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INTELLECTUALIS

TRIPS@25: Past, Present and Future

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EDITORS' NOTE

Dear Readers,

We proudly present Volume 3, Edition 4 of *Intellectualis* with the theme of 'TRIPS@25: Past, Present & Future'. In this issue we aim to analyze the metamorphosis of the TRIPS Agreement after 25 years of being in force and the various challenges that have been tackled during this time. Further, we also try to explore how the Agreement has dealt with a pandemic, the effect it has had on access to medicines and how various other aspects of intellectual property have been shaped during these times.

This issue is further enriched by a conversation with Ms. Shishira Johny and Ms. Urvi Tembey where we delve into the areas of TRIPS and the Digital Economy, Pharmaceuticals & Public Health. Ms. Shishira and Ms. Urvi, alumni of the World Trade Institute, University of Berne, have written for reputed publications such as The Diplomat, The Interpreter (Lowy Institute), The Print, and Statecraft.

We hope that you take the time to read what our e-newsletter has to offer. We would like to extend our gratitude to the student body of School of Law, CHRIST (Deemed to be University) for their overwhelming response to the newsletter. We would also like to thank our Chairpersons, Dr. Avishek Chakraborty and Dr. Aradhana Satish Nair for constantly supporting us and guiding us through the drafting of this newsletter.

We hope you enjoy reading this Edition!

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TRIPS@25: IN CONVERSATION WITH MS. SHISHIRA JOHNY & MS. URVI TEMBEY

The IPRC conducted a Panel discussion on the theme: TRIPS@25, commemorating the 25th anniversary since the TRIPS agreement. It was an honour and privilege to have international trade & investment lawyers, Ms. Shishira Johnny and Ms. Urvi Tembey as the panelists who gave valuable and professional insights on the topic.

Q. Given that IP is rooted in national jurisdiction how does this impact the application of the TRIPS agreement in the field of public health and digital economy.

S: Let's take a simple example under copyright protection in which territoriality has often been highlighted as a policy issue in dialogues on digital economy and IP. Imagine a group of graphic designers based out of multiple locations working on a shared cloud infrastructure. When the project is sent, it would be from the server of one of these designers, the project is received in a second country and the cloud itself is situated in a third. This is a simple example that shines a light on the difficulty involved in identifying the ownership and jurisdiction of the work to provide copyright protection. Such cases revolving around new technology are deeply impacted by the differences in the IP regulations across nations. The minimum standard of copyright could be implemented in multitude means, under the TRIPs agreement, thus territoriality continues to be an issue in terms of copyright protection. There are no specific rules under the TRIPs agreement which can reflect upon this dilemma.

Data is the backbone based on which the digital economy is built on and continues to grow. How do you provide copyright protection for data when the originating country is different from the receiving country? When it is difficult to identify the

jurisdiction of data then the ownership of data would be considered to grant protection. This would be an even bigger question than the one on territoriality. IP, in general, revolves around the concept of territoriality and TRIPs follows along the same path albeit with the intent of providing interoperability between different national jurisdictions. Whether this 'interoperability' can be exercised considering the recent technological developments remains a much-contested policy question.

U: The TRIPS Agreement sets out minimum standards, and countries are given the freedom to incorporate higher intellectual property (IP) standards in their domestic jurisdictions if they deem fit. Countries can thus enter into Free Trade Agreements which grant greater protection than the minimum standard required by the TRIPS Agreement. Such requirements that go beyond the minimum standard are termed "TRIPS Plus" obligations. For example, a country can choose to extend the term of patent protection beyond the 20-year period mandated by the TRIPS Agreement, or it may limit the grounds on which a compulsory license can be granted. Another interesting debate has been around data exclusivity of clinical trial data. While the TRIPS Agreement requires WTO Members to protect undisclosed test data against 'unfair commercial use', it does not define what constitutes such unfair use. It also does not make any reference to data exclusivity. This gives countries the policy space to incorporate the obligations into their respective laws with some flexibility. While some countries have implemented legislation to protect data but chosen to not to grant data exclusivity. others have granted data exclusivity for a defined period and further provided for extended protection in the case of new uses of known compounds. It is also important to note that Least Developed Countries (LDCs) are altogether exempted from implementing measures of the TRIPS Agreement relating to pharmaceutical products. It is thus evident that IP is rooted in the national jurisdiction of countries, and WTO members have the space to implement provisions of the TRIPS Agreement beyond the minimum standards in a way that best suits their policy objectives.

"You see some countries opening up their market for services through the internet. UAE is a good example. There was a limitation on the number of applications for VOIP calls."

Q: What has been the impact of COVID-19 in your specific and respective domains?

U: COVID-19 has brought the age-old debate of 'does IP restrict the access to medicines or does it facilitate access to medicines' to the fore. There are countries on both sides of the debate, and each one highlighting important facets of the role of intellectual property. It thus makes us think of the following questions: Do we need to amend our IP systems to accommodate new issues? Are our existing IP laws good enough to tackle a pandemic?

If not, how can we amend them? Can we function within the existing framework? Or do we need to come together and find a solution to this problem? COVID-19 has brought forth an age-old issue with a fresh perspective, and made countries rethink their policies.

S: COVID-19 pandemic has essentially raised the bar on the scope of activities which can be achieved using the internet. It has given people a way to identify the means and ways to use new digital technologies. You see some countries opening up their market for services through the internet. UAE is a good example. There was a limitation on the number of applications for VOIP calls. With the COVID 19 pandemic sending people indoors for long periods, they have opened up their markets for several Internet-calling services that previously individuals didn't have access to in UAE like Zoom, Google Meet and Webex (businesses could previously use Skype for Business). Another instance is where more people are trying to understand how smart contracts work to enable smooth transactions during the pandemic. Or how logistics is being supported with the use of blockchain technology and how blockchain technology can secure your transactions. Earlier, people were reluctant to venture into these new fields, but COVID-19 has pushed them to try these new fields. What this essentially has created is a rise in the use of these technologies in the backdrop of a regulatory environment that completely overlooks the uses of these new technologies. Some countries are trying to navigate this wave by not acknowledging the widespread use of these technologies and their commercial viability. And many other countries are trying to impose restrictive regulations to ensure that there are relevant rules in place for the property-right holder while often overlooking the users.

Q: How do you think future discussions, in these two fields [digital economy and public health], will be impacted in the pandemic?

S: Probably what could be looked into are the negotiations in the WTO Joint Statement Initiatives on Electronic Commerce. Hopefully, when WTO overcomes the issues it currently faces, we'll see a change in these negotiations. However, it must be noted here that the JSI on E-Commerce is a plurilateral negotiation.

U: I think on the pharmaceutical front, countries are going to try to make supply chains more resilient. Especially because in the initial stages of the pandemic some countries had imposed export restrictions to address their domestic needs, and as a result import-reliant country faced shortages. While these restrictions were gradually removed, they highlighted the importance of having resilient supply chains especially for essential commodities. So, I think that is something countries will work on. Another impact of the pandemic will be improvement

in the collective response frameworks in order to better exchange information and improve coordination for future emergencies.

Q: Implementing obligations under the TRIPS agreement, often raises questions of balancing social and economic considerations. How has this dilemma played out in respect of the digital economy and public health?

S: Under the TRIPs agreement, IP regulation should ensure that producers stand to achieve economic gains through IP protection and at the same time access to the product for users have to be considered. This inadvertently raises the debate on developing versus developed. Certain elements of IP regulations are not covered under the TRIPs agreement as it considers countries that are developed, all the way till small and vulnerable economies. Therefore, the minimum standards which are put in place should be compatible for implementation in LDCs with shorter transition periods. This balance is often skewed in bilateral or plurilateral agreements when developing nations are forced to accept TRIPs Plus regulations. Developing or Least developed nations have relatively low internet access and penetration in the internet field compared to their developed counterparts. In accepting such TRIPs plus agreement, as rightly said by Prof. Ruth L. Okediji, developing and least developed member nations are pre-emptively being made to pay for all the regulations that developed countries think these member nations could impose in the future. Often this pre-emptive protection is at the cost of welfare.

"In accepting such TRIPs plus agreement, as rightly said by Prof. Ruth L. Okediji, developing and least developed member nations are pre-emptively being made to pay for all the regulations that developed countries think these member nations could impose in the future."

U One the one hand, IP fosters an environment of innovation by acting as an incentive and helps in recovering the investment that is made by companies towards R&D. However, on the other hand, expensive prices of patent protected drugs can hinder access to medicines and make it difficult for countries to achieve their development goals. This dilemma has been evident since the early negotiations at the WTO and even during the current pandemic. While countries have regularly sought to balance these economic and social considerations, it is important to note that they are not always in conflict with one another. For example, IP can help in providing access to good quality medicines as opposed to counterfeit or substandard drug. The TRIPS Agreement, nonetheless, has a number of exemptions and exceptions, which allow countries to derogate from their obligations in some cases. These exemptions and exceptions are 'flexibilities' that WTO Members can use in order to achieve their social welfare goals. The regulatory review exception is one such example. It entitles a third party to use a patented invention, without the consent of the patent holder, before the

end of the patent protection, if such use is for the purposes of developing information to obtain a marketing approval. This can facilitate the early entry of generics into the market. Similarly, there are other provisions, including exceptions to IP rights, that members may resort to in order to address their public health and other needs. Interestingly, the TRIPS Agreement also provides to Security Exceptions for countries to resort to. The incorporation of these flexibilities into the TRIPS Agreement has been one way of dealing with this dilemma.

S: I guess Urvi has taken a very optimistic approach in answering this question and I might have taken a pessimistic route. I think at the end of the day, it is within each of us to answer whether the balancing act can be sustained by the TRIPs agreement as it does give you a lee-way to look into public welfare, in the agreement, alongside economic gains.

Q: With your experience at WTO and as an international trade lawyer, how would you advise your younger-self on legal practice and the road ahead given the pandemic?

S: As an international trade lawyer, it is not just the WTO that you have access to, you can be a compliance lawyer that looks into customs and international trade, maritime and shipping, or one could effectively research in trade policy. There are various aspects of law which you could also look into like arbitration, global trade advisor, and legal officers supporting the dispute settlement systems in whatever form it would represent itself in the future. One could also pair international trade law with other legal fields like competition policy, international economics, investment law and data protection. This is often recommended for future international trade lawyers. International trade is one place where you would find economists, political scientists, lawyers, all working together trying to find a way through this myriad of trade systems. Therefore inter-disciplinary knowledge development would differentiate you from other international trade lawyers. Taking up summer courses like the one offered by IIFT, Delhi on international trade or courses abroad on international trade would add to your resume in addition to expanding your understanding of international trade. If you're not in a capacity to take up summer courses you can always collaborate with researchers who are undertaking international trade research and offer your services to them.

U: As cliché as it may sound, I think the one thing that I can say is that you should definitely choose a field that you like. If you think that this is the career that interests you, then choose it. Trade is a niche field, and college is a good time to explore what you like and what you don't like. One way to do that is through moots, which let you deep dive into a field and see if it interests you. For me, doing the ELSA (John H. Jackson) Moot Court Competition was an excellent experience, especially because of the kind

of in-depth research you are required to do. It also gives you a great exposure to trade law, and allows you to learn from experts and students from other countries.

CHALLENGES POSED BY ARTIFICIAL INTELLIGENCE TO PATENT LAWS

-Pemmaraju Lakshmi Sravanti

INTRODUCTION

A multi-disciplinary international team, headed by Professor Ryan Abbot has successfully filed patent applications for two inventions, seeking to list artificial intelligence (without a human organism) as the inventor. The AI (DABUS) has produced an output, thus sought a patent for the same. The European Parliament Committee on Legal Affairs defines AI as Savant a smart robot that acquires autonomy through sensors or by exchanging data with its environment and trades and analyses data, is self-learning, has a physical support, and adapts its behaviours and actions to its environment.

Patent offices have adopted a human authorship requirement, which thus prohibits protection of works that are not by a human inventor. Machines have been generating patentable results for at least 20 years; and yet the statues predominantly emphasise on the requirement of inventors to be individuals, leading to a consequence that several inventions remain unpatentable. A question that now arises is whether or not legal systems should recognise the role of artificial intelligence in automating invention.

CHALLENGES AS IDENTIFIED BY LITERATURE

In the articles by Shlomit Yanisky Ravid and Xiaoqiong Liu; and by Ryan Abbott , the focus is on the criteria for an invention to be invented. The authors discuss the functioning of the US legal system to identify the rationale behind eligibility. The key feature is the machine-or-transformation test which categorically denies protection to mere “mental processes”. The second criterion is non-obviousness. The tests laid down in judicial rulings play an important role to identify the standard to be considered in determining non-obviousness. The research also delves into the question of infringement. The paper identifies the legal obstacles in terms of identification and application.

This research paper has two important elements for the present research- the need to re-evaluate the tests, and development of legal safeguards to identify

liability-bearers. The primary consideration is the level of obviousness- could the legal system hold that any invention by an AI would be obvious to all other AI? If not, the need for new methods of evaluation rises. Additionally, the paper shall evaluate the 'mental process' element- how far can AI conceptualise a particular invention? If the AI's owner fails to show such mental conception on part of AI, will the legal system consider this as a flash of genius (presently not applicable in the US legal system due to change in law and confirmed in Graham v. John Deere Co). Such failure will require revival of previous concepts, and determining their application to AI.

In the article by Michael McLaughlin, the paper maps the development of the role of AI in law, with particular mention of intellectual property law. The paper raises a critical question that requires the legal systems to answer- what benchmark can be set to grant patents to AI that the human participation is relinquished. The paper traces the legal philosophy of inventorship and seeks to appreciate how fluid the concept is evolving to be. The significant contribution of this research is the differentiation between computer-assisted and computer-generated works; which have different consequences in law. The inference drawn is that IPR law is not equipped to recognise AI, and evaluate the possibility of not granting protection to AI within the realm of IPR law.

In the article, Ryan Abbott suggests that the law should hold the AI's owner as the default assignee of the invention, which could be in conformity with the present legal system. But he also recognises the obstacles when one owner could not be identified. The author discusses the legal landscape in terms of the barriers and issues with information disclosure. The author also addresses the arguments in favour of AI-generated works, particularly in copyright law, and cites arguments to further the rationale of patent protection. He relies on the incentive theory, framing disclosure and commercialisation as the end goals of recognition. However, the author does not shed light on the obstacles in the process of commercialisation- entering into contracts, avoiding infringement, and bearing legal liability in case of infringement.

The above work remains incomplete, primarily in contract law, with special reference to the essentials of contract, and contracts which are void under Section 23 of the Indian Contract Act, 1872. The paper shall also seek to answer if AI should be assigned the role of the minor, wherein the AI's owner would be termed as the guardian for legal purposes. Such a relationship will allow the owner to enter into legal relations which benefit AI, ultimately benefiting the owner. If various persons have contributed to the development of AI, legal systems could hold the largest contributor as the guardian, or as per the decision by the contributors.

In the article by Iria Giuffrida, the author evaluates granting legal personality to AI for the process of assigning liability. The author argues that actions of the AI are largely based on its programming, and thus the fault can be traced back to the owner. This would defeat the earlier consideration of assignor-assignee relationship, but would make sense if the legal systems choose to trace the fault. The primary issue with tracing arises when there are several contributors to the AI; Will they be held liable together, or those who contributed to the software (excluding those who contributed to the hardware).

CONCLUSION

There is a need to discuss the above-mentioned modes of liability, and also study the implications if AI were assigned the role of a minor. The latter form of liability has been argued to be a forerunner as autonomous AI have been categorised as unpredictable, just like minors. However, this argument could be negated by the application of employer's liability. In this scenario, the legal system will consider the owner to be employing the AI (which invents) and the owner (treated as employer) will have the primary say in how the invention is to be used, and thus, any liability will be traced back to him. This allows legal systems to impose liability even if there is a transfer in the ownership of the AI (through sale or exchange).

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PROBLEMS OF COPYRIGHT IN THE DIGITAL ERA: A NEED FOR REVISION OF TRIPS

-Sanjana Rebecca

INTRODUCTION

The interconnection between international trade and intellectual property (IP) has been universally established by the Agreement on the Trade Related Aspects of Intellectual Property (TRIPS). With the rise in disruptive technologies and advancement of emerging technologies, there has been discussions for reformation of the TRIPS provisions. The digital era implications on international IP and the requirement for a transformation of the traditional norms and modes of imposition of IP rights cannot be ignored. In promoting the need for revision of TRIPS provisions especially in the area of intellectual property, it is pertinent to trace the impact of the copyright provisions under the TRIPS and understand the role of copyright across national borders. The changes brought about the shift from the analogue to the digital era have raised a multiplicity of issues particularly involved with adjudicating copyright claims internationally with the WTO as a platform and how implementation of the TRIPS provisions on a national level is scarcely reflected in policy work undertaken by member states. Some of these issues were briefly addressed by the Centre for International Governance Innovation panel in 2018 and the speaker Wolf Meier Ewert, counsellor, at the WTO IP, Government Procurement and Competition Division painted an alternative perspective by focusing on two-fold issues, such as the issue of transformation, applying rules that were pre-conceived to the changing situations and the second issue concerning the paradigm of balance between the owner of rights and the users of those rights and the question of transposition if a new balance were to be found. Before proceeding into the current scenario and application of copyright, let us revert back to the inception of copyright provisions in the TRIPS agreement.

> ***"In my personal view, perhaps, the biggest blunder committed by TRIPS was to rely on the existing protection offered by the Berne Convention, instead of moving toward rebuilding and revising the international copyright protection from scratch in line with the futuristic digital climate."***

PROBLEMS OF COPYRIGHT IN TRIPS: FROM ITS INCEPTION TO THE DIGITAL ERA

TRIPS' copyright provisions stem entirely from the Bernes Convention which did not aim at uniformity in the level of copyright protection but much rather wished to respect differences between member states, provided that national treatment (reciprocity

by states with reference to copyright protection) and minimum standards of copyright protection that were to be adhered to by member states were met. However, the balance between the Bernes Convention and national frameworks for copyright protection could not be struck owing to the autonomy that the convention granted to the member states in enjoying national discretion in determining the exceptions and limitations on minimum rights. Undoubtedly the Bernes Convention paved the way for the transposition of the international copyright law into national regimes but the differences in implementation, amendments and legal enforcement cannot be bridged. The TRIPS sought to bridge the gap between member state policies on IP by introducing the WTO platform as a dispute settlement mechanism for member states to impose sanctions against offending countries. In my personal view, perhaps, the biggest blunder committed by TRIPS was to rely on the existing protection offered by the Berne Convention, instead of moving toward rebuilding and revising the international copyright protection from scratch in line with the futuristic digital climate. In hindsight, the varied problems involved in adjudicating copyright claims have only widened differences between countries. Further, the vague and directional role of the Bernes Convention have also created problems of interpretation for member states as well as TRIPS jurists. Many jurists have noted the need for a balance between the TRIPS and national law and also the difficulty in maintaining it. It is evident that copyright infringement affects trade functions and TRIPS signatories have often developed divergent approaches and modified their laws to comply with TRIPS. However, when it comes to creating a balance, it appears to be a herculean task for TRIPS jurists, in offering an objective assessment of the national law as well as protecting the rights and obligations of member states in the process of dispute settlement. The absence of national copyright laws implementing TRIPS and the ineffective implementation and enforcement of measures against copyright piracy have been identified as threats in creating balance. Although, member states have strict and advanced copyright regimes, their relative impact cannot be viewed in light of TRIPS due to their failure in unifying differences by adopting TRIPS standards. Similarly, even in states that have incorporated the TRIPS into their IP protection regimes, they fall short in areas of enforcement and often condone copyright piracy. Another major problem that cannot be overlooked is the ambiguity involved in the TRIPS treaty pertaining to the subject matter of new rights that fall under the umbrella of copyright. This is extremely prominent in the digital era where new rights have been created in the sphere of copyright like those that have been introduced by User Interface platforms in terms of user generated content. The CIGI panel in its discussion also remarked on the economic inequity in the creative sector. For instance, according to Nick Ashton Hart, Geneva Representative of the Digital Trade Network, musicians only enjoy 12 percent of the global music revenues as the flow of trade is controlled by major

phonogram producers. Highlighting this situation, I would also like to dive into a similar situation of OTT platforms that have recently taken over on a global scale and the copyright implications of the multi-national nature of content generation and other trade and revenue related issues that remain untouched under the TRIPS lens. Due to cloud inventions, the flow of information across cross borders and sharing of data through AI internationally poses a real challenge to the national character of copyright. The solution of multi-territoriality of copyright information have been increasingly suggested keeping in mind how copyright registries are not made public unlike patent registries. The advocacy for a multi-territoriality provision in the revised TRIPS is unavoidable if deference is to be enjoyed by states in determining the exclusive rights of authors and future authors obtaining access to copyrighted works. Theoretically, unification and minimization of national differences in copyright protection may appear easy but unequivocally the progression of copyright in the digital era depends on the steps undertaken toward the TRIPS treaty revision.

CONCLUSION

In the process of globalization, the need for revisiting TRIPS in the digital era is a must. The post-pandemic world poses diverse challenges of restoration and strengthening of IP protection due to the easing of IP restrictions by the international community as popularly demonstrated by the Open COVID-19 pledge. The post-pandemic IP challenges coupled with the issue of emerging technologies can only be adequately addressed with a revised interpretation of the existing national laws in the guiding light of a revised TRIPS. The problem of copyright is an unstable and unpredictable one, it is constantly subject to change with emerging technology and the process of change can only be immediate slowed down through transposition and transformation and ultimately unification over the course of time.

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CASE INGOTS

-Ishwarya Singh

Foundation for the Protection of the Traditional Cheese of Cyprus named Halloumi v. EUIPO. (ECLI:EU:T:2021:16)

The appellant lost a long-running trademark battle for its trademark 'BBQloumi' for its barbecue grilled Holloumi cheese. The EU General Court held that the figurative mark lacked distinctiveness as it indicated a platter of grilled cheese in some Mediterranean environment, however lacked to represent that they were grilled pieces of Halloumi cheese, Moreover, the Court pointed that the name 'BBQloumi' established a weak link with grilled Holloumi cheese in the minds of a consumer.

Huawei Technologies Co. Ltd. v. Minds Studio Ltd. (O/018/21)

The Chinese brand failed to procure protection for its mark 'Mind Studio' in the UK, after Mind Studios Ltd. filed an opposition against it. The UK IPO agreed with the contention of the Respondent and held that the applicant's mark was visually similar to the opponent's mark and it even covered the same class of goods and services. Huawei was denied trademark protection for 'Mind Studio' on the ground of likelihood of confusion and was ordered to pay cost to the opponent.

Infinium USA LP. V. Chevron Oronite Co. LLC. Decision by US Court of Appeals.

Chevron Oronite emerged successful in an oil lubricant patent dispute with Infenium USA. The dispute arose when Chevron had filed a case against the respondent, alleging invalidation of its patent. The Court of Appeals found that Infenium's patent was invalid, while rejecting Infenium's claims of irregularities in the suit

Hermès International v. K. Tia Maria. Judgment by the Japan IP High Court.

Hermès, an international luxury brand, owns a 3D trademark of its famous Birkin bag in Japan. It recently emerged victorious in an infringement suit that it filed against a Japanese brand, Tia Maria, for selling Birkin look-alike bags. The IP High Court sided with Hermès and upheld the decision of the Tokyo District Court which found that the Birkin bag had acquired distinctiveness, and the bags sold by Tia Maria amounted to trademark infringement.

THE INTERRELATION BETWEEN TRIPS AND HUMAN RIGHTS

-Sahana R.

INTRODUCTION

Intellectual Property rights have represented an equilibrium between public interests and private rights. The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) has always taken into consideration social welfare of the public and at the same time the interests of artists and IP holders. Article 7 of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) states the objectives which includes the protection and enforcement of intellectual property rights. This protection to Intellectual property rights is for the promotion of innovation that must be conducive to social and economic welfare and balance of rights and obligations. Even though the agreement states the objective of social and economic welfare, TRIPS has been criticized for various reasons based on human rights such as health and trade, IPR and freedom and so on.

TRIPS AND HUMAN RIGHTS

The TRIPS Agreement seeks to achieve a balance of human rights in a range of ways. First, members may take steps to protect ICESCR-related issues, especially health care, nutrition and the environment. There have been conflicts between Intellectual Property rights laws and humanitarian laws. For example, trademarks or copyrights can contravene the right to freedom of speech and expression. This term, as covered by Article 19 of the International Covenant on Civil and Political Rights (ICCPR) of 1966, covers the freedom to find, give and receive feedback. In the case of *Ashdown v. Telegraph Group Ltd*, the court was of the opinion that a copyright could be used against freedom of expression and information. Copyrights holders could overpower others and not let them publicize certain information. Paragraph 26 of the UN High commissioners report on impact of TRIPS on human rights acknowledged that the TRIPS made no indication relating to preservation and promotion of cultural rights. The local communities have a distinct culture and practice which has not received a protection under the TRIPS and this conflicts the human rights law such as Article 15 of the International Covenant on Economic, Social and Cultural Rights. Article 15 of the International Covenant on Economic, Social and Cultural Rights recognizes everyone's right to have a cultural life, enjoy scientific progressions etc. For the preservation of some of the skills of some local communities and indigenous peoples, many of the types of intellectual property protection found in the TRIPS Agreement may be applicable. There are still contradictions, however, between the security of IP and the

protection of local and indigenous communities' awareness.

Article 11 of the International Covenant on Economic, Social and Cultural Rights recognizes adequate standard of living for all the people and states that in order for everyone to be free from hunger, the states must distribute food equally and make food and other basic necessities available at affordable prices. In the case of technologically developed seeds which are protected by Intellectual property, the objective behind the right to food and basic living is lost.

The accessibility of essential life-saving drugs has been criticized on humanitarian grounds due to the regulation of patents in the pharmaceutical industry. The Doha Declaration reaffirmed that the countries are allowed to take steps to protect public health. Paragraph 6 of the Doha Declaration recognized the problem of developing countries with no manufacturing facilities or insufficient manufacturing facilities. Due to the lack of technology, equipment, human resources or economic viability of domestic production, many developing countries and the least developed countries (LDCs) cannot produce either active ingredients or formulations. The Doha Declaration allows third parties to manufacture and export medicines to the least developed countries. Although paragraph 6 of the DOHA declaration provided a solution to the restrictive TRIPS drug trading agreement, due to the lack of resources and infrastructure, the problem of easy access to affordable medicines was not resolved.

"The law must strike a balance between private interests and public needs."

CONCLUSION

In response to the TRIPS council and Doha Declaration, Canada amended their Patent law and allowed the use of patents for International Humanitarian purposes. Through the Canadian Patent Act amendment of 2004 Canada made essential medicines available to other WTO members, underdeveloped countries etc. In India under section 84 of the Indian Patent Act, one can make a request to the Controller for grant of compulsory license on expiry of three years. This three-year period has been highly criticized on humanitarian grounds as some essential medicines are required at an affordable price at the right time. The patent holder has a market advantage during this time that may cause higher rates to be paid, depending on the unique market conditions, over the technology. The law must acknowledge other human rights as well such as right to freedom, Right to culture and so on. No law or regulation must be against any human right and must be able to cater to the needs of the public. The law must strike a balance between private interests and public needs. The concept of TRIPS with a human rights approach is termed as TRIPS Plus and is the future of Intellectual property and trade.

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TECHNOLOGY, THE ECONOMY AND TRIPS

-Joanna L. Mathias

INTRODUCTION

We have entered a new and global era for the protection of intellectual property rights. The Agreement on Trade-Related Aspects of Intellectual Property Rights ('TRIPS Agreement'), which forms part of the new Integrated World Trade Organization (WTO) system, imposes an obligation on all WTO Members to establish and enforce a high level of protection of intellectual property rights ('IPRs').' The TRIPS Agreement, read in conjunction with other complementary agreements, is enforceable by WTO Member action through the imposition of trade sanctions. After seven years of Uruguay Round negotiations, the TRIPS Agreement was signed, with several years of negotiations leading up to the TRIPS Agreement. The mandate of the Uruguay Round and earlier discussions of an anticounterfeiting code following

the negotiations of the Tokyo Round. The TRIPS Agreement plays a modern and important role in the international economic system as one of the WTO's principal multilateral trade agreements. The aim of the Agreement was to conclude the era of global intellectual property administration under the auspices of the World Intellectual Property Organization (WIPO), which the industrial interests of the Organization for Economic Co-operation and Development ('OECD') perceived as insufficiently powerful, and to begin a new era of mutual competence. In the new age, WIPO takes upon a secondary role.

HISTORICAL PERSPECTIVE

Historically, many developed countries had not established high standards of protection for IPRs under their national legal frameworks. The same countries agreed to provide such safeguards as a result of the TRIPS negotiations, and if the IPRs to be covered were predominantly owned by OECD-country companies, recognition of IP ownership rights would logically lead, at least in the short term, to the transfer of capital from developing to developed economies. Initially, developed countries opposed negotiating the TRIPS Agreement on the ground that they had foreseen this economically undesirable consequence. Later on, the TRIPS agreement was accepted by developing countries and this was due to the bargain included in by industrialized countries for different forms of concession to the developing countries.

The United States pursued an aggressive trade policy towards developing countries until and through the Uruguay Round negotiations. In accepting the TRIPS Agreement, one of the developing countries' motivations was to decrease this constant pressure from the United States. The arguments claiming that developing countries would benefit from higher levels of IPR security are rational. But there is not enough empirical proof that confirms this train of logic. More significantly, only a small part of how IPRs and their globalization could affect economic growth is captured by these claims.

INDIAN SCENARIO

In India, the patent system indirectly affects India's economic development. Now that India has adequate intellectual property security laws in place and their implementation is good enough to place trust in it, a number of multinational corporations have begun their research and development phase in India, which has indirectly increased the country's economic growth by raising tax payments and providing employment to the citizens of India. In the year 2016-17, the total revenue produced by India's intellectual property offices was Rs. 608.31 crore, while total spending was only Rs. 129.8 crores. Rs. 410.03 crores was the overall revenue

generated by the patent office and other intellectual property such as Trademark, Geographical Indication, Design and Copyright generated the remainder.

Much has changed in the global innovation world in the past two and a half decades. Technological trade has flourished and more technology has been passed to subsidiaries. In the domestic sense, in order to optimize the social welfare that society as a whole may reap from a new innovation, the optimal patent policy seeks to balance the benefits accruing to consumers and manufacturers, primarily by answering the question: how much monopoly profit should the innovator be allowed? Phrasing the problem in this manner recognizes that the price under patenting will be higher due to the implied monopoly given by the patent and, as such, due to the limitation of production and the higher price borne by customers, will create a deadweight loss to society as a whole. As a result, market share concerns and the social lack of welfare due to the monopoly given by patents still dominate economic thought about patents.

CONCLUSION

TRIPS contribution to innovation is one of the main benefits of economic development. Simply put, innovation may lead to higher efficiency, which means a higher output is produced by the same input. As productivity increases, more products and services are produced. In other words, the economy is growing.

Technology advances themselves will significantly assist in equalizing the distribution of technology. Nevertheless, the initial capital formation can remain an obstacle to the application of technology. The role of the public policy planner lies in this - fostering a balance between the highly useful formation of private capital and humanity's general social welfare. A mixture of approaches is required for meeting the best solution in achieving and preserving an equal balance in the international IPRs system. The aim of the international framework of IPRs should be to facilitate innovation, while at the same time guarding against a sharp division of the global economic system between technical haves and have nots. The significance of the connection between IPRs and economic growth is thus apparent.

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GRANTING INTELLECTUAL PROPERTY RIGHTS TO ROBOTS: INVITATION OF AN AI APOCALYPSE OR EVOLUTION OF A NEW LEGAL SYSTEM?

-Nidhi Rachel Kurian

With technological innovations and inventions on a steady rise, machines have become increasingly human-like while humans have become increasingly machine-like. As per the World Intellectual Property Organization (WIPO) report of 2019, of late, patent applications and grants for AI-related technologies have been on the rise. This phenomenally increases the probability of the seemingly caricatural future, filled with humanoids and other such thingamajigs, becoming a reality. With humanoid robots like Sophia gaining citizenship, we need to strongly consider whether the rise of AI would mean an evolution of rights and duties for a whole new class of citizens.

A robot is generally understood as a machine that is capable of making "decisions" without human interaction by drawing information from its surroundings. Whether these "decisions" could be bestowed with intellectual property rights and whether the right holders should be the robots or its creators are mind-boggling questions that need a thorough mulling over. Astonishingly enough, autonomous creations of robots go as farther back as 1994 when computer scientist Stephen Thaler built a "Creativity Machine" that produced patentable inventions of its own accord however even as recently as in 2017 when an AI system named DABUS was identified as the inventor in the patent filings in UK, these were rejected claiming the lack of the existence of a legal personality which is a requisite of current Intellectual Property Right Laws.

A 1997 paper by Ralph D. Clifford analyzed the importance and necessity of granting intellectual property rights to machines by studying the "Creativity Machine" of Thaler. According to Clifford, the exclusion of machine "created" works from the concepts of intellectual property law was appropriate for the present age because no incentives needed to be given to a computer to produce works unlike what was the case for human beings. Hence, according to him, the intellectual property laws were designed only for natural persons who required an incentive to create or produce a work and IP law should change to accommodate machines only when "computers are endowed with a consciousness that makes the evaluation of personhood for computers mandatory". This idea of the requirement of legal personhood for the application of IPR was reiterated

in a 2017 paper which added the concept of an IP public domain where no one would be able to claim copyright or patent protection. It equated the autonomous creations of machines to "the music that the wind generates when it moves through wind chimes" stating that these creations lay beyond the scope of protection of IP Law as robots and humanoids cannot be equated with human innovators and creators.

This idea of attribution probably stemmed from the fact that corporate entities were granted IPR on the basis of their legal personality, which Artificial Intelligence programs and robots have not yet been given, the sole exception being Sophia who was given the citizenship of Saudi Arabia in 2017.

In the UK case, even though DABUS, unlike other machines, did not merely execute human instructions and was in some sense, its own master, the European Patent Office took the position that Rule 19(1) of the European Patents Convention was intended only to consider natural persons as inventors and in case of non-natural persons was only extended to legal fictions either directly created by legislation or developed through consistent jurisprudence. In a similar case (the Baidu case) involving copyright in China however, the court deemed AI assisted work to be copyrightable. Reasoning that there was a mix of human and machine interactions which resulted in the production of an original work which met the requirement of originality under the copyright system, the court granted the humans who developed the AI.Albeit the rights involved in both the cases and the requirements for attracting their application are different, it fueled the discussion around the possibility of AI or robots being granted Intellectual Property Rights. This ultimately encouraged the discussion and publication of a draft paper by WIPO in 2019. The issues identified in the paper were revised in 2020 and comprehensive discussions took place in a total of 3 sessions to address the consequences of the advent of AI as a general-purpose technology.

"Hence, AI generated and AI assisted can be covered under the existing systems whereas it is not the case for autonomous AI creations"

With regards to ownership and inventorship, some speakers at the discussion highlighted that the intention behind the argument that an AI should be named as the inventor of a creation that was autonomously generated by it is to prevent human beings from taking undue credit for work they haven't done. However, without clear definitions in place that distinguish "AI generated works" from "works autonomously created by AI" we cannot even begin to imagine of creating modifications to IP Policy.

While AI generated works may still have the dilemma of being linked to human inventors since they created and programmed the AI, when something is

autonomously created by the AI it is as if it has a mind of its own. Hence, AI generated and AI assisted can be covered under the existing systems whereas it is not the case for autonomous AI creations. Therefore, unless a clear distinction is made, awarding ownership and inventorship would present a moral and legal dichotomy. Hopefully, with more discussions and deliberations we would be able to create an inclusive IP system before it may be too little too late.

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TRIPS AND NPD PROTECTION

-Lian Cicily Joseph

INTRODUCTION

The Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) provides for a regulatory framework that attempts at encompassing and protecting all forms of intellectual property. Article 10 (2) of the agreement provides that *"compilations of data or other material, whether in machine readable or other form, which by reason of the selection or arrangement of their contents constitute intellectual creations shall be protected as such. Such protection, which shall not extend to the data or material itself, shall be without prejudice to any copyright subsisting in the data or material itself."* The implication therefore is that a)

compilation of data or other material can be protected under the agreement provided it meets certain minimum standards and b) this compilation can be either in a machine-readable form or in any other form. The use of data in its varied forms is multi-faceted and it has an interplay with multiple aspects of our lives. The fear of data monopolization by big tech companies have forced countries to engage in discussions and subsequently formulate ways to ensure that such control is effectively countered. The Ministry of Electronics and Information Technology through its Committee of Experts on non-personal data governance framework under the chairmanship of Mr. Kris Gopalakrishnan published a report that proposed the creation of a new law regulating the use of non-personal data and a new authority to oversee its regulation.

The report highlights that many big tech companies are heavily reliant on the use of data, analytics, etc with companies forming new ways to generate value from any available data. This might lead to a situation where there exists power imbalance in relation to the bargaining powers of the few companies currently dominating the market vs smaller business entities including MSMEs and even potentially the government. Non personal data has been generally understood to mean data that is not personal, in reference to the definition provided under the Personal Data Protection Bill, 2019 and data that is without any personally identifiable information. The committee also identified three categories of non-personal data *"1) Public Non-Personal Data 2) Community Non-Personal Data & 3) Private Non-Personal Data"* and has also defined a new concept, 'sensitivity of Non-Personal Data'. Under this subheading, non-personal data could be sensitive when it is in relation with a) national security or strategic interests; b) business sensitive or confidential information; c) anonymised data that bears a risk of re-identification.

" The report highlights that many big tech companies are heavily reliant on the use of data, analytics, etc with companies forming new ways to generate value from any available data."

A revised draft of the report was issued and was open for public consultation until the 27th of January 2021. Many experts have cautioned against the seemingly wide ambit of the scope of the law and questioned whether there exists legal basis for some of its recommendations and whether the framework outlined would even solve the issue identified by the committee i.e., monopolization of data and the resultant imbalance in control. The report creates a framework that enables for the mandatory acquisition of privately held data by other entities for their commercial gain and such a provision might be in contravention of the intellectual property held by companies and in contravention of the TRIPS Agreement. The acquisition of such data seems to stem from an element of public interest and

community benefit. The report even characterises some public non personal datasets as derived from public efforts and funded by public money meaning that it could be argued to be a 'national resource.' Under this framework therefore, data can be requested and the business concerned can either mandatorily share their data for no compensation, fair monetary remuneration or market compensation or comply with requests made.

POTENTIAL CONFLICT?

As mentioned before, Article 10(2) of the TRIPS Agreement provides protection in cases of data collected. Databases can be protected as literary work under the Copyright Act, 1956 on the basis of their originality. Act under section 2(o) defines literary works to include computer programmes, tables and compilations including computer databases. In the celebrated case of Eastern Book Company and Ors v D B Modak, the court concluded that the minimum requirement to gain protection is that there must be some level of creativity and originality applied in any compilation seeking protection. Whether or not a particular database will receive protection is heavily based on the level of creativity and labour that went into its creation.

Companies use raw data collected and add value to it through a series of processes to subsequently derive value implying that the minimum standard of originality and labour has been satisfied and the same is protected both under the Act and under TRIPS. An argument can be made that the requirement of sharing of non-personal data with other entities would amount to expropriation of intellectual property and as per TRIPS and the Berne Convention 1967 an adequate price fixing mechanism must be followed. India is a signatory to both instruments and what is required is that the framework so created has to offer fair, reasonable and non-discriminatory (FRAND) pricing which is notably missing from the report.

"The report must also take into consideration India's outstanding obligations not just under TRIPS but under other international instruments including the Berne Convention before finalising that the framework envisioned is the appropriate one."

CONCLUDING REMARKS

Perhaps one of the most significant arguments against such acquisition of data is that it has the potential to stifle and inhibit creativity and innovation. Article 39 of TRIPS provides natural and legal persons the right to non-disclosure of information that qualifies as a trade secret. Data is an integral component of many businesses and fears of acquisition and compulsory licensing could dampen innovative strides made in this regard. The report must also take into consideration India's outstanding obligations not just under TRIPS but under other international instruments including the Berne Convention before finalising that the framework envisioned is the appropriate one. The monopolistic tendencies and

level of control exercised by big tech companies raises several pertinent questions however an effective balance must be struck between competing and conflicting claims with due recognition to the regime already established under the law.

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IPR REWIND: December 2020

- **DSNLU's International Webinar on Challenges to Law and Technology [Dec.16]-** Centre for Intellectual Property Rights, Damodaram Sanjivayya National Law University, Visakhapatnam organised an International Webinar on Challenges to Law and Technology in the 21st Century.
- **SASFL's Samvad on Sustainable Technology [December 19]-** South Asia Students For Liberty announced a Samvad on the theme "Sustainable Technology" as part of the Liberty. Innovation. Technology (LIT) 2021 series.
- **Webinar on 'Intellectual Property Commercialization and Entrepreneurship' [Jan 15**]- Centre for Innovation Research and Facilitation in Intellectual Property for Humanity and Development of CNLU organized a Webinar on 'Intellectual Property Commercialization and Entrepreneurship' in collaboration with Cell for Intellectual Property And Management (CIPAM) Ministry of Commerce and Industries, GoI, New Delhi.
- **Webinar on Role of Intellectual Property Appellate Board (IPAB) in Mitigation of Patents Litigation by CNLU [Jan 17]-** Centre for Innovation Research and Facilitation in Intellectual Property for Humanity organised a webinar on 'Role of Intellectual Property Appellate Board (IPAB) in Mitigation of Patents Litigation' on 17th January 2021 with an objective to spread awareness towards intellectual property Rights. Dr. B P Singh and Mr. Pankaj Kumar were the speakers for the webinar.
- **International Virtual Conference on Interface between Law & Technology by Navrachana University, Gujarat[Jan 30]-**The conference organized by school of Business & law, Navrachana University is an effort to study the innate relationship of law and technology. It undertakes to make a serious enquiry as to how the issues under ever-changing technology can be effectively addressed through law.

TRIPS: A STEP AHEAD IN THE PATH OF TECHNOLOGY TRANSFER AND INNOVATION

-Shefali Fernandes

Technology has become an indispensable part of almost every sphere of life. It is significant in relation to growth and development of countries. It is essential that instead of only one firm or individual, this knowledge of technology is transferred to more persons and institutions so as to bring in productivity. With the steadfast progress in intellectual property, there stems a need to disseminate information and knowledge in regard to technology.

The two most significant ways of doing these are by means of innovation and transfer. These are required

so as to encourage economic progress and growth. The TRIPS Agreement facilitates the same, it provides for an equilibrium between ensuring protection of Intellectual Property and at the same time, mandates that it should contribute to both promoting innovation and transfer of technology.The Agreement connects intellectual property and international trade. Transfer of technology is both national, which occurs within countries and international, which happens between countries.

Least- developed countries are a significant part of the international technological transfer, as it assists in their development and benefits them the most. The most advantageous types of technologies for these countries are sustainable forest, waste, water management and the like.

In 2003, The TRIPS Council implemented the same in the agreement, wherein it lays down certain obligations that are to be complied with by developed countries and in return for that, they are offered incentives. However, this has not been completely fulfilled as envisioned by the Council, as the least-developed countries represented by Cambodia stated that they had concerns about the lack of implementation of the same. Additionally, they also raised concerns of whether the incentives would benefit the least-developed countries in terms of transfer of technology. The requests from these least-developed countries included include specifying incentives to least developed countries and royalties for the same.

In a paper prepared by few countries namely Australia, Canada, European Union, Japam, Singapore, Switzerland, United States, Taiwan, Penghu, Kinmen and Matsu, the importance of inclusive innovation and Medium and Small Enterprises (MSMEs) was greatly stressed.They specially emphasized the impact of IP rights on businesses in developing and developed countries, and the positive effects of MSMEs in local markets.

With regard to India, it was stated in the minutes of the TRIPS Council meeting, that MSME's are the lifeline of the economic development in countries that are still developing. Furthermore, the country also stated, that although MSMEs have great potential in the market, a major impediment in the path is that the costs of securing and enforcing Intellectual Property Rights are exorbitant. It also accentuated on the need to increase awareness on Intellectual Property in order to provide incentives for growth of MSME's which would in turn instil a sense of competition and also help them get more acquainted with technology.

The path ahead is still unknown, it is to be seen whether and how technology innovation and transfer will be made more effective especially in developing countries where the need for it is greater than others,

and if implemented successfully would lead to wonders.

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TRIPS AND THE RIGHT TO REPRODUCTION

-Aleena Anabelly A

The principal objective of copyrights is to extend the authors the undivided economic rights on their creations. The economic rights envisaged in the TRIPS agreement includes the right to reproduction – which awards the author the authority to restrict an external actor from reproducing their creative work by devising or creating copies. The aforesaid postulation of proprietary sovereignty might seem elementary and uncomplicated, but it has got influential implications in the copyright creation process. The author of this article aspires to analyze the past, present and future of the 'right to reproduction' incorporated in the TRIPS agreement.

RIGHT TO REPRODUCTION

Article 9 of the agreement on trade-related aspects of Intellectual Property (TRIPS) provides for certain basic economic rights to the authors of copyrighted work. These rights are conferred on them by ensuring the compliance of Article 1 to 21 of the Berne Convention, which is an international agreement incorporated for the protection of literary and artistic works. According to Article 9 of the above-mentioned convention, the authors of various literary and artistic works are bestowed with the exclusive right of authorizing the reproduction of their intellectual property to any entity of their choice in any manner or form. Owing to the evident dichotomy between the right to perform and the right to print, the convention further excludes public performances from the interpretational ambit of this provision in

Article 9.3. Additionally, the exception clause allows domestic legislation to permit the reproduction of creative works in exceptional circumstances. As a result of the incorporation of such provisions in the TRIPS agreement, the progressive Intellectual Property rights protection framework formulated through the Berne Convention was applied to a wider array of nations.

RIGHT TO REPRODUCTION OF COPYRIGHTS IN INDIA

After the USA's controversial incorporation of services to the jurisdiction of GATT in 1982, 24 countries formed a bloc to curb further application of such restrictions by superpowers. Later, the authority and strength of this coalition began to debilitate leading to a giant drop in the number of allying countries. This conflict of interest was settled by excluding services from GATT in the ministerial meeting that was held at Punta Del Este in 1986. Accordingly, India signed the TRIPS agreement in 1994, right after opening up its economy to the world. This new advancement was perceived as a milestone towards achieving every democratic system's romantic aspiration – 'utmost welfare'.

The domestic legislation of India has channelized the laws on Intellectual Property in such a manner that it structurally conforms with the fundamentals laid down in the TRIPS agreement. Therefore, the right to reproduction is awarded to the authors of copyrights through various provisions of the Copyright Act, 1957. Subsequently, Section 14 of the Act grants the authors of the literary, dramatic or musical work the right to "reproduce the work in any material form including the storing of it in any medium". Additionally, the public performances or display of the work, translation, adaptation, circulation and use of the work in cinematographic films are governed by this section. Another important modification that was integrated into the Copyrights Act was Article 9 (2) of the TRIPS agreement which suggests that the copyrights protection should prioritize expressions over ideas, procedures, methods of operation or mathematical concepts.

The TRIPS agreement has considerably influenced the policymakers of various political systems in the formulation of Intellectual property protection mechanisms. It continues to be the understructure from which progressive and laudable policies emanate. This document has significantly aided the promotion of the right to reproduction of copyrights and continues to ensure that this right is accessible to everyone irrespective of the economic and infrastructural progress of the country they belong to.

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TRIPS AND ACCESS TO ESSENTIAL MEDICINES

- ***Abhisvara K***

INTRODUCTION

Over 10 million deaths are caused each year by infectious diseases and more than 90 per cent of these belong to the developing world. HIV/AIDS, respiratory diseases, malaria, and tuberculosis are the primary causes of death in Africa, Asia, and South America; areas that account for four-fifths of the world's population. The severity of the AIDS crisis has called attention, specifically, to the fact that millions of people in the developing world do not have access to the medicines needed to cure or alleviate illnesses.

The importance of the access to essential medicines can be better understood from the statement made earlier by a Director-General of WHO, Dr. Chan, who stated that an estimated 2 billion people in the world have no access to essential medicines, effectively shutting them off from the benefits of advances in modern science and medicine. The major reasons that limit the access to essential medicines in developing and underdeveloped nations are high cost of newer medications under patent protection and lack of R&D that limit the production of medicines for treating the neglected diseases.

TRIPS AND THE DOHA AGREEMENT

The World Trade Organization (WTO) Trade-Related Aspects of Intellectual Property Rights Agreement (TRIPS of 1994) lays down the basic standards for the protection of intellectual property, including pharmaceutical patents.

The TRIPS brought about the largest expansion of IP protection. It came into force on 1 January 1995. WTO Members were given different dates by which they were required to amend their domestic laws and practices to protect patent rights on pharmaceuticals according to their status as developing countries and whether or not they had any previously existing laws recognizing patents in this area. Under Article 66.1, least developed countries were originally given time

until 2006 to recognize and enforce patents on pharmaceuticals and later this date has been extended to 1 January 2033. The TRIPS Council granted a broader extension of time twice, to least developed countries to implement the substantive provisions of TRIPS (other than the non-discrimination provisions). Additionally, the TRIPS also provided a range of public health safeguards and flexibilities that were further strengthened by the Doha Declaration of 2001 on the TRIPS Agreement and Public Health. The agreement upheld the sovereign right of governments to take steps to protect public health. The Doha Declaration was hailed by public health advocates as a significant achievement because it gave public health priority over private intellectual property and established the rights of WTO members to use TRIPS safeguards.

IMPORTANCE OF ESSENTIAL MEDICINES

Article 25 of the United Nations Declaration of Human Rights (UDHR) recognizes every person's "right to a standard of living adequate for the health and wellbeing of himself and of his family, including food, clothing, housing, and medical care and necessary social services." It is an established fact that women have distinct and slightly more complex physical health. The third Sustainable Development Goal (SDG) of the United Nations also clearly highlights the importance of the access to medicine "through ensuring healthy lives and promoting wellbeing for all at all ages".

In view of the COVID-19 pandemic, this topic has become much more significant. Issues like patenting of COVID medicines, vaccines, testing kits, and other innovations to check COVID-19 could have serious consequences on availability, access, and affordability of the treatments. During the second G20 virtual Trade and Investment Ministerial Meet, Union Minister Piyush Goyal strongly called for an agreement to enable the use of TRIPS' flexibilities to ensure access to essential medicines, treatments and vaccines at affordable prices.

OBSTACLES IN THE ACCESS TO ESSENTIAL MEDICINES AND THE FREE TRADE AGREEMENTS

The major obstacle in the path of universal access to essential medicines is the overzealous and unmerited patenting indulged by mega pharmaceutical companies. Given these obstacles, contrary to the good hopes after signing of the TRIPS on promoting the access to medicines, the situation became worse. The poor and developing countries are the worst sufferers of this inequitable and inefficient IP regime. However, the Free Trade Agreements (FTA) executed by the USA in the past decade attempted to redefine and even undermine the Doha Declaration. These FTAs have included provisions limiting the governments' powers for utilizing the health safeguards envisaged originally in TRIPS. The FTAs are imposing higher levels of IP protection that either block or delay the onset of generic competition. Such

measures will make medicine costlier and limit their accessibility to a vast majority of the global population. Expensive treatments will devastate the already fragile economic status of poor people eroding the sustainability of public health programs. It is much more problematic in low and middle-income countries with very limited public finance for healthcare and the majority of the patients in those nations have to pay for medicines from their meagre earnings. The trade agreements are not a good option to solve the vexing problem of access to affordable medicines. Moreover, such FTAs make the situation worse.

CASE STUDIES

In 2010, a detailed study by the Director-General of Medicines, Supply and Drugs (DIGEMID) of the Peru Government, brought out the need for cheap and easy access to essential medicines in the poor countries. The study revealed that the monthly cost of one key patented medicine required for treating head and neck cancer is equivalent to 880 times the daily minimum wage in Peru; an amount that would take a worker more than two years to earn, without a single day off.

One of the classic examples of pharmaceutical price gouging is the prohibitively steep price for Insulin. It is a vital medicine for the treatment of diabetes, a non-communicable disease. The access to insulin still remains problematic though this medicine was invented exactly a century ago in 1921. In 1923, when a patent was first drafted for insulin, its inventors were reluctant and they believed that the new medicine belonged to the public. Exactly 100 years later, it is still inaccessible to thousands of people due to the dominant role of three multinational companies. They are responsible for restricting its cheap universal access. Such problems of expensive medicines can be solved if a patent holder enters into a voluntary licensing mechanism with third-parties like the generic drug manufacturer to produce, market and distribute a specific drug within a marked territory. Royalty-free, non-exclusive licenses among a large number of countries within the licensed territory permit the sale to both, the public and private sector, and permit licensees to source active pharmaceutical ingredients from anywhere in the world, and are more likely to encourage robust competition and the economies of scale that are needed to substantially reduce prices. Some more possible options for improving the access to essential medicines are tiered pricing, voluntary donation of drugs, abstinence from the filing of patents in the least developed countries and also, the non-enforcement of patents.

THE WAY FORWARD

Individual nations also need to be proactive in the formulation of national laws as affordable access to essential medicines that are under patent depends partly on the terms of national patent laws too, besides the actions of the patent holder. WHO released comprehensive guidance on creating national drug policies for addressing the access to essential medicines, and their quality and rational use is needed. For example, the Universally Accessible Cheaper and Quality Medicines Act of 2008, enacted by the Philippines, contains the following declaration of policy: "It is the policy of the State to protect public health and, when the public interest or circumstances of extreme urgency so require, it shall adopt appropriate measures to promote and ensure access to affordable quality drugs and medicines for all." The Act also states that any doubts about the interpretation of provisions of the Act shall be resolved by adopting a construction in favor of the protection of public health.

"Individual nations also need to be proactive in the formulation of national laws as affordable access to essential medicines that are under patent depends partly on the terms of national patent laws too, besides the actions of the patent holder."

Moreover, in some countries, the treaty obligations assumed are enforceable through their domestic courts, providing their citizens with a legal framework for getting better access to the essential medicines at affordable prices. Similarly, all nations should have a sound procurement policy for medicines. It is an essential tool to assist the governments in purchasing quality drugs at the lowest possible cost. An effective procurement strategy must accurately estimate the drug needs of the country and select the most appropriate purchasing strategy based on resources and time available with that nation.

TRIPS provides several flexibilities that are useful for reducing the prices of essential medicines and ensuring the goal of universal access. TRIPS does not prevent national governments from issuing compulsory licenses for facilitating the national health objectives, selection of an exhaustion regime that best suits national circumstances (for example, permission for parallel importing) and also, defining patentability criteria through their national patent legislation.

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Watch out for these events!

3 Feb 2021:

The WIPO Arbitration and Mediation Center will be presenting a webinar on the use of ADR methods in cases of technology and smart contracts from 12:00 PM-1:00 PM CET. The speakers will throw light on the key benefits and challenges faced by industry participants in the use of ADR for specific tech disputes and also provide insight into the commercial insurance market.

8-19 Feb 2021:

The WIPO Academy, RGNIIPM Nagpur and the National Law University Nagpur, will be hosting WIPO-INDIA training program online in India. The program provide an opportunity for professionals and students to acquire deeper knowledge of Intellectual Property.

10 Feb 2021:

JCAA and the WIPO Arbitration and Mediation Center will be presenting a webinar discussing international IP resolution strategies and the shift of international mediation and arbitration to online platforms to respond to the COVID-19 pandemic.

22 Feb 2021:

Chadha and Chadha and Google will be hosting a webinar on 'Avoiding avoidable oppositions through attentive patent prosecution in India: The telescopic view' discussing the key aspects patent applicants should bear in mind while prosecuting a patent application in India to keep frivolous oppositions at bay.

SUSTAINABLE TECHNOLOGIES

-Saba Kittur

INTRODUCTION

Sustainability - as the unblended definition states - 'Development that meets the needs of the present without compromising future generations' ability to meet their needs' (WCED, 1987) is increasingly being subscribed by many corporates. Statistics by Google Books Ngram Viewer shows the late 20th century and early 21st century has seen a rise in the word usage of 'Sustainability' by 80%. Sustainability is the buzzword today with businesses now accepting as a norm the 3 P's of sustainability - People, Planet and Profit, UN member states adopting the 17 UN SDG for world prosperity by 2030, and systems redesigned and processes revamped to accommodate reduction, recycling and reusing products. This term has become imperative for industries because it is now a fundamental market force affecting long term financial viability and success.

Today, many countries have put forth ambitious proposals by urging companies to incorporate sustainability at the design process. Organizations need to adopt sustainability standards in their operations to adhere to government regulations and revised industry standards. Therefore, this paper discusses what it means for organizations to be 'green' at the business level, the existing legal context surrounding sustainable technologies, and how one of the industry's biggest firms, Hewlett Packard, sets sustainable benchmark business practices.

THE NOTION OF SUSTAINABILITY

At the core of business operations, sustainable technologies focus on economic, environmental and social sustainability. The effect of government legislation is imperative in these three fragments. Legislation worldwide has reformed policies to include' compulsory take-back of products at the end of life'. According to a survey report by Global2014, a few countries passed around 2-3 legislations per year on climate change. This number of laws increased steadily to 25-27 per year globally by 2013. Notable among them are the EU directives on compulsory product take-back at the end-of-life, The Netherlands National Environmental Plan and the packaging recycling and product take-back laws in Germany.

Many countries have put forth ambitious proposals by urging companies to incorporate sustainability at the design process. In the construction industry, the UK government launched its code for sustainable homes; the UAE government launched MECSD for Green Certified Sustainable Development. Necessarily, sustainability legislation must constrain certain business operations, whether by setting limits

on the amount of carbon produced by industry, or through labor legislation intended to reduce inequality, or through any number of other legislative efforts to promote development goals. Justly operating a business in this environment means navigating the shifting waters of sustainability legislation. However, these types of legislative measures need not be a burden on business – they could hold the seeds of opportunity.

THE LEGALITY OF GREEN TECHNOLOGY

The term 'green technology' is parallel to sustainable development. It relates to the varied nature of environment- friendly products and innovation in clean energy devices. The International Patent Classification Committee developed an "IPC Green Inventory" that facilitates the search for patent information relating to sustainable technology. This inventory includes a list of categories: Alternative energy production, energy conservation, nuclear power generation, transportation, waste management, agriculture forestry, and administrative, regulatory and design aspects. Addressing the current requirement using the adoption of green technologies may require complete rethinking. It needs innovation in the very technology of equipment design and manufacturing.

"There emerged the need to develop and protect Green technology by way of Green IP"

At the core of the advancement and development of technology are the Intellectual property rights, which are conceptualized in proprietary rights. Article 7 of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) acknowledges this role of IP rights: "The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations." One of the primary reasons for granting monopoly rights under the IP system was to encourage and promote technological innovation and environmental benefits. There emerged the need to develop and protect Green technology by way of Green IP.

SUSTAINABILITY AT HEWLETT PACKARD

Hewlett Packard is well known as the pioneer of the silicon-valley for their excellence in the PCs and printer segment. However, what is lesser known is their efforts over the past two decades to evolve through three distinctive environmental sustainability phases. These phases started in the 1980s and continue to be in the 21st century.

In the 1980s, the environmental interests were principally pollution control and prevention with a core aim to reduce emissions from the manufacturing processes. Over the years, the focus has shifted to product stewardship that centered on the company's endeavors to minimize the environmental impacts of its full life cycle.

Today, HP remains committed to the cause of saving the planet and responding to the ongoing pandemic by protecting its employees while marshalling resources to support communities in need. To be an environmental leader in the 21st century, HP needs to integrate environmental sustainability into its fundamental business strategy.

HPS SUSTAINABLE INITIATIVES IN INDIA

In the Indian market, HP is revamping its packaging strategy to reduce single-use plastic by 75% by 2025. The goal is to contribute to a low carbon, circular economy that can ultimately benefit people and communities' health. The company's sustainable Impact Report shows that of the $58.8 billion sales earned in 2019, $1.6 billion in new sales was driven by sustainable backed products delivery. HP further announced to expand its sustainability goal towards "Forest Positive Future" enterprise and support science-based targets that aggressively promote forest conservation. HP's core focus on sustainability convenes on three pillars - environment, society and integrity. For these reasons, Circular Economy and Packaging Revolution "At HP, sustainability serves as a guiding principle for how we conduct business and create solutions that are changing the world. " says Dion Weisler Former President and CEO, HP

This segment explores the three sustainability strategies that HP adopts, which closely relate to the three dimensions of sustainability followed globally. Further, we also look at the Circular economy and Packaging Revolution approaches that HP undertakes that outline the sustainability progress.

The Design for Environment program initiated in 1992 led to product designs that use less energy and require fewer resources to make and are reused and recycled. Pocketing the same concept, HP is building on the sustainable design legacy by moving from Traditional linear manufacturing of "take, make, dispose of" to a more sustainable approach of "make, use, return" model of a Circular Economy. A circular economy is more than just recycling. For HP, it means extending the life of the products manufactured by creating modular designs that are easy to maintain. This approach places customers at the center of operations. It focuses personnel on finding ways to keep products and materials in use for as long as possible, at the highest state of value. Prime examples for recycling are the HP Planet Partners return and recycling program. More than 3.3 billion pounds of hardware and supplies were collected through this program —the equivalent weight of

more than 150 Eiffel Towers. Another example of straightforward design philosophy is the HP Elite x2 1012 G1 tablet, which comes with online repair documentation and readily-available parts. The Supply Chain segment is the IT industry's largest, made up of many production and non- production suppliers. Briefly explained HP considers the supply chain responsibility extending to labor, health and safety, responsible minerals sourcing, supplier delivery and environmental impact. Collaboration with suppliers is done to decrease GHG emissions, water use and waste. HPs products rely on a vast network of suppliers spanning six continents. Transparency is maintained by disclosing the production suppliers' names and locations, representing approximately 95% of our manufacturing spend.

The Packaging Revolution plans to achieve its new plastic-free commitment. By sourcing more than 25000 tons of post-consumer plastic and recycling it. HP also eliminated plastic-based foam cushions and replaced it with pulp-based, 100% recycled and recyclable substitutes.

STRENGTHENING SOCIETY

The HP culture motto is - "How we do things is just as important as what we do." HP took the initiative towards increasing organization-wide focus on diversity hires (especially towards women and African-Americans). Furthermore, HP foundation pledged $500000 towards social justice organizations as part of broader efforts to combat systemic racism and 200% matching of employee donations. HP's Board of Directors comprises 42% women and 58% minorities. It has also partnered with Girl Rising, a global nonprofit dedicated to eradicating poverty by providing education to women and girls. Additionally, it publishes the inaugural Human Rights Progress Report to drive transparency and long-term community impact.

CONCLUSION

In a nutshell, sustainability recognizes that the world is closed rather than a boundless system, with limits. Customers demand sustainable products, stakeholders raise awareness, encourage sustainable practices between companies and consumers, and shareholders use 'Sustainability' to measure economic success. Therefore, sustainable technologies are here to drive the future.

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TRADITIONAL CULTURAL EXPRESSIONS IN THE FIELD OF INTELLECTUAL PROPERTY RIGHTS

-Pawan SS

Traditional Cultural Expressions (TCE) are used to refer to the cultural and social identities of indigenous and local communities. These expressions have emerged from the core values and beliefs of their culture, which has evolved over several generations. TCEs include expressions of folklore music, dance, art, designs, names, signs and symbols, rituals, architectural forms, handicrafts and narratives, among other artistic or cultural expressions. The protection of TCEs contributes towards economic development, encourages cultural diversity and helps in preservation of ancient cultural heritage. Protection to TCEs under the current IP regime is by recognizing them as geographical indicators, applications of origins and trademarks. The performance of traditional songs and music comes under the World Intellectual Property Organization (WIPO) Performance and Phonograms Treaty, and the Beijing Treaty on Audiovisual Performance.

Trademarks can also be used to identify authentic indigenous art, such as the way in which the Maori Arts Board in New Zealand, Te Waka Toi, has done. Some countries have also enacted special legislations for the protection of folklore. WIPO's Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore is in the process of negotiating and developing comprehensive legal protection for the same at the global level.

WHAT ARE THE REQUIREMENTS FOR TRADITIONAL CULTURAL EXPRESSIONS (TCES) / FABLES OVERSEERS?

There have been calls for different types of protection to be given for TCEs. These include – Protection of conventional abstract and creative creations against unapproved propagation, variation, conveyance, execution and other such acts; avoidance of annoying, critical or potentially socially and profoundly hostile uses; assurance of crafted works, especially their 'style'; Counteraction of bogus and deluding cases to genuineness and inability to recognize source; and cautious insurance of customary signs and images.

Certain methodologies were recognized during the reality discovering missions and interviews led by WIPO in these indigenous communities since 1998:

- IP protection of TCEs to ensure monetary return to these communities. Acquisition and practicing of IP rights based on international conventions will help to prevent the misuse of TCEs by others. The economic contribution that such IP protection makes will improve their financial status as well.
- IP protection will prevent unauthorized use by others. Networks may acquire IP insurance to effectively practice their IP rights to forestall the utilization and commercialization of their social legacy and TCEs by others, including socially hostile or disparaging use. The initial two methodologies include 'positive security' that is, acquiring and stating rights in the ensured material. Positive insurance can, accordingly (i) fill in as the legitimate reason for any business and different dealings that TCE holders may decide to seek after with different accomplices, and (ii) prevent outsiders from utilizing TCEs in an unapproved or unseemly way.

Different positive and guarded systems can be utilized together, contingent upon what the holders or caretakers of TCEs need to accomplish. TCEs of a particular group may be ensured protectively as an endeavor against impersonations or fakes.

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