Rescare case, patents for methods of treatment were awarded consistently.

At that point, in the instance of *Bristol Myers Squibb Co v F H Faulding and Co Ltd* the issue was brought again up for a case including two patents for a procedure for regulating the medication Taxol in the treatment of cancer. Heerey J of the Federal Court of Australia didn't feel bound by the decision in the Rescare case, thinking of it as not to be ratio decidendi however just an obiter. Heerey J concurred with Sheppard J in Rescare and pursued his disagreeing judgment. Thus, the protection of the method in the issue was viewed as "generally inconvenient" for public policy reasons and the two patents were held to be invalid." "On appeal, notwithstanding the dissents, the Full Court unanimously overruled Heerey's judgment by following the majority in Rescare case that patentability of procedures for medicinal treatment was not "generally inconvenient." Therefore, Australia considers methods of medical treatment as patentable subject matter.[231] The Australian Law Reforms Commission never encouraged exclusion from patentability of procedures of medical treatment rather the commission is concerned with the ill-effects it would have on the biotechnology investment, healthcare and innovation and research & development operations. In summation, the Australian Law Reforms Commission never

[230] Pallin v. Singer, 36 USPQ 1050 (1995). [231] The Australian Patents Act, 1990, §18(2).

encouraged the restrictions on the patentability of medicinal methods instead the commission is focused on the ill-effects it would have on the biotechnology investment, healthcare and innovation and research & development operations. The following table shows the countries allowing and prohibiting the patentability of medicinal methods:[232]

JURISDICTION	CLAUSE	STATUS
INDIA	SECTION 3(I)	NOT ALLOWED
EUROPIAN UNION	ARTICLE 53(C)& 52(4)	NOT ALLOWED
USA	CLASS 128, 239, 897 & 899	ALLOWED
JAPAN	ARTICLE 29(1)	NOT ALLOWED
CHINA	ARTICLE 25.1(3)	NOT ALLOWED
EGYPT	ARTICLE 2	NOT ALLOWED
KOREA	ARTICLE 32	NOT ALLOWED
NEW ZEALAND	SECTION 2(1)	ALLOWED FOR NON HUMAN
PAKISTAN	SECTION 7(4)(C)	NOT ALLOWED
SOUTH AFRICA	SECTION 25(A)	NOT ALLOWED
THAILAND	SECTION 9(4)	NOT ALLOWED
AUSTRLIA	SECTION 18(1)(A)	ALLOWED
CANADA	SECTION 2	NOT ALLOWED
SINGAPORE	SECTION 16(2)(2)	NOT ALLOWED

Impact of Medical Patents on Medical Profession & Public Policy

Rationale of the law

The practice of providing protection for patents relating to medical apparatus, cosmetic surgery and drugs for human beings and they're not considered against the public policy or violating any societal standards. Then the question that arises that is why patents for medical methods are excluded? For example, any drug curing an autoimmune condition is patentable, whatis the explanation for refusal to patent a procedure to administer said drug? The EPC denies the claims of patents where the medical procedure is in anyway therapeutic. What is the reason one can give with respect to legal and logical standpoints to claim that medical methods produce a cosmetic result or an operative result instead of a curative result that the latter is not patentable andthe earlier is? The court in *Wellcome Foundation v. Commissioner of Patents*[233]held that the

[232] Lalit Ambastha & Shruti Kaushik, *Method of Treatment; A Patent Perspective*, PATENTWIRE (Oct. 31, 2019, 3:30 PM), https://www.patentwire.co.in/wp-content/uploads/2019/05/Method-of-Treatment.pdf.
[233] Wellcome Foundation Ltd v Commissioner of Patents, [1983] FSR 593.

differences have been viewed without a specific distinction and stated that law should live up to the requirements of the modern era as the society is not static but dynamic.

Reluctance to Perform a Patented Procedure

Medical practitioners may refuse or hesitate to conduct a procedure that is patented to prevent infringement. The equitable doctrine would naturally protect the physicians who opted to apply a patented method in an emergency, for example. But in India, if filed for a suit the practitioner may be left empty handed as under the Hippocratic Oath they are bound to serve the patient.

Increasing Healthcare Expenses

The increase in the costs as to the medical procedures patents is an issue. [234] The prices of drugs and the medical apparatus used in treating are expensive. Expenditure in costly new treatment may bring about decreased medical services costs in the long haul, on account of shortened emergency hospital stays, less intensive care and proficiency.[235] A patented procedure can be less expensive than the unpatented one, henceforth.

Harm to the Doctor/Patient Relationship

An issue that involves a patient's case being fully confidential with the doctor, the confidentiality clause that some doctors serve could be butting heads with the filing of an application for a patent. If a case is filed against the doctor having a patent then the patient being treated by said doctor, his/her right to privacy may be violated as the court may order for an enquiry into the case through the medical records including the patient's medical history.

Conflict of Interest

The issue regarding the conflicts of interest being a possible outcome as if the doctors who have incurred costs such as license fees for the patented procedure, while opting for the correct treatment for the patient, their decision and judgment might be hampered and inclined.[236] The saidargument negates the issue that the physicians have an obligation to let the patient know of all thealternatives available to him/her to treat the disease or condition. A conflict among the physician'sresearch for a patent and the right of the patient to be informed about the physician's motives were

[234] Gocyk-Farber B, *Patenting Medical Procedures: a search for a compromise between ethics and economics*, 18 CARDOZO LAW REV. 1572, 1573 (1997).
[235] Anderson S, *A Right without a Remedy: The Unenforceable Medical Procedure Patent*, 3 MARQ INTELL. PRO. L. REVIEW 117, 153 (1999).
[236] Meier B., *The New Patent Infringement Liability Exception For Medical Procedures*, 23 JOURNAL OF LEGISLATION

265 (1997).

discussed in *Moore v Regents of University of California.*[237]The medical negligence and malpractice laws considered with the ethical duty of a doctor/physician are strong agents to prohibit doctors in performing dangerous or unneeded medical procedures and actions taken against the best interest of the patient. It is recommended that instead of demanding a fee by the physicians, they could ask for a small royalty to be given to them per procedure and operation.[238]

Patenting Medical Procedures- A Complicated Issue

The usual justification by countries is that the allowing of medical procedures' patenting will lead to violation of the freedom of the doctors and medical practitioners and hinder their working to help a patient. The doctors must have the freedom to practice and apply the latest medical technology whether patented or not without fear or any infringement. In India, the scope of patents with regard to the said subject matter is not wide as it lacks judicial opinions by the courts. If one considers that the procedure is patentable throughout its life then the people in the country may reap the advantages of medical procedures that don't have patentable or profit-making apparatus'. That being said the individuals will have to incur costslike increased expenses, accessibility issues, enforcement issues, and the patient-doctor relationships will be fettered. The society does not need said hindrances and is better if the medicalprocedures are excluded. Public health should be and is the main priority in India and that is a goodstep. The patent rights and the well-being of people, between them, clearly the priority should be thepublic health as increasing accessibility of medical innovations is a priority.

Recommendation

Clarity in the International Regime of Patents

TRIPS agreement or be it any other international agreement, it should give specific reasons as to why a member state may choose to exclude the patentable matter and if so, it should provide sufficient rational grounds as to why it is doing so. The principle behind the exclusions is to be interpreted in such a way that justifies the exclusion. Their objective should be to examine the loopholes in the existing provisions legalizing exclusions of medical procedures and eventually look for remedies to the issues at hand. The different approaches taken by various countries of developing or developed nature can be understood and a rational system will be established in the patent regime. Ultimately, it will promote the priority of social and public benefit by improving

[237] Moore v. Regents of University of California, 793 P2d 479 (1990).

[238] Chartrand S., *Why Is This Surgeon Suing? Doctors Split Over Patenting of Their Techniques*, NEW YORK TIMES, (Jun. 8. 1995).

quality in the healthcare sector. In summation, a constructive interpretation of the TRIPS agreements and the countries' reasons to prohibit the patentability of medical procedures will definitely benefit the patent regime.

Conclusion

IPR in India is still developing and has bloomed wonderfully yet remains the fact that it has to grow and catch on a lot further from where it is now. People in India who do not have an idea about the patentability of medical apparatuses and non-patentable subject matter like medical procedures u/s 3(i) should know what it is first. The practitioners without any prior knowledge may apply for a patent but it may be rejected on valid grounds. The mindset of the practitioners may not be at par or very different compared to the physicians practicing abroad. The idea of getting a medical procedure patented should be justified and read up upon by the doctors. If patented, many doctors, to prevent infringement might refuse treatment. It might be too early for India to make exclusions of medical procedures invalid as of now. Another major reason being the lack of judicial interpretation regarding the subject matter of patentability medical a procedure is a factor. If there were any judicial decisions or precedents to rely upon the law can be amended but it might be too early for India to amend its law. As for countries like the USA and Australia, they have had judicial decisions on the said subject matter and therefore have established the practice but India hasn't had any.

TRIPS FOR TRADE: EVALUATING THE BASIS, BEGINNING AND IMPLICATIONS OF INDIA'S FAUSTIAN BARGAIN

Priya Anuragini*

Abstract

Uruguay round of Multilateral Trade Negotiations, for the first time, significantly linked trade liberalization to intellectual property protection. The industrialized world could no longer dominate the trade in goods and therefore sought the expansion of multilateral rules based trading system to include services, investment and Intellectual Property Rights (IPRs). Though developing countries opposed the inclusion of substantive norms on intellectual property protection within the negotiating mandate of the multilateral trade round, eventually most of them capitulated under the threat of unilateral trade sanction from the United States. A case in point being India, which agreed to inclusion of TRIPS primarily to protect its trade with United States and made the famous "Geneva Surrender". The article is based on the premise that Geneva Surrender epitomizes a Faustian bargain by India for India bartered its sovereign prerogative in Intellectual Property (IP) law making in return for market access. Thus, India was required not only to provide market access in return for market access rather it also needed to barter its prerogative in IP law making and establish a regime prevalent in countries like U.S. suited to their development and socio- economic needs. Moreover, the bargain was not a one-time compromise rather it made market access conditional to the level of IP Protection and TRIPS only established the minimum protection that needed to be accorded to IP. There was no bar on according more than the minimum protection rather it was encouraged and soon TRIPS- Plus protection would be demanded for market access. It is against this background that this paper seeks to analyze the constraints that led India to agree to the linkage of IP Protection and Trade in the Uruguay round. The article then describes the implications of the India's bargain on the Patent legislation of the country. Finally, the author argues that the bargain continues to this day as the country hardly relies on the flexibilities in the TRIPS amidst U.S. demands of providing TRIPS-plus protection.

Introduction

After the Second World War, international trade cooperation prospered under a provisionally applied agreement called GATT (General Agreement on Tariffs and Trade). Essentially, an international trade agreement on reduction of tariff barriers to trade, the 23 contracting parties to GATT, 1947 intended it to be administered by soon to be created International Trade Organization (ITO).[239] However, the ITO never came into existence due to non-ratification of Havana Charter and GATT became a de facto international organization for trade.[240] While GATT was not conceived as an international organization, it successfully transformed itself into one and was largely successful in reducing tariff on trade in goods.[241] In the ensuing years, more countries signed GATT and further trade liberalization continued.[242] However, in the early 1980s as the cold war was drawing to a close, and also as the world was becoming increasingly more interdependent, GATT rules were proving insufficient for administering international trade.[243] Countries particularly U.S. favoured a new round of trade negotiations with a broad agenda as American export interests were no longer served by dilution of tariff barriers for exports of manufactured goods.[244] American exporters sought multilateral trade negotiation to encompass hitherto uncharted areas such as services, investment and intellectual property wherein their competitive edge was still intact unlike in the case of manufactured goods where developing countries had made significant inroads.[245] The Ministerial Declaration on the Uruguay Round included Trade-related aspects of intellectual property rights (TRIPS) including trade in counterfeit goods within the framework of what would be negotiated within the umbrella of GATT.[246] While many developing including India agreed to this text construing it to mandate negotiations on Intellectual Property Rights (IPRs) only to the extent necessary to deal with trade in counterfeit goods and other such trade related aspects pertaining to IPRs, this was a patent misreading as the very first

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[239]DOUGLAS A. IRWIN *et al*, *The Genesis of the GATT* 95 (2008).
[240]Daniel Drache, *The Short but Significant Life of the International Trade Organization: Lessons for Our Time* (Oct.3, 2019, 11:10 PM), https://core.ac.uk/download/pdf/47530.pdf.
[241]Peter Van Den Bossche & W Zdouc, *The Law & Policy of the World Trade Organization: Text, Cases & Materials* 84 (2017).
[242]Chad P. Brown, *Self-Enforcing Trade: Developing Countries and WTO Dispute Settlement* 10-21(2009).
[243]Bossche, *Supra* note 3.
[244]WORLD TRADE ORGANIZATION, THE MAKING OF THE TRIPS AGREEMENT: PERSONAL INSIGHTS FROM THE URUGUAY ROUND NEGOTIATIONS, 83 (Jayshree Watal & Antony Taunman eds., 2015).
[245]Andrew G. Brown, Reluctant Partners: A History of Multilateral Trade Cooperation-1850-2000 149 (2004).
[246]*Ministerial Declaration, General agreement on Tariff and Trade,* (Oct.3, 2019, 11:10 PM), https://www.wto.org/gatt_docs/English/SULPDF/91240152.pdf.

paragraph of the text provided for "the need to promote effective and adequate protection of IPRs".[247] While the developing countries had initially conceded that the subject of counterfeit goods could be discussed in GATT, they did argue for a while that the negotiating mandate did not warrant inclusion of substantive norms and standards for protection of IPRs within multilateral rules-based system on trade. Initially, India with other developing countries particularly Brazil opposed inclusion of substantive norms of intellectual Property (IP) Protection in the trade negotiations.[248] Eventually, however, when the scope of the negotiating mandate was settled in April, 1989, it was decided that it did warrant negotiation on substantive norms and standards for protection of IPRs thereby inextricably linking trade and market access with intellectual property protection.[249] Though in a communication made to the group of Negotiation on Goods on 10th July, 1989, India stated that the objective of the "intellectual property system is to monopolize rather than to liberalize" and advocated for the need of recognizing the "freedom of the member states to attune their intellectual property protection system to their own needs and conditions".[250]However since the consensus was already reached in April, 1989 to negotiate on substantive standards on availability and scope of IPRs , India's communication in July, 1989 had not much relevance. Interestingly, India is said to have played a major role in finalizing the April, 1989 text.[251] However if India was opposed to inclusion of substantive norms on IPRs in the trade round, then why did it concede in April 1989 by allowing inclusion of "standards of availability of IPRs" in the text that was to clearly establish the negotiating mandate only to again argue differently in July, 1989. What made India surrender its interests and position even as there was fierce opposition on the stand taken in the country?[252]

1. Trade as the Objective of the Faustian Bargain: The Threat of (special) 301

[247] JAYSHREE WATAL, INTELLECTUAL PROPERTY RIGHTS IN THE WTO AND DEVELOPING COUNTRIES 21 (1st edition, 2003).
[248] JAYSHREE WATAL, INTELLECTUAL PROPERTY RIGHTS IN THE WTO AND DEVELOPING COUNTRIES 24 (1st edition, 2003).
[249] *Id.*, at 27.
[250] MTN.GNG/NG11/W/37(1989); *Group of Negotiation on Goods, standards and Principles concerning the availability, scope and use of Trade-Related Intellectual Property Rights (Communication from India), Multilateral Trade Negotiations*, THE URUGUAY ROUND (Oct.5,2019, 10:00 AM).
https://www.wto.org/gatt_docs/English/SULPDF/92070115.pdf
[251] Watal, *supra* note 9, at 27.
[252] *Intellectual Property Rights, The Geneva Surrender*, ECONOMIC AND POLITICAL WEEKLY (1989).

U.S. may say to be primarily responsible for inclusion of IP in the Uruguay round.[253] While GATT, which primarily governed trade in goods, had few provisions pertaining to IP prior to the beginning of the Uruguay Rounds, they did, not even remotely, lay down minimum standards that contracting parties to GATT were required to follow for determining "recognition, availability and scope of IP". U.S.'s insistence on inclusion of IP in the trade round lay in the fact that approximately, one fourth of all the U.S. exports consisted of IPs and the lack of IP protection in export markets particularly developing countries including, India and Brazil, was injuring US trade interests and increasing its trade deficit.[254] Particularly in India's case, its patent system was the direct motivation for US efforts in Uruguay round.[255] The existing Patents Act, 1970, inter alia, did not allow product patents for certain categories of technologies including medicines and chemicals.[256] This allowed domestic pharmaceutical manufacturers of India to reverse engineer and manufacture low cost generic versions of effective medicines that had been produced and patented in industrialized countries such as US and were priced higher due to subsisting patent rights in those countries. In fact, due to the 1970 patent legislation, India's generic pharmaceutical industry earned itself the epithet of "pharmacy of the world" riding on the strength of its cheap export of medicines, a feat that did not go down too well with innovator pharmaceutical companies who claimed that Indian generic drug manufacturers were free riding on their R & D.[257]

In fact, the Pharmaceutical Research and Manufacturers of America (PhRMA), an associationof the innovator pharmaceutical companies and one of the most influential lobbies is said to haveplayed a major role in determining the US stand in trade negotiations so as to ensure that India's IP regime gave in to protect its interests.[258]And indeed it did give in. India capitulated under US pressure which came in the form of 301 and agreed to barter sovereignty in IP law making.

Section 301 finds place in the US Trade Act of 1974 and authorises the president of the country to suspend trade agreement concessions and institute retaliatory action against foreign countries subject to the determination that foreign countries are maintaining trade policies that are

[253] WORLD TRADE ORGANIZATION, THE MAKING OF THE TRIPS AGREEMENT: PERSONAL INSIGHTS FROMTHE URUGUAY ROUND NEGOTIATIONS, 83 (Jayshree Watal & Antony Taunman eds., 2015).
[254] Prasanth Reddy T, Sumathi & Chandrasekharan, Create, Copy, Disrupt: India's Intellectual Property Dilemmas, 36 (2017).
[255] *Id*, at 37.
[256] The Patents Act,1970 § 5
[257] Prasanth Reddy T, Sumathi & Chandrasekharan, Create, Copy, Disrupt: India's Intellectual Property Dilemmas, 30 (2017). [258] *Id.*, at 31.

unjustifiable, unreasonable, or discriminatory and burden or restrict United States Commerce.[259] The provision was a result of the dissatisfaction of the U.S. with the dispute resolution system under the GATT, 1947 and was amended a number of times to bolster U.S.'s unilateral authority todeal with erring trade partners by instituting retaliatory action. In 1988, section 301 was further strengthened to taken on what the U.S. considered to be the unfair foreign trade practices. The 1988 enacted Omnibus Trade and Competiveness Act expanded the executive power to unilaterally retaliate against countries so as to ensure that they fell in line to protect the interests of the U.S. businesses in other countries and introduced what was referred to as Super 301 and Special 301.[260] Both these additions were aimed at enhancing the bargaining power of U.S. trade negotiators in promoting international trade liberalization in sync with the interests of the U.S.[261] While, Super 301 required the USTR (United States Trade Representative)[262] to probe into a variety of unfair trade practices of the trading partners of the United States and identify priority countries, Special 301 mandated the USTR to identify those foreign countries that "denied adequate and effective protection to IPRs.[263]. More specifically, Special 301 required the USTR to identify "priority foreign countries" which were countries whose policies were having the most adverse economic impact on the United States and who were not entering into bilateral or multilateral negotiations to provide adequate protection to IPR. USTR had the onus of initiating investigations into the policies of those countries which were identified as priority foreign countries. The USTR was mandated to mandate to complete the investigation and enter into bilateral negotiation with the countries within six months. If the detrimental policies persisted USTR was authorized to retaliate by imposing restriction on imports from countries that were identified as priority countries. Interestingly, USTR was not required to conduct investigation or impose duties if it would be detrimental to the interests of the United States. [264]

[259] Elizabeth K. King, *The Omnibus Trade Bill of 1988: Super 301 and its Effects on the Multilateral Trade System under the GATT*, 12 U. PA. J. INT'L L. 245 (1991).
[260] King, *supra* note 22.
[261] Judith H. Bello and Alan F. Holmer, *"Special 301": Its Requirements, Implementation, and Significance*, 13 FORDHAM INT'L L.J. 259 (1989).
[262] Arvind Subramanium, *The Thorn in India- US Business ties*, BUSINESS STANDARD (Oct.27,11:30PM), https://www.business-standard.com/article/economy-policy/the-thorn-in-india-us-business-ties-114031201298_1.html.
[263] 19 U.S.C. §§ 2411-2417.
[264] Bello, *supra* note 26

In its first special 301 report, USTR placed India on the priority watch list along with Brazil, Mexico, China, Korea, Saudi Arabia Taiwan and Thailand.[265] Further, Indian IP regime was to be reviewed by November, 1989 and if found unsatisfactory India could have been "downgraded" to priority foreign country. Further, India was identified as Priority Country in 1989 pursuant to the newly created Super 301 i.e., Section 310 of the Trade Act, 1974 as amended in 1988. However, U.S. chose not to retaliate against India immediately as it was more interested in India agreeing toits demands in the Uruguay round of negotiations.[266] Thus, a retaliatory action was staring India inthe face while it was going through a difficult balance of payment situation and export earnings were considered relevant to better the situation.[267] And, so to protect the interests of its exporters who lamented "why should they be penalized", particularly to ensure that the textiles exports from India to U.S. were not impacted adversely, Indian government made the decision of bartering sovereign prerogative in IP Policy making to U.S.

What further necessitated India's Faustian bargain was the stipulation made in the GATT ministerial declaration before the beginning of the Uruguay round of trade negotiations that the result of the negotiations "shall be treated as part of a single undertaking".[268] Thereby, countries had no choice but to agree to abide by all that was negotiated in the multilateral round which meant that if a country was desirous of being a party to Agreement on trade in goods, it necessarily had to agree to Agreement on Intellectual Property referred to as TRIPS.

2. The Faustian bargain: Implications and Continuation

On 1st January, 1995, WTO (World Trade Organization) replaced the earlier GATT by virtue of the Final Act Embodying the results of the Uruguay round of Multilateral Trade Negotiations (Final Act).[269] India signed the Final Act on 15th April, 1994 and thus was obligated to comply with the provisions of TRIPS.[270] And the compliance was mandatory for WTO had an elaborate ruled based dispute settlement system wherein every WTO member had recourse to the dispute

[265] Special 301 on Intellectual Property, Factsheet, (Oct.27,11:30PM) (1989). https://ustr.gov/sites/default/files/1989%20Special%20301%20Report.pdf (last accessed on October 3, 2019)
[266] King, *supra* note 22.
[267] Budget 1988-89, (Oct.27,11:30PM) https://dea.gov.in/budgetdivision/indiabudgetarchive
[268] Part IB, *General agreement on Tariffs and Trade, Ministerial declaration on the Uruguay Round*, September 20, 1986, (Oct.27,11:30PM), https://www.wto.org/gatt_docs/English/SULPDF/91240152.pdf.
[269] Final Act embodying the results of the Uruguay round of Multilateral Trade Negotiations, Apr.15,1994, (Oct.27,11:45PM) https://www.wto.org/gatt_docs/English/SULPDF/92160001.pdf (last accessed on October 3, 2019).
[270] *Id.*, at ¶4.

settlement system against breaches of WTO Law and responding member had no choice but to be bound by the jurisdiction of the WTO dispute settlement system.[271] Further, to ensure effective enforcement of the decision of the WTO DSB (Dispute Settlement Body), WTO dispute settlement system also provided cross retaliation as one of the remedies to the complaining party if the responding party refused to comply with the DSB ruling.[272] Cross retaliation implied that if India was found violating TRIPS, the complaining country could imposes higher duties on textile imports from India and thus the reasons that may have coerced India into making the Faustian bargain would exist till India would choose to remain a WTO member and ensure compliance with TRIPS.[273] And thus aside from the immediate implications of Faustian bargain which followed soon after India becoming a WTO member, the implications continue till date. The most pronounced impact of India's Faustian bargain was and continues to be on the Patents Act,1970 and Pharmaceutical sector and this section attempts to bring those to the fore

India was required to amend its 1970 enacted Patents Act comprehensively in order to comply with TRIPS. Interestingly, all the members of WTO were exempted for a period of one year from complying with the provisions of TRIPS.[274] However, countries like India which did not grant patent-based monopoly in certain products like Pharmaceuticals were mandated to comply with TRIPS right away.[275] Thus the onus on developing countries like India to protect IPRs was greater than those on the developed countries as explained below.

Article 27.3 of TRIPS required product patents to be granted in all fields of technology including pharmaceuticals for which many developing countries including India only provided process patents till then. And, while article Art. 65 of TRIPS allowed developing countries a period of 10 years to comply fully with the mandate of Art. 27, the transition period was not clean.[276] This meant that developing countries like India were required to establish a mechanism for allowing filing of product patent applications in pharmaceuticals even during the transition period and grant them with what were known as "Exclusive Marketing Rights (EMRs) subject to fulfilment of

[271] Art. XXIII:1, GATT, 1994.
[272] Art.22, ¶3(c), Understanding on the Rules and Procedure governing the Settlement of Disputes, Annex 2 of the Agreement establishing the World Trade Organisation.
[273] Bossche, *Supra* note 3, at 291.
[274] Art. 65(1), Agreement on Trade Related Aspects of Intellectual Property Rights, Annex 1(c) of the Agreement establishing the World Trade Organisation.
[275] Art. 70.8, Agreement on Trade Related Aspects of Intellectual Property Rights, Annex 1(c) of the Agreement establishing the World Trade Organisation.
[276] WORLD TRADE ORGANIZATION, THE MAKING OF THE TRIPS AGREEMENT: PERSONAL INSIGHTS FROM THE URUGUAY ROUND NEGOTIATIONS, 211 (Jayshree Watal & Antony Taunman eds., 2015).

certain conditions. [277] Considering, EMRs were very similar to patent rights under TRIPS or even broader in as much grant of right was linked to product patent in other WTO member; it in effect meant that India had agreed to product patent regime from the very first day of TRIPS. Though the narrative was that developing countries like India had a transition period of ten years before they needed to shift to product patent regime stipulated by TRIPS, in reality there was no such transition period.[278] Interestingly, it was on the non-compliance of Art. 70.8 and Art. 70.9 that India faced its first WTO dispute as a respondent. The dispute was brought by U.S. on account of not providing a means for means for filing of mailbox application and not establishing a system for grant of EMRs. India lost both before both the adjudicatory forums of WTO i.e., the panel and the appellate body and later also against EU which complained against India on the same issues.[279] Threatened by cross retaliation, India rushed to bring its patent legislation in line with TRIPS thus cementing the Faustian bargain once and for all.

India introduced three amendments in the Patents Act, 1970 within a space of six years to bring it in line with the mandate of TRIPS.[280] The net effect of all the three amendments was that monopoly for inventors/ innovators in the form of patent protection was enhanced thereby diminishing accessibility and affordability of even those inventions which were critical for advancing human rights like right to health. For instance, the product patent regime was extended to food, chemicals and medicines, duration of patent protection increased to 20 years and license of right that allowed the government to disregard the monopoly offered by the patent if "reasonable requirement of the public with respect to the patented invention were not met".[281] The only silver lining was that India was able to put some limitation on the monopoly by making use of the a few flexible and open-ended provisions in TRIPS.[282]

Interestingly, while India had to amend its patent legislation comprehensively to fulfil its TRIPS commitments, the unilateral U.S. pressure on India for providing enhanced protection and

[277] Art 70.8 & Art.70.9, Agreement on Trade Related Aspects of Intellectual Property Rights, Annex 1(c) of the Agreement establishing the World Trade Organisation.
[278] Biswajit Dhar, *Complying with TRIPS Commitment: EMR versus Product Patent Regime*, ECONOMIC AND POLITICAL WEEKLY, 3230-3231 (1998).
[279] India- Patent Protection for Pharmaceutical and Agricultural Chemical Products, WT/DS 50/ AB/R
[280] Prasanth Reddy & Sumathi Chandrasekharan, *Create, Copy, Disrupt: India's Intellectual Property Dilemmas*, 41(2017).
[281] The Patents Act, 1970, § 5.
[282] §3(d) of the Patents Act, 1970; Art. 6 & 30, TRIPS Agreement, 1995.

monopoly to patents has not abated. [283] In fact, as the table below, indicates India has continued to be on the priority watch list in its annually published special 301 report even after complying with the mandate of TRIPS in 2005.[284]

S. No	Year	India's Designation	Areas of Concern as per USTR
1.	2005	Priority Watch List	• Does not protect undisclosed data against unfair commercial use
2.	2006	Priority Watch List	• Does not protect undisclosed data against unfair commercial use
3.	2007	Priority Watch List	• Counterfeit pharmaceuticals,
4.	2008	Priority Watch List	• Piracy of Pharmaceuticals
5.	2009	Priority Watch List	• Unfair use of undisclosed data by third parties to obtain marketing approval for medicines
6.	2010	Priority Watch List	• Unfair use of undisclosed data by third parties • Section 3(d) of the Patents Act, 1970, Counterfeiting of medicines
7.	2011	Priority Watch List	• Unfair use of undisclosed data by third parties • Section 3(d)of the Patents Act,1970, • Stronger patent monopoly for innovators required

[283]Sri vidhya Ragavan, *The (Re)Newed Barrier to Access to Medication: Data Exclusivity*, 51 AKRON L. REV, 1163 (2017).
[284]The USTR Special 301 Report, https://ustr.gov/issue-areas/intellectual-property/Special-301 (Oct.25,09:30 PM).

8.	2012	Priority Watch List	• Compulsory Licenses, • Unfair use of undisclosed data by third parties
9.	2013	Priority Watch List	• Section 3(d) of the Patents Act,1970, • Securing and enforcing patents in the pharmaceutical sector
10	2014	Priority Watch List	• Compulsory licensing
11	2015	Priority Watch List	• Concerns over innovation environment in the pharmaceutical sector • Section 3(d) of the Patents Act,1970
12	2016	Priority Watch List	• Section 3(d) of the Patents Act, 1970, • Patent linkage required
13	2017	Priority Watch List	• Challenges faced by the pharmaceutical innovators due to Section 3(d) of the India Patents Act, • Compulsory licenses of the Patented Pharmaceutical
14.	2018	Priority Watch List	• Criteria for compulsory licensing, • Section 3(d) of the Patents Act, 1970 • Unfair use of undisclosed data by third parties
15.	2019	Priority Watch List	• Compulsory licensing,

			• Section 3(d) of the Patents Act, 1970 • Unfair use of undisclosed data by third parties

Table 1

When U.S. placed India on the priority watch list in 1989 for the first time, its intent was to ensure India agreed to barter its prerogative in IP law making for market access. While India agreed then, U.S. has constantly upped the ante on the standards that Indian IP regime needs to adhere to protect IP and used its special 301 report to promote TRIPS- plus protection of IP .[285] As the above table indicates, U. S. through its special 301 Report constantly attempts to limit or restrict India's reliance on the flexibilities provided in the TRIPS by pinpointing India's usage of those flexibilities as areas of concern. Thus, while in 1989, India was placed on the priority watch list to ensure that it extended adequate patent protection for all classes of inventions and participate constructively in multilateral IP negotiations, it continues to find itself in the same position in 2019 for relying on the flexibilities provided in the TRIPS pertaining to compulsory license , ever greening, etc. [286] Interestingly, while U.S. has refrained from initiating the WTO Dispute settlement mechanism against India , it has used bilateral trade forums to exert pressure on India.

[287] While India has reiterated that it is TRIPS compliant and will not "succumb to any pressure from anywhere", and yet the Faustian bargain seems to continue.[288] For instance in 2014, India and the U.S. established a high-level working group under the auspices of Trade Policy Forum (TPF) to sort out the "contentious issues".[289] Around the same time, India initiated the process for drafting a National IPR Policy, a first for the country and this was duly acknowledged and appreciated in

[285] Sean Flynn, *Special 301 of the Trade Act of 1974 and Global Access to Medicine*, JOURNAL OF GENERIC MEDICINES, 451 (2010).
[286] Art. 27& 31, TRIPS Agreement, 1995.
[287] Kirtika Suneja, *India, US talk restoration of GSP, withdrawal of tariffs*, THE ECONOMIC TIMES, (Oct.23, 11:00 PM) *available at* https://economictimes.indiatimes.com/news/economy/foreign-trade/india-us-talk-restoration-of-gsp-withdrawal-of-tariffs/articleshow/71071029.cms?from=mdr.
[288] Press Trust of India, *India not to succumb to any pressure on IPR issues: Nirmala*, THE BUSINESS STANDARD, (Oct.23, 11:15 PM), https://www.business-standard.com/article/pti-stories/india-not-to-succumb-to-any-pressure-on-ipr-issues-nirmala-116042601513_1.html.
[289] Press Trust of India, *PM Modi's US Visit: India, US to set up high- level working group on IPR*, THE ECONOMIC TIMES (Oct.23, 11:15 PM), https://economictimes.indiatimes.com/news/economy/policy/pm-modis-us-visit-india-us-to-set-up-high-level-working-group-on-ipr/articleshow/43985458.cms?from=mdr.

the 2015 USTR Report.[290] Was the exercise to draft a National IPR Policy only to placate the U.S so that India's trading interests are not adversely affected?

Further, in addition to a few flexibilities offered by TRIPS, one of the notable achievements for India during Uruguay Round of Multilateral Negotiations was to be able to secure an open ended and relatively liberal provision on grant on compulsory license.[291] Thus, TRIPS and the Doha Declaration on the TRIPS Agreement and public health gives WTO members a lot of flexibility in granting compulsory licenses on patents to ensure accessibility and affordability of products or processes which otherwise owing to the patent granted monopoly may become inaccessible and unaffordable. However, in almost over a decade and a half since TRIPS became fully operative, India has granted just one compulsory license. And thus, India's Faustian bargain from the 20th century continues in the 21st century.

[290] Special 301 Report 2005, 8 (Oct.23, 11:45 PM) https://ustr.gov/sites/default/files/2015-Special-301-Report-FINAL.pdf.

[291] WORLD TRADE ORGANIZATION, THE MAKING OF THE TRIPS AGREEMENT: PERSONAL INSIGHTS FROM THE URUGUAY ROUND NEGOTIATIONS 295 (Jayshree Watal & Antony Taunman eds., 2015).

CLINICAL TEST DATA AND MARKET APPROVAL OF DRUGS: UNDERSTANDING INDIAN LAW VIS-À-VIS TRIPS AGREEMENT

Sonal Singh*

Abstract

Marketing of pharmaceuticals requires approval from the drug regulatory authorities of countries to ensure that the drugs satisfy the requirements of quality, safety and efficacy. Drug originators are required to submit data to the authority in this regard. Generation of such data generally involves elaborate experimentation, chemical analysis, trials in various phases and estimation of the impact on environment. These are time-consuming and expensive processes. These tests generate valuable data regarding a particular drug. For granting market approval to pharmaceutical products, a country's drug regulatory authority requires the drug registrants to submit clinical test data proving the drugs' safety, efficacy and quality. Whether the generic drug manufacturers can rely on the data submitted by the drug innovator, or they have to generate the data by undertaken clinical trials on their own has been debatable. Article 39.3 of the TRIPS Agreement provides that "Members, when requiring, as a condition of approving the marketing of pharmaceutical or of agricultural chemical products which utilize new chemical entities, the submission of undisclosed test or other data, the origination of which involves a considerable effort, shall protect such data against unfair commercial use. In addition, members shall protect such data against disclosure, except where necessary to protect the public, or unless steps are taken to ensure that the data are protected against unfair commercial use." Some member states are of the opinion that it provides for 'data exclusivity' that is, exclusive rights of the originators over the test data submitted by them, thereby excluding its reliance by any subsequent generic manufacturer seeking market approval, as according to them such reliance would result in 'unfair commercial use.' The other set of argument is that data exclusivity delays the entry of generics in the market and leads to increase in price of drug. This article aims to clarify the relevant provisions

of TRIPS Agreement regarding submission of test data for market approval of drugs. The author has also discussed the Indian law in this regard to clarify the position of India.

Introduction

Pharmaceutical products are required to seek approval from the drug regulatory authorities of the country before they could be marketed. The drug registrants are required to submit data proving drug's efficacy, safety and quality. This requires the drug originator to undertake several tests. The data thus generated is valuable as it undertaking such tests demands time as well as investment. Whether the data submitted to drug regulatory authorities can be relied upon to grant market approval to subsequent generic drug[292] manufacturers is an issue which has conflicting opinions. On one hand it is argued that the information about quality, safety and efficacy of the drug should not be kept disclosed. As the national authorities already have knowledge of the characteristics and effects of the original drug, it is not rational to require a generic manufacturer to carry out the same tests all over again. Proving similarity to the authorities is sufficient.[293] On the other hand it is argued that manufacturer of an original drug invests heavily in conducting the required tests and thus, he deserves to get adequate returns. Thus, generic drug manufacturers should not be allowed to rely on the data submitted by the original manufacturer. The subsequent manufacturers would get an unfair advantage as they would not be required to investment in conducting the required tests. This would discourage the developers of new pharmaceutical products.[294] Thus, manufacturer of the original drug should have exclusive right over this data, at least for a limited time period, called data exclusivity.

Article 39.3 of the TRIPS Agreement provides "*Members, when requiring, as a condition of approving the marketing of pharmaceutical or of agricultural chemical products which utilize new chemical entities, the submission of undisclosed test or other data, the origination of which*

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[292]Rafael Alfonso-Cristancho, *Definition and Classification of Generic Drugs Across the World,* 13 APPL. HEALTH ECON. HEALTH POLICY. 5, 6-7 (2015).

[293]Animesh Sharma, *Data Exclusivity with Regard to Clinical Data*, 3 INDIAN J. L. & TECH. 82, 83-86 (2007).

[294]Carlos María Correa, *Protection of Data Submitted for the Registration of Pharmaceuticals: Implementing the Standards of the TRIPS Agreement,* ESSENTIAL MEDICINES AND HEALTH PRODUCTS INFORMATION PORTAL A WORLD HEALTH ORGANIZATION RESOURCE (Oct. 10, 2019, 12:30 PM), http://www.southcentre.org/publications/protection/protection.pdf.

involves a considerable effort, shall protect such data against unfair commercial use. In addition, Members shall protect such data against disclosure, except where necessary to protect the public,or unless steps are taken to ensure that the data are protected against unfair commercial use." Data or information falls under the purview of Article 39.3 only when the following conditions arefulfilled:

i) Data Necessary to Obtain Marketing Approval

The very condition of the said provision is that member country through its national regulations requires submission of test data for providing market approval to pharmaceutical or agricultural products. Thus, if a member country does not stipulate the requirement of submitting such data, Article 39.3 is not applicable. Such data contains results of safety and quality testing of agrochemicals and drugs. The data is to be submitted only to the extent it is necessary for obtaining marketing approval. Excess data submitted voluntarily by the applicant is not protected under this provision.[295]

ii) Undisclosed Data

Data or information already in public sphere is not covered under Article 39.3. Information relating to drugs made available by the health authority, or published in scientific journals falls into publicdomain. Thus, disclosed and undisclosed nature of information is an objective attribute. Applicant's declaration of undisclosed information is verified.[296]

iii) New Chemical Entity

The expression "new" is not defined in the TRIPS Agreement. Though the requirement of "new" in Article 39.3 does not presumably entail a patent standard of novelty, member states still have the option to do so. Even if a chemical entity is considered new under Article 39.3, it will not imply that it is necessarily patentable because either it might possibly not fulfil the standards of novelty or inventiveness for the purpose of patent. Interpretation of "new" has been left to the member countries. "New" can refer to the date of application for approval of the drug. Newness could be

[295] *id* at 17.
[296] *id* at 15.

either absolute or relative, i.e., new can mean first application anywhere in the world or in the member country where it was filed, depending upon the approach adopted by the memberstate.[297] A product recognized and used in a field could find a new application in the pharmaceutical sector. It might not be deemed to be a new chemical entity as the chemical was already known. Alternatively, newness can be determined within a particular regulatory framework, regardless of the fact that the same chemical could have been used in the context of a different regulatory framework.[298] It can also be construed that protection may not be provided when the test data is developed for a *new use* of a pharmaceutical product (known as a "second indication").[299] In such case, the method or application of use of a known chemical entity is new, however the entity is not new as such.[300]

Article 39.3 would not be applicable when approval is required for new indications, dosage forms, crystalline forms, combinations, etc. of existing drugs, because no new chemical entity would be involved.[301] The issue was addressed in the *"Squibb"* case[302] where it was held that a (subsequent) product is "essentially similar" to an earlier approved product if the subsequent product possesses "the same qualitative and quantitative composition regarding active principles" and it is bio-equivalent of the first product, "unless it is different from the original product regarding efficacy or safety". In such cases, the original applicant is not granted new periods of "marketing exclusivity" for every new indication.[303]

iv) Considerable Effort

Article 39.3 deals with information pertaining to test data about clinical trials for pharmaceuticals and field trials for agrochemicals. There is no aspect of creation or invention in this information. Under the TRIPS Agreement, any substantive standard for granting protection to data under Article 39.3 is not defined. The only stipulation is that there should be a "considerable effort" in obtaining the data. However, what will amount to "considerable effort" is not mentioned in the agreement.

[297] TREVOR COOK, SPECIAL REPORT: THE PROTECTION OF REGULATORY DATA IN THE PHARMACEUTICAL AND OTHER SECTORS 10 (Sweet & Maxwell, London 2000).
[298] *Id* at 6.
[299] Correa, *supra* note 3, at 17.
[300] Correa, *supra* note 3, at 18.
[301] Correa, *supra* note 3, at17.
[302] Bristol – Myers Squibb Company v. Royce Laboratory Inc., 69 F.3d 1130 (Fed. Cir.1995).
[303] *Ibid.*

It can signify special or concentrated activities, mental or physical, which are extensive in duration or scope.[304] It can also mean the extent of investment made by the applicant in coming up with the pharmaceutical or agrochemical product. [305] This requirement can be established in proportion with the significance of efforts made, on a case-to-case basis. When the above conditions are fulfilled, an obligation is casted on the member countries to provide protection to undisclosed data submitted to government authority from disclosure.

Exceptions to the Obligation of Non-Disclosure

Under Article 39.3, national authorities have to ensure that the data submitted is not disclosed, unless:

i) it is necessary to protect the public; or

ii) steps are taken to ensure that the data protected against unfair commercial use.

i) Necessity to Protect the Public

For determination of necessity, WTO/GATT rules and jurisprudence may provide guidance to the member states. However, at the same time member countries have to bear a heavy burden of proof to invoke it.[306]

ii) Ensuring protection of data against Unfair Commercial Use

Information may be disclosed, if its unfair commercial use is prevented. Unfair commercial use would pertain to an act contrary to honest practices in commercial or industrial matters.[307] Yet again what will be "unfair" depends from country to country. It is not defined in the TRIPS Agreement. Countries have been provided with enough room of maneuver to determine what will amount to unfair commercial use.

1. Unfair Commercial Use and Unfair Competition regarding Article 39.3

"Unfair" means "not honest or equitable or impartial or according to rules".[308] The idea of "unfair" is relative to the values of a particular society at a given point in time. Hence, what amounts to

[304] G. Lee Skillington, *The Protection of Test and Other Data Required by Article 39(3) of TRIPS*, 24 NW. J. INT'L L. & BUS. 1, 28 (2003).

[305] *Id.*

[306] TREBILCOCK ET.AL., THE REGULATION OF INTERNATIONAL TRADE 40 (Routledge, London & New York 1999).

[307] Paris Convention for the Protection of Industrial Property, art.10 bis, Mar. 20, 1883 21 U.S.T. 1583; 828 U.N.T.S. 305.

[308] Correa, *supra* note 3, at 25.

"unfair" varies from country to country.[309] The Vienna Convention on Law of Treaties, 1969 provides that a treaty shall be interpreted in good faith according to the ordinary meaning to be given to the terms of the treaty in their context and in the light of its purpose and object.[310] Article 39.1 of the TRIPS Agreement mandates protection of "undisclosed information" in the framework of "unfair competition". It requires that to ensure effective protection against unfair competition as under Article 10bis of the Paris Convention (1967) members shall protect the data submitted to governments or governmental agencies according to paragraph 3. Thus, Article 39.3 should be interpreted in the light of Article 39.1, that is, in the context of "unfair competition."[311] Article 10bis of the Paris Convention for the Protection of Industrial Property, 1883 provides that an act of unfair competition would mean any act of competition contrary to honest practices in industrialor commercial matters. Yet again what will be "unfair" varies from country to country.

Regarding data protection, the WIPO Model Provisions on Protection against Unfair Competition suggests that "any act or practice, in the course of industrial or commercial activities, shall be considered an act of unfair competition if it consists or results in an unfair commercial use of secret test or other data, the origination of which have been submitted to a competent authority for the purposes of obtaining approval of the marketing of pharmaceutical or agricultural chemical products which utilize new chemical entities. "[312] Thus, an act which constitutes unfair commercial use of the submitted data will also result in an act of unfair competition. Article 39.1 and Article 39.3 thus cast an obligation on member countries that, for ensuring effective protection against unfair competition, the data submitted for market approval should not be disclosed by the national (government) authorities, unless steps have been taken to prevent its unfair commercial use.

2. Whether data exclusivity is mandated under Article 39.3 of TRIPS Agreement?

Article 39.3 of TRIPS directs protection against "unfair commercial practices" however it allows countries to determine practices which can be considered as commercially unfair. Thus, different approaches may be adopted by member states, consistent with Article 10bis of the Paris Convention. Countries may:

[309] TREBILCOCK ET.AL., *supra* note 15, at 50.
[310] Vienna Convention on the Law of Treaties art. 31(1), May 23, 1969, 1155 U.N.T.S. 331.
[311] General Agreement on Trade-Related Aspects of Intellectual Property art. 39(1), Jan. 1, 1995, U.N.T.S. 299.
[312] WIPO Model Provisions on Protection against Unfair Competition art. 6(3), 1996 no. 832(E).

a) permit the second-entrant to rely upon "originator's" data in lieu of compensation, or

b) grant approval to market approval application of generic manufacturer without examining or relying upon confidential data submitted by originator, or

c) require the second-entrant to generate test data on its own for obtaining authorization of use from the "originator" of data, or

d) Undertake examination and may rely upon the data submitted by the "originator" for evaluation of application of second-entrant.

However, developed nations (like U.S.) argue that Article 39.3 mandates that data submitted by drug originator can't be relied upon by the national authority to award market approval to second entrant, or the generic drug producer.[313] Thus, the provision mandates data exclusivity, that is, originator of a drug has exclusive right over the test data submitted by it to the national authority for market approval. U.S. & EU argue that allowing national authorities to rely on the data submitted by originators to grant market approval to generics would provide a commercial benefit or advantage to them as they will not have to invest in conducting the clinical trial. Thus, it would amount to unfair commercial use of the submitted data, which is not permitted under the provision.[314] The pharmaceutical industry and some developed countries strongly argue that Article 39.3 requires granting of exclusive rights to the drug originator. Granting commercial advantage to a generic manufacturer amounts to "unfair commercial use" of the data, irrespective of the fact that actual use may not occur and the practice as such might not be "dishonest." As per them, the only way to ensure effective protection to test data against unfair commercial use is by providing a period of exclusivity to use the data.[315] Similar argument was given by U.S. in its complaint against Australia. Australia did not have the provision of exclusivity. The generic companies were required only to demonstrate bio-equivalence to get market approval of a similar product. Besides, Australian authorities gave certificates of free sale, permitting generic companies to export to other countries, where market approval was granted automatically based on Australian certificates. It was argued by U.S. that this was in violation of Article 39.3. The U.S. pressure ultimately resulted in an amendment to the Australian law.

[313] Manthan D. Janodia et al., *Data Exclusivity Provisions in India: Impact on Public Health,* 13 J. INTELLEC. PROP RIGHTS. 442, 444 (2008).

[314] *Id.*

[315] Priapantja, *Trade Secret: How does this apply to drug registration data*?, ASEAN WORKSHOP ON THE TRIPS AGREEMENT AND ITS IMPACT ON PHARMACEUTICAL, DEPARTMENT OF HEALTH AND WORLD HEALTH ORGANIZATION, Jakarta (2000).

Under the Therapeutic Goods Legislation Amendment Act, 1998 Australia introduced five years of test data exclusivity. Similarly, the U.S. pressure led to incorporation of exclusivity provision inthe USA-Jordan Agreement on the Establishment of a Free Trade Area, 2000. Similarly, it is alsoargued by EU that Article 39.3 provides for an exclusivity obligation. Member countries only have the liberty to determine the duration thereof.[316] On the contrary, the other group (mainly developingcountries) argues that data exclusivity is not mandated under Article 39.3. Reliance on data by national authorities for granting market approval to generic manufacturers does not result in 'unfaircommercial use.' Thus, data exclusivity is a TRIPS-Plus provision. This, brings us to a major interpretational issue- *whether reliance on originator's test data by drug regulatory authorities to grant market approval to subsequent generic drug manufacturers amounts to 'unfair commercialuse' (thereby resulting in unfair competition)?* In other words, *whether data exclusivity is mandated under Article 39.3 of TRIPS?*

21. Negotiating History of Article 39.3

TRIPS Agreement's requirements regarding trademarks, copyrights, industrial designs, patents and integrated circuits, all explicitly provide for exclusivity. The negotiating history of Article 39.3 clarifies that though members had discussed data exclusivity, but ultimately they did not adopt text that mandated test data exclusivity.[317] U.S. had proposed that TRIPS should prevent use of test data, without consent of right holder or on payment of "reasonable value of the use" if that use amounted to "commercial or competitive benefit of any person or of the government." But it was not included in Article. Instead, the term "unfair commercial practices" was included. And, what will amount to unfair commercial use was left to members' discretion.

Article 39.3 provides for protection of test data however use of data by governments is not prevented under it. It rather aims to protect its use by competitors. It does not provide for implementation of protection only in the form of data exclusivity. The same is confirmed by the negotiation history of TRIPS Agreement. If the negotiating parties had agreed to provide for exclusivity, it could have been provided explicitly.

22. Reliance on Data by the Government is not an Unfair Commercial Use

[316] Correa, *supra* note 3, at 49.
[317] Correa, *supra* note 3, at 50.

Article 39.3 seeks to provide protection against "unfair commercial" uses. An act of competitor deriving benefit from his act of competition or causing monetary loss to another is not, in itself, unlawful. An "unfair commercial use" can be said to exist, for illustration, in cases where a competitor obtains the results of testing data, through dishonest practices such as breach of confidence or fraud and uses them for applying for market approval for its own benefit. It can also be applicable in situations where government provides access to undisclosed test data to provide advantage to a firm which did not produce it or share its cost. It would correspond to contravention of the non-disclosure obligation and an "unfair commercial use."[318] Despite the desire of some TRIPS negotiating parties, the phrase "unfair commercial use", reasonably interpreted, does not mean that Article 39.3 necessitates the provision of exclusivity, or of compensation. It has provided wide room of maneuver for member countries for determining the existence of such a use and the means of protection thereby. Only covers "commercial" uses are covered under Article 39.3. It excludes use by the national health authority for assessing efficacy and toxicity of agrochemical or pharmaceutical products.[319] Article 39.3 does not add to Article 10bis of the Paris Convention. It only incorporates examples of general principles contained in Article 10bis paragraph (2).[320]

23. Judicial Interpretation

Ruckelshaus v. Monsanto Co.[321] is related with protection of data submitted for registration of an agrochemical product. Monsanto argued that the opportunity given to a competitor to use Monsanto's original data on payment of compensation denied its "reasonable investment-backed expectation." Rejecting Monsanto's complaint, the Supreme Court held that when Monsanto provided data to the Environmental Protection Agent (EPA), then under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 1910, EPA had freedom to use the submitted data not being trade secrets while determining the application of another, provided that EPA required the subsequent applicant to pay "reasonable compensation" to the original submitter.[322] In absence of any specific provision granting a period of exclusivity, relying on data to approve subsequent

[318] Correa, *supra* note 3, at 40.
[319] STEPHEN LADAS, PATENTS, TRADEMARKS AND RELATED RIGHTS: NATIONAL AND INTERNATIONAL PROTECTION 1676-1677 (3 Harvard University Press, 1975).
[320] Correa, *supra* note 3, at 29.
[321] Ruckelshaus v. Monsanto Co., 467 U.S. 986 (1984).
[322]The Federal Insecticide, Fungicide and Rodenticide Act., 7 U.S.C. § 3(C)(1)(D) (1910).

applications do not result in illegitimate misappropriation of trade secrets. In *Bayer's case*[323] the Court concluded that, provisions of the North American Free Trade Agreement (NAFTA)[324] are meant for protection of trade secrets. If the health authority actually relies on the data submitted by the drug originator to assess generic manufacturer's application, then minimum five years of protection from competition is provided to the innovator. However, if the authority neither examines nor relies on that confidential information for approving the generic, the data is not used and thus, provision of exclusivity does not apply. The issue that whenever Abbreviated New Drug Submission (ANDS) is filed, the applicant must be given five years of exclusivity, was rejected.

4.4. Doha Declaration – TRIPS Flexibilities and Healthcare

Health problems affecting various developing and under-developed nations were recognized at the Doha World Trade Organization Ministerial Conference, 2001.[325] It was realized that WTO TRIPS Agreement should be a part of the broader national and international action for addressing healthcare issues.[326] While it was recognized that intellectual property rights are necessary for development of new pharmaceuticals, however, its effects on prices of medicines was also recognized.[327] During the Doha Declaration, an important step was taken by agreeing that TRIPS does not and should not be a barrier for member states in taking measures to protect public health.[328] TRIPS Agreement ought to be construed and implemented in support of WTO Members' right to protection of public health and promotion of medicines. Thus, member states affirmed that TRIPS provisions provide flexibility in this regard and they can be utilized.[329]

Article 39.3 of TRIPS provides flexibility in defining what would amount to "unfair commercial use" of test data. Thus, taking into account the Doha Declaration on public health, it can be said that data exclusivity is not mandated under Article 39.3. Member states have sufficient flexibility

[323] Bayer Inc. v. The General Attorney of Canada, The Minister of Health, Apotex Inc. and Novopharm Ltd., 1 S.C.R. 533 (2015).
[324] The North American Free Trade Agreement, 1994 art. 1711 (6) 32 ILM 289, 605 (1993).
[325] World Trade Organization, Ministerial Declaration, Nov.14, 2001, WTO Doc. WT/MIN (01)/DEC/1, 41 ILM 746 Para1 (2002).
[326] World Trade Organization, Ministerial Declaration, Nov.14, 2001, WTO Doc. WT/MIN (01)/DEC/1, 41 ILM 746 Para 2 (2002).
[327] World Trade Organization, Ministerial Declaration, Nov.14, 2001, WTO Doc. WT/MIN (01)/DEC/1, 41 ILM 746 Para 3 (2002).
[328] World Trade Organization, Ministerial Declaration, Nov.14, 2001, WTO Doc. WT/MIN (01)/DEC/1, 41 ILM 746 Para 4 (2002).
[329] *Id.*

regarding interpretation and application of Article 39.3. They are free to interpret and apply provisions for test data protection keeping in mind their public healthcare needs.

4.5. Test data is not a separate IP

In many jurisdictions, the unfair competition law regulates the misappropriation of trade secrets. Under the discipline of unfair competition, existence of "property" rights is not necessary for protection. The TRIPS Agreement also takes an unfair competition approach for undisclosed information. It neither treats undisclosed information as property nor obligates countries to confer exclusive rights. Article 39.3 refers to undisclosed information "under the control" of a person. This is different from the concept pertaining to provisions concerning other categories of intellectual property rights. During the TRIPS negotiations, U.S. suggested that undisclosed information can be considered as "property. "However, it was not adopted.[330]

Conclusion - Data exclusivity is not mandated under TRIPS. It is a TRIPS- Plus provision and member states are not mandatorily required to provide for it. It gives sufficient flexibility to the member states to decide the provisions to govern protection of undisclosed information.

5. Legal Framework in India regarding submission of Clinical Test Data

In India, the Drug and Cosmetic Act, 1940 provides for the requirements for importing, manufacturing, distributing and marketing a drug. The central regulatory authority, Central Drug Standard Control Organization (CDSCO) also called the Drug Controller General of India (DCGI) is responsible for providing authorization to new drugs.[331] As per the Drug and Cosmetic Rules, 1945, second entrants with new dosage forms, new fixed dose combination, new indication, etc. are considered as new drugs which require approval of DCGI.[332] For obtaining market authorization for new drugs, Form 44 is to be submitted to the CDSCO. After getting marketing authorization by CDSCO, an application is made to the State Drug Control Authority for permission for manufacturing the drug through Form 29. The guidelines and requirements for authorizations are incorporated in Schedule Y of the 1945 Rules. For new drugs to get market approval, data has to be submitted proving safety, quality and efficacy of the drug, proven by conducting clinical trials.[333] However, for seeking permission for manufacture of a new drug already approved in the country, data pertaining to bioequivalence or bioavailability and

[330] Correa, *supra* note 3, at 54.
[331] The Drug and Cosmetics Rules, 1945 Rule 122-E.
[332] The Drug and Cosmetics Rules, 1945 Rule 122-E (b).
[333]The Drug and Cosmetics Rules, 1945, Sch. Y, Appen. I.

comparative dissolution studies for oral dosage forms are to be submitted along with the application.[334] Generic drugs fall under this category. A new drug is regarded as "new" up to a period of four years from the date of its first approval.[335] This implies that a generic drug seeking authorization within four years of first authorization is regarded as a new drug and thus, requires approval of DCGI. Once a period of four years from the first authorization expires, the State Drug Control Authority can be approached for market approval of a generic version of the already approved pharmaceutical.[336] To obtain market approval within four years of the first authorization, generic manufacturers have to produce data proving bioavailability or bioequivalence of the drug for approval by DCGI. After a period of four years the innovator's drug is not new. Thus, generic drug manufacturer need not submit bioequivalence tests to the central authorities. It can directly be granted by application to the state FDA authorities.

The Dr. Ranjit Roy Choudhary Committee in 2013 made recommendation that bioequivalence studies should be made mandatory for all generics regardless of the time of their approval.[337] The Drug Consultative Committee did not accept the recommendations of Choudhary Committee on the ground that "infrastructure for conducting such studies is not sufficiently and uniformly available in the country. Thus, it can't be implemented as a rule."[338] However, in 2017, notification was issued by the Ministry of Health and Family Welfare which incorporated the recommendation of Choudhary Committee making bioequivalence or bioavailability tests compulsory for generics.[339] Indian patent regime has not incorporated data exclusivity provision. Generic drug manufacturers are required only to submit data proving bioavailability of the drug. They don't have to conduct clinical trials all over again to seek market approval. The CDSCO will compare the bioequivalence data of generic drug with the clinical trial data already submitted by the

[334]The Drug and Cosmetics Rules, 1945, Sch. Y, Appen. I-A.
[335] The Drug and Cosmetics Rules, 1945, Rule 122-E Expn. (ii).
[336] Mathew Joe C, *Roche's cancer remedy loses new drug status*, BUSINESS STANDARD (Nov. 15, 2019, 12:30 PM), https://www.business-standard.com/article/companies/pharma-tops-in-patent-suits-110011600017_1.html.
[337] Prof. Ranjit Roy Chaudhary, *Expert Committee to Formulate Policy Guidelines for Approval of New Drugs*, CLINICAL TRIALS AND BARGAINING OF DRUGS (Oct. 12, 2019, 12:30 PM), http://www.indiaenvironmentportal.org.in/files/file/clinical%20trials1.pdf.
[338]Prashant Reddy, *India makes a long overdue move to ensure better drug safety*, SCROLL (Oct. 15, 2019, 10:30 PM), https://scroll.in/pulse/834356/india-makes-a-long-overdue-move-to-ensure-better-drug-safety.
[339] *Ministry of Health and Family Welfare (Department of Health and Family Welfare) Notification (3rd April, 2017)* CENTRAL DRUGS STANDARD CONTROL ORGANIZATION (Oct. 17, 2019, 10:3 PM), https://cdsco.gov.in/opencms/opencms/system/modules/CDSCO.WEB/elements/download_file_division.jsp?num_id=OTgy.

innovator drug manufacturer. Thus, Indian patent regime does not follow the TRIPS-Plus standard of data exclusivity.

Conclusion

The TRIPS Agreement gives enough room of maneuver to the member states to determine steps for protection of clinical trial data. Data exclusivity is not a TRIPS mandate, rather a TRIPS Plus provision. The Indian Drug and Cosmetic Act, 1940 and the Drug and Cosmetic Rules, 1945 do not provide for data exclusivity. The innovator drug manufacturers have to undertake clinical trials to prove safety, efficacy and quality of the drug, while the generic drug manufacturers have to submit data to establish bioavailability or bioequivalence of the drug. The DCGI is not prohibited from relying on the clinical trial data submitted by the drug originator to grant market approval to the generic manufacturers.

CASE COMMENT ON SUZUKI MOTOR V SUZUKI (INDIA) LTD

Ata Hasan*

The Delhi High Court passed a judgment in the case of *Suzuki Motor v Suzuki (India) Ltd.*[340]Regarding well known mark on 19th July 2019, by a Single Judge Bench namely, Justice J.R. Midha of Delhi High Court, ruled in favour of Suzuki Motor (Plaintiff) declaring SUZUKI to be a well-known trademark. A decree was passed under Order XII Rule 6 of the Code of Civil Procedure, 1908 against Suzuki Ltd. (Defendant) as they specifically failed to deny the facts which were present in the plaint, thereby affirming the allegations.

Background

The Plaintiff had instituted the suit for permanent injunction so as to restrain the Defendants from infringing their trade mark SUZUKI. An interim order was passed on 12th December 2005, restraining the Suziki Ltd. from using SUZUKI as part of their trade name. There were other co-defendants present who were removed in the trial stage as they were not necessary parties in the suit. The Plaintiff sought a decree under Order XII Rule 6 of the Code of Civil Procedure, 1908 against the Defendant, on the ground that there was no defense raised in the written statement. The territorial jurisdiction of the Court had been challenged as the Defendant claimed that not having any office in Delhi. But it was later admitted by the Managing Director on oath before the Court that they have an office in Delhi.

Contentions of Plaintiff

The Plaintiff had started its business in Japan in the year 1909, having SUZUKI as a part of its corporate name/trade name. It had registered SUZUKI as a trade mark around the world including India. Due to its global brand presence, it has created tremendous goodwill and reputation. The trade mark SUZUKI has become distinctive for the Plaintiff at their global levels due to its continuous and substantial advertising. In India, the Plaintiff registered their mark in the year 1972 and after that in the year 1982; it comes under a joint venture agreement with the Indian government. It has licensed its technology to Maruti Suzuki India Limited (MSIL). The Plaintiff also allowed MSIL to use SUZUKI as its corporate name. Considerable publicity was made on thecollaboration.

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Around that time, the Defendant adopted the name SUZUKI INDIA LIMITED with deceptive and dishonest intention to encash upon the goodwill of the Plaintiff and to pass off its business as having some relation to the Plaintiff. SUZUKI is a Japanese surname and there is no support on the part of the Defendant to use it as a corporate name. Also, SUZUKI is a family name of the founder of company. Thus, it is not connected in any way with the Defendant activity. The explanation provided by the Defendant was not satisfactory, including the reason provided by the Managing Director who stated that his father knew someone by the name SUZUKI. This was not considered as genuine.

Contentions of Defendant

The Defendant had been using SUZUKI as a part of its trade name since 1982 and it has earned goodwill and reputation due to its honest and concurrent use in relation to its finance and investment business. The Plaintiff filed the present suit after 25 years. Therefore, the delay should be construed as acquiescence under the Trade Marks Act, 1999. The Plaintiff has wallowed in 'forum shopping' as no part of cause of action has arisen in the jurisdiction of this Court. The business place of defendant's company is in Kolkata; hence the suit is barred by territorial jurisdiction of this Court. The Plaintiff cannot claim monopoly over all classes of goods as it can only uses its mark for automobiles. Therefore, there won't be any deception or confusion by the consumers with regard to the use of the name SUZUKI as the Defendant has no relation to automobiles. The Defendant has not made any admission hence the suit is unwarranted under OrderXII Rule 6 of the Code of Procedure.

Findings of Court

The Court observed that the Defendant did not deny that the adoption of the name SUZUKI was dishonest, malafide and intended to deceive the consumers. The Court refers the cases M/s *Gian Chand Brothers v Rattan Lal*[341] and *Badat& Co v East India Trading Co.*[342] As the Defendant did not specifically deny those contentions, hence it is deemed to have been admitted. The Defendant also failed to deny that it was fully aware of Plaintiff's reputation and goodwill, and that the use of the mark will mislead consumers thinking them to be licensed by Plaintiff which is not true. There has been garnishment of Plaintiff's goodwill and reputation and also dilution of thedistinctive trade mark due to illegal use by the Defendant.

[341] M/s Gian Chand Brothers v Rattan Lal., MANU/SC/0015/2013.
[342] Badat& Co v East India Trading Co., AIR 1964 SC 538.

This action has caused irreparable damage to the Plaintiff. This has not been denied by the Defendant. As there was no specific denial by the Defendant, it had been deemed to be admitted. The Court observed that vague denials were sufficient to pass decree against the Defendant. The Court stated that the Plaintiff is the registered proprietor of well-known trademark SUZUKI which has been registered with the Registrar of Trade Marks. The Plaintiff had provided to the Court sufficient evidences and material to show SUZUKI was a well-known mark since 1982 when the Defendant adopted the said name.Therefore, the adoption of the mark by the Defendant was fraudulent in nature with the intention to encash upon their goodwill. The defence of the Defendant of not being aware of the Plaintiff's name and trademark since 1982 is rejected as there was enough record to prove its well-known nature. Also, the Defendant is deemed to have constructive notice of the Plaintiff's statutory and exclusive right to use the trade mark. The Managing Director affirmed on oath that a consumer may get confused while dealing with Defendant company thinking it to be Japanese company. Hence, there is no just cause for the Defendant to use SUZUKI as part of corporate name, as the term is a Japanese surname and there is no association with Indian name, place, object or term. SUZUKI has acquired distinctiveness and secondary meaning in the business circle and if anyone adopts the same name it would likely create the idea of a connection with the Plaintiff. As there was dishonest intention to use the mark since the beginning, mere delay in bringing the action cannot be put as defence by the Defendant. By just being a concurrent user is not sufficient in law.There should be honest use. The Defendant failed to prove its honesty and therefore the Court came to the conclusion that there has been infringement of Plaintiff's trade mark on account of statutory rights under Section 28 of The Trademarks Act, 1999. As the concept of passing off is changing, it is not necessary to allow both the Plaintiff and the Defendant to trade in same field. The Defendant had also raised a false defence of territorial jurisdiction of having no office in Delhi. But the Managing director has admitted on oath on having an office at Delhi, hence there was no merit in the said objection. Accordingly, the suit was decreed under Order XII Rule 6 of the Code of Procedure, 1908 against the Defendant. Also, the court observed that the suit warrants prosecution under Section 209 of Indian Penal Code, 1860 for raising false claims. Nevertheless, in the interest of justice, Defendant had been granted three weeks' time to file an unconditional apology.

Comments

This judgment underlines the importance of specific denials in a suit. The judgement also highlights that once the Court comes to a conclusion that there is dishonesty on the part of

Defendant, delay is immaterial and judgment emphasizes on the importance of vague denials in a suit. Also, it highlights the fact that presence of dishonesty will not cause the suit to be dropped off even though there had been delay in filing the suit. The judgment also stresses on the understandingof well-known mark and how passing off can the parties occur even though are in different business. Registration and unauthorized use of such a trademark is an infringement of the trademark. Unauthorized use of such mark creates confusion about the quality of product within the consumers and hence damages the reputation of the brand. Illegitimate imitation of trademarksis a punishable offence.