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INTERNATIONAL JOURNAL OF RESEARCH AND ANALYTICAL REVIEWS (IJRAR) | IJRAR.ORG An International Open Access, Peer-reviewed, Refereed Journal

"THE INTERSECTION OF AI AND COPYRIGHT IN MUSIC INDUSTRY"

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<u>CHAPTER 1</u> INTRODUCTION

The field of artificial intelligence (AI) is expanding at a breakneck pace around the globe. Managing AI's intellectual property (IP) is becoming increasingly important in light of this recent growth. As of yet, there has been no consensus on the topic matter. AI-created work is still up for debate as to whether it merits a higher status. When it comes to AI-related IPR legislation, there are a number of anomalies to be found. Patent and copyright ownership is up for debate, and there are serious worries about infringement and the consequences that go along with it. With the rapid advancement of technology, even international agreements and conventions are no guarantee of legal certainty.

In order to incorporate AI into present regulations, countries such as the United States and the United Kingdom have been working hard. Infopaq and Infopaq's landmark copyright case in Europe interpreted existing legislation and the terms "authorship," "intellectual production," to determine the ownership of intellectual property rights (IPR). Legislation must also be put in place because of the growing deployment of AI. This could also involve making major revisions to the Trade Agreement on Intellectual Property.¹

Sophia– In 2017, The Kingdom of Saudi Arabia has granted citizenship to a humanoid robot. Examples of recent technology advancements are Alphago and Zero, to name only two. Artificial intelligence's capabilities have enabled these startling advancements (AI). John McCarthy invented the term Artificial Intelligence at a symposium in 1956. A computer's ability to make decisions on its own using algorithms and commands was referred to as autonomous decision-making. Early philosophers predicted that machines would eventually outperform human intelligence.

Because of the rise of computers and robots that mimic human intelligence, this concept has gained traction. Artificial intelligence (AI) has risen to prominence as one of the most fascinating parts of contemporary technology since its birth. The machine learning process includes the analysis of data, the identification of

¹ Swapnil Tripathi, Artificial Intelligence and Intellectual Property Law, 7 Christ University Law Journal, 83-97 (2017), ISSN 2278-4332X https://doi.org/10.12728/culj.12.5.

patterns of user preference, and the implementation of discoveries to obtain the best possible results in the market.AI's usefulness is necessitated by the enormous need for manipulating and organising large amounts of data.

It enhances the use of current applications to their fullest potential. Using newer Apple products, Siri's quality and productivity have been enhanced. Cleaning robots like the Roomba 980 and Google Maps' AI-powered forecasts are just a few examples of how AI is being used on a daily basis.

Indisputable proof of the transformative power of machine learning and deep learning may be found. However, new challenges and obstacles have arisen as a result of this rapid development. According to a draught report from the European Parliament to the Commission on Civil Law Rules on Robotics, no sector of society would be immune to AI in the future. Several legal and methodological issues arise when artificial intelligence (AI) and intellectual property rights (IPR) are combined.

Intellectual property rights (IPR) are essential to the preservation of intellectual property and the economic reward for creative labour, and AI has added a new dimension. Expert systems, perception systems, and natural language systems are the three types of artificial intelligence (AI) classified by the World Intellectual Property Organization (WIPO).. For example, Expert Systems deal with medical disorders, whereas Perception Systems enable the technology to see the world through the senses of hearing and sight. In view of the rapid development and deployment of artificial intelligence, patent, trademark, and copyright regulations must be reevaluated (AI).²

1.1. Development of AI in IPR

"AI is the science and building of producing clever machines, particularly clever PC programmes," according to John McCarthy. Over a century has passed since the first mention of artificial intelligence (AI). Ancient Greek mythology was the first to feature robots and artificial humans. As a result of Alan Turning's pioneering work, numerous significant advances have been made in artificial intelligence (AI), including the development of the Turning Tests and the ELIZA language, which is a distinctive language for building personal computers. In retrospect, the last three decades have been crucial for artificial intelligence.

During the Gulf War in 1991, DART was used by the US military. It was a computerised system for arranging and scheduling logistics operations. The self-driving car is currently in development. During the 2005 DARPA Grand Challenge, STANLEY triumphed. In 2017,Sophia, a humanoid robot, was granted Saudi citizenship. Some people questioned whether artificial intelligence (AI) gadgets should be afforded the same rights as humans.. Naruto v. Slater, known as "The Monkey Selfie Case," was a case in which a San Francisco court refused copyright rights for the macaque monkey who took selfies. In this instance, there were far more questions than answers.

The present sciences have information that is important, but it does not meet the old notions of creativity because it does not constitute a work of art. Thus, AI is exploding around the world in tandem with

https://jolt.law.harvard.edu/digest/artificial-intelligence-and-authorship-rights, accessed on 17th March, 2022.

² Raquel Acosta, Artificial Intelligence and Authorship Rights (17/2/2012), available at

economic progress, making it more critical than ever to establish and analyse its fundamental structure, which includes issues of ownership, licences, and abstract works of art..³

1.2. Curent situation

"Who has the IP rights for a substance generated by their invention?" is currently unanswered in both India and the rest of the world. The current legislation exclusively considers humans to be creators, and hence, owners and infringers of intellectual property (IPR).. As a result, it becomes necessary to consider how these AIs will be used in the future. As a result, AI's work has triggered a slew of new responsibilities..

United Kingdom

According to the Copyright, Designs, and Patents Act of 1988, a creator's IP rights are defined (the CDPA). Machines that develop substances under the control of their creator have IP rights under CDPA, even if the creator does not have direct control over how the machine uses AI.

People can own intellectual property rights over AI-created substances even if no human inventor was involved in the creation process. As a result, AI is not considered a creator under UK law.

United States of America

For example, in the United States, the Copyright Act only protects speech, not the ideas that underpin it. AI data is not specifically protected by the Act, which states that a copyright requires "an original work of writing." Copyright protection for AI-generated content must entail human involvement in the creative process as a result of the US courts' view of "author" as a person or human being. The AI being employed is viewed as a tool in the copyright procedure..

China

Algorithms and data protected by intellectual property are considered AI in China. The collection of data as well as the algorithm's expression are both protected under Chinese law as part of AI's copyright. Patents are utilised to safeguard AI's essential concept. Patents on inventions, not on utility models, should be used to protect algorithms like this. China has been able to better secure artificial intelligence by putting in place a more robust framework. As long as there are various stakeholders, there are still a lot of questions about the ownership.

Japan

With intellectual property rights, Japan has been a trailblazer in regulating AI (IPR). The AI for Everyone-People, Industries, Regions, and Governments (2019) plan had been designed to identify issues and carry out future investigations. AI for Everyone- Articles 30-4, 47-4, and 47-5 of the Copyright Act were also revised to better safeguard intellectual property by creating flexible limiting rules for IoT and AI. Under Article 12-2 (1) of the Copyright Act, authors who have contributed to the database are protected even if the database itself is protected. However, there are still questions about whose data is whose and how patents work must be clarified..⁴

³ Roll, I., & Wylie, R. (2016). Evolution and revolution in artificial intelligence in education. International Journal of Artificial Intelligence in Education, 26(2), 582-599.

⁴ Garikai Chimuka,Impact of artificial intelligence on patent law. Towards a new analytical framework – [the Multi-Level Model],World Patent Information,Volume 59,2019, available at https://doi.org/10.1016/j.wpi.2019

^{.101926.(}https://www.sciencedirect.com/science/article/pii/S0172219018300814), accessed on 17th March,2022.

Way Ahead

When no data is available, it is believed that the next generation of AI would be able to deal with more realistic conditions. As a result, intelligent agents must learn by making mistakes in order to make judgments that have long-term benefits. Next-generation artificial intelligence, which has yet to be completely realised in practise, would therefore be more autonomous and sophisticated in its decisions. As a means of putting intellect into action on a real-world scale, robotics and autonomous systems are essential to the field of artificial intelligence (AI). Embodiment can be seen as a separate aspect of AI. As a matter of fact, it is the emphasis on embodiment that permits AI to be in control through sensors and actuators.

Before artificial intelligence (AI) causes havoc in the not-too-distant future, it is imperative that it be regulated. Incorporating AI into nearly every aspect of our daily lives comes with its own set of challenges and risks. Given their massive data storage capabilities, artificial intelligence systems can be exploited in several ways. As a result, it is necessary to determine who is responsible for what and to what degree. As a waypoint, the term "intellectual property rights" (IPR) refers to a person's ownership of and control over their creative work. An important advantage for the AI owner is the ease with which he or she can maintain and establish accountability if AI technology's consequences are harmful or destructive.

A more difficult future lies ahead in terms of Intellectual Property Rights (IPR). They haven't had any success in stopping the spread of AI and IPR. They have weighed all of the facts and come to their decision in these countries, however. As long as the market equilibrium and incentives for new breakthroughs are kept, questions of ownership and financial benefit in AI development will continue..⁵

1.3. AI & IPR in India

India's development model incorporates a large degree of technical advancement, which includes AI. Not only in social media and entertainment, but also in retail, the usage of AI is on the rise. The country experienced a tremendous evolution in technology, from online shopping to the use of online vehicle services. Concerns about the basic infrastructure are even more pressing in a developing country like India. Patent and copyright rules are well-established in the Indian legal system..

However, There are no rules or regulations controlling artificial intelligence. Artificial intelligence is not covered by the current legislation, which are based on more traditional kinds of intellectual property, such as books, creative writing, and discoveries.. The scope of AI is significantly more complicated and requires a different approach than the one currently in place. Computer programmes, business techniques, and mathematical formulas are not patentable inventions under the Patents Act of 1970.

Sections 2 (p) and (t) of the aforementioned Act use the phrases "patentee" and "person interested," respectively, to exclude artificial intelligence from its purview. Anyone who is interested in being human is specifically excluded from the definition of the patentee in the Act.

In terms of the Copyright Act, the Sweat of the Brow Doctrine and the Modicum of Creativity principles describe what constitutes original work. AI's original work can be incorporated in the doctrine if a certain amount of originality is allowed. Section 2 (d) of the Copyright Act grants copyright to the 'creator' of the

⁵ Tripathi, Swapnil, and Chandni Ghatak. "Artificial intelligence and intellectual property law." *Christ University Law Journal* 7.1 (2018): 83-98.

work. It is inferred in this law that the creator be a human or legal person, which limits the idea of a machine being protected by this law.

Existing rules are out of step with how technology is evolving and will continue to evolve. Since social media and online commerce have become so prevalent in a country with the world's second-largest population, it's critical that the legal framework evolve along with it. As an example, Alexa, Amazon's AI product, is being used to lock doors in homes as a security precaution. Which party will be held accountable if an AI system fails due to confusion?"It is conceivable for a customer or end-user to be held responsible for the product's failure. Another inventor's rights may be violated by an innovation based on the same algorithm or concept. This has gotten out of hand and is now a major problem. That would defeat the very point of intellectual property rights, as it would discourage new businesses from becoming inventive. It would also lead to a slew of litigation and confusion in the IPR industry, too.

1.4. Copyright and AI

Copyright gives the author of a literary, artistic, or musical work the sole right to sell, use, and distribute their work.

In the case of *Burrow Gilles Lithographic Co. v. Sarony*, The issue was whether or not a photograph could be accorded copyright protection because of the conflict between creative and mechanical labour. To be granted copyright protection, the court ruled a product created by a machine must have been created by human hands. As a result, their scope of protection was constrained. Due to the stringent approach, it would be impossible to assign copyright to works created by AI systems.

In another similar judgment of *Bleistein v. Donaldson Lithographing Co*, As far as the court was concerned, it was important to distinguish between human and mechanical efforts. A copyrightable work must take into account human nature, according to Justice Holmes. A copyright exemption could not be granted because the work in question was not created by humans.

There is no agreement on who should own the copyright on an AI's creations, even if countries do so. Current law requires a right-holder to have legal personality, which an AI does not have until its creator is granted this on behalf of the robot. ⁶

Alfred Bell & Co. v. Catalda Fine Arts, Inc.

As a result of this decision, the courts have begun to treat copyrights more leniently. For a piece of art to be considered original, it must not have been based on any previous piece of art of a similar nature.19It even held that an author can claim ownership of inadvertent or accidental alterations. Accordingly,Some comfort was afforded to individuals who claimed copyrights for AI-produced works because the work itself had not been reproduced, despite the fact that it was made using unique programming and algorithms. The provision

⁶ Ballardini, Rosa. "Artificial Intelligence and IPR: The Quest or Plea for Ai as a Legal Subject." Ballardini RM & van den Hoven van Genderen R., "Artificial Intelligence and IPR: the quest or plea for AI as legal subject", in Pihlajarinne T.(eds), Alen-Savikko A.(eds) and Havu K.(eds), AI and the Media-Reconsidering Rights and Responsibilities, Edward Elgar (Accepted (2021).

of protection for artificial intelligence systems is now clearer following these three court decisions. Potential rights holders are nevertheless affected by the lack of a clear position..⁷

EU & United States

Firstly, AI-created works must be distinguished from AI-assisted works, and vice versa. In the first scenario, Human intelligence cannot provide protection, and in the second circumstance a copyright is owned by the person who first invented the substance. There is also a question about the necessity that the AI's work be original. Anybody can utilise computer-generated works without fear of copyright violation...

UK

The CGW policy is implemented in the UK, not the EU or the US, as is customary in these regions. The creator of the artificial intelligence (AI) programme holds the copyright on the machine's output under this system.

Patents and AI

While this is a significant advancement, the use of AI-enabled systems creates and invents new outputs that are outside the scope of the inventor's expertise and comprehension. While this is an exciting breakthrough, it also introduces uncertainty into the patent system. Inventions that are unique, non-obvious, and beneficial are eligible for patents, which are given to the inventor. Those who do not have a licence from the patent holder are unable to produce the innovation, sell it, or distribute it.

Artificial Intelligence (AI) is booming to the point that AI-created computers are delivering outcomes that may be patented.

EU & United States

US law defines a "inventor" as an individual or group of individuals who created the invention or found its subject matter. Under this criterion, the US does not intend to grant patent protection to AI-generated inventions.

In Europe, The "own intellectual property" category includes copyrightable works made by computers and other devices/machinery, although patents by AI systems and robots are not covered.

UK

The laws of the United Kingdom do not allow for the patenting of works made by artificial intelligence (AI). UKIPO patent application mentions the inventor of DABUS (patented AI system) as Dr. Stephen Thaler (sometimes referred to as the "creativity machine"). There is no way for the UKIPO to register DABUS' inventions since he is a machine, not a human. As a result, the UKIPO declined this application. An AI creator cannot transfer ownership of an innovation to an AI's original owner in the UK since human inventors are required by law. The Hearing Officer agreed. AAI creators can't claim credit for AI-developed inventions, according to him. As a result, there are still a lot of questions surrounding this case..⁸

1.5. Trademark & AI

⁷ Chikhaoui, Emna, and Saghir Mehar. "Artificial intelligence (AI) collides with patent law." *Journal of Legal, Ethical and Regulatory Issues* 23.2 (2020): 1-10.

⁸ Rashmi, Rajat, and Shilpi Sneha. "Artificial Intelligence: IPR, Liability and Ethical Issues." *Int'l. In-House Counsel J.* 11 (2017): 1.

www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138)

The objective of trademark law is to ensure that customers are not misled by a company's logo, appearance, packaging, or any other markings that serve to identify the business. As with patent and copyright, it is difficult to understand how AI can infringe trademarks, and these difficulties can arise as well. There have been cases where trademark infringement involving AI has been raised. In the case of *Louis Vuitton v. Google France*, In this case, the petitioner claimed that Google's keyword advertising and algorithmic selections infringed on his trademark..

However, the court ruled that an infringement had not occurred unless the party involved actively participated in it.. The case of *Lush v Amazon* revealed the necessity of drafting trademark legislation and planning ahead for potential problems. As far as we knew, Amazon had not been granted permission to sell Lush's products. Amazon had won the right to use the term "Lush" after a competitive bidding process. Even if someone searched for Lush on Google, Amazon ads would appear instead of results for Lush. Despite the fact that there were no current sales on the website, the AI continued to display similar items based on the requested phrase. Lush filed a trademark infringement lawsuit against Amazon, and the court ruled them guilty of doing so.

This problem could get considerably worse as artificial intelligence (AI) is increasingly used in retail and business strategies, as well as security and payment mechanisms. If there are AI-based consumers, the situation may worsen even further. Algorithms and data are used by AI to identify what the user has previously done. Confusion over trademarks is very likely if AI becomes a consumer, which might lead to extensive litigation.

In this regard, no country has specific legislation, and regulations are urgently needed to avoid more misunderstanding in the coming years..⁹

1.6. AI & Patent

The intersection of AI and patent law is gaining traction at the present time. On the one hand, artificial intelligence will be useful for securing patents.11, A patent search can help inventors by providing them with an early indication of whether or not a similar idea is already out there. As AI becomes more intelligent, it will be able to carry out inventions without the need for a person's input or intervention.12. When it comes to patent and AI, we need to look specifically into certain specific areas like:

Weapon: There is a global movement in warfare using AI machines and programmes. It is outside the scope of this study to address the controversy over how artificial intelligence (AI) will be controlled under international humanitarian law (IHL), but the topic of who will own the patent for any weapons developed by an AI machine or programme is an important one.

Medicine/pharma sector: When it comes to patents, the pharmaceutical industry and the development of new medications take precedence. In the future, a patent issue will arise if an AI successfully manufactures a drug. Suppose that an AI programme develops a vaccine to combat the global pandemic corona virus at the same time that everyone else is searching for a vaccine for the disease. If this happens, there will be a great deal of confusion over whose patent rights to the vaccine ultimately accrue, since the patent could go to the

⁹ Mahesh, K. "Shaping IPR Legality of Artificial Intelligence in India." *Law Essentials J.* 1 (2020): 22.

AI system itself, its creator, or the person who bought it. Without resolving this issue, it will be impossible to establish how and at what price the vaccine will be distributed to other countries. As a result, there is a pressing need to prevent such problems from developing.

Road safety: The number of people who die in car accidents is too high to ignore, so various programmes are being developed to improve road safety. AI may be able to come up with a way to reduce human deaths in the same way that self-driving automobiles may be developed. In addition, there are already companies working on this aspect of road safety and incorporating AI into it. Like Microsoft, the company is developing a software that uses face recognition to monitor the driver's conduct and raise a warning in time to prevent an accident from occurring..

New technologies: Patent law is all about new ideas and inventions that we come up with on a daily basis. When a programmer or AI machine comes up with an idea, it's crucial that everyone knows exactly who will own the intellectual rights to that idea, regardless of who came up with it.¹⁰

1.7. ARTIFICIAL INTELLIGENCE AND INDIAN PATENT LAW

At this point, we can safely claim that the legal consequences of AI for patent law are unexplored area. We are still attempting to figure out our initial move. Because of this, there is no provision in Indian patent law to resolve the problem. The substance of AI-related invention must be grasped before we can discuss whether or not it is patentable. Algorithms, mathematical formulae or procedures, and calculation or a mix of the two comprise an AI-related invention, not a single invention by itself. With this clarification another thing comes into equation i.e. Section 3(k) of Indian Patent Law. Mathematical or business techniques, as well as computer programmes or algorithms, cannot be patented under the Indian Patent Act. 8 In light of the ambiguity of the legislation, the Indian Patent Office's instructions are the next best bet for accurate information. To yet, the Patent Office's strategy has been reactive rather than proactive. Thus, it suggests that Indian Patent Office rulings are strongly impacted by external pressure and opinions. Recently, the Indian Patent Office has released a few recommendations on Computer-related inventions, but rather than addressing the issue, they left applicants with more questions and suspicions. Due to the Patent Office's propensity of reacting rather than proactively tackling the problem, new regulations and requirements were introduced for each new guideline.

Recently in 2019 the Delhi High court took different approach in Ferid Allani9 case. However, based on the concepts outlined in draught guideline-2013, the Delhi High Court found that "technical effect" and "technical contribution" of the underlying invention are not prohibited from patentability for computer-related inventions. Court correctly ruled that Section 3(k) only applied to computer programmes, not all inventions based on computer programmes, in this decision.

The Delhi High Court's decision has given us the way to unexplored waters..¹¹

¹⁰ Allen, Gregory (April 2020). "Department of Defense Joint AI Center - Understanding AI Technology" (PDF). AI.mil - The official site of the Department of Defense Joint Artificial Intelligence Center. Archived (PDF) from the original on 21 April 2020. Retrieved 25 April 2020.

¹¹ Araujo, L. (2007). How evolutionary algorithms are applied to statistical natural language processing. *Artificial Intelligence Review*, 28(4), 275-303

1.8. APPROACH TILL DATE AND AI DABUS CASE

The argument over AI as a holder of intellectual property rights has intensified in recent years due to the growth of the AI field. However, the IP legislation has not kept up with the pace of these innovations, and this has led to greater ambiguity among AI innovators. We can see from the precedents set that the courts are not in favour of giving AIs intellectual property rights. Judgments in this case revolve over whether or not AI should be regarded as a legal person.

AI DABUS case was the latest development in the debate. When it came to this particular issue, the focus was on the legal status of artificial intelligence. The owner of AI DABUS, Stephen Thaler, believes that AI DABUS should be recognised as an inventor and designated an assignee and successor in title, so that he can carry out all of the responsibilities and rights that come with being an IP rights holder. The entire situation can be appraised from this sentence, but it isn't simple enough. There are specific techniques for assigning ownership under patent law. The inventor might either be an employee or a contractor of the company using one of these ways. Ownership can be transferred at the time of patent application in both circumstances. Using these techniques, we can get back to our original issue: legal personhood. Despite the fact that the parties in both circumstances are recognised to have legal personalities, AI is not a legal person and cannot fulfil the above-mentioned activities. In the well-known Monkey selfie case, others expressed a similar point of view. 10 The 9th Circuit Court of Appeals ruled that animals do not have statutory standing under the Copyright Act, and hence are not entitled to copyright protections. Using the same logic, it's clear that AI cannot assert any sort of intellectual property rights.

Because AI does not have a legal personality or entity, it cannot be an employee of a business. AI can be owned by the company or an individual, but it cannot be hired for employment.

When it comes to legal guardianship of minors or those who are unable to make decisions for themselves, a similar argument was made in the AI DABUS case. Since an AI lacks legal personality, judges held that the situation differs from that of a juvenile or incapacitated person. They held that in the former scenario, the person has a legal personality and a legal right that they can transmit.

1.9. Understanding the New Dimensions of 'Invention' & 'Inventor'

When determining whether or not a patent should be given, a number of important characteristics of an invention must be considered. However, in order to be regarded as an inventor, one must meet a set of requirements. Townsend v. Smith, for example, is an example of this in the United States. As a result of the inventor's "vision," a new invention may only be regarded a legitimate conclusion if it has gone through this first stage. Innovators always have a specific concept in mind when they minimise something. That only the human intellect can come up with these new ideas has been suggested.. One of the strongest justifications for including AI in the category of "inventor" is the rationale for removing the "flash of genius" patentability requirement. Congress in the United States ruled that the process by which an inventor came up with an invention was no longer necessary as long as the innovation progressed the subject of study it wished to focus on was sufficient to be considered an invention. This means that artificial intelligence systems such as AlphaGo and Watson, which create answers from a vast database using a large quantity of data, are eligible

for patent protection as advancements in computer science. But academics contend that things are more nuanced than this..

Even if the collaborative invention argument were to be employed, computers and their human counterparts would be recognised as innovators., However, in most legal systems, computers do not have a "legal personality," which is similar to the position of businesses not being citizens. The 'incentive theory' is another reason to allow computers to be classified as inventors and given patent protection. As long as humans can see the benefits of protecting the inventor and honouring his commitment to his invention, computers that lack emotion will continue to be motivated to develop new technologies. This is especially true if computers are unable to express emotions. As a result, those who oppose granting artificial intelligence (AI) patent protection claim that computers are devoid of any such attachment. Because of this, they are unable to form strong judgments on how their invention should be used, which undermines the fundamental purpose of patent protection.¹²

AI & Traditional Knowledge

Traditional Knowledge is something (maybe a skill or any know how or practice) which has been acquired or followed from time to time. This community's expertise is passed down from one generation to the next. In some cases, AI may infringe on traditional knowledge by taking abstracts from the existing traditional knowledge.

Considering what has been said thus far, it is possible that an AI system or programme may violate the traditional wisdom that is a treasured heritage of many cultures..¹³

Liability for infringement

When an AI computer violates intellectual property rights, this is one of the most hotly discussed issues. Whether the programmer, the machine, or someone else will be held liable for the consequences. There is still ambiguity regarding this aspect.

As long as the programmer had advance knowledge that the machine would infringe on someone else's IP, he or she will be held responsible for any damages that resulted from that infringement. Even if the programmer has no knowledge or purpose of violating a third party's intellectual property rights, it might be difficult to ascertain who is responsible if the AI system or programmer violates those rights.

For this reason, there is still a void that must be addressed in order to establish the AI program's legal responsibility for its actions. When criminal liability is involved, how will the AI be held accountable for its actions?

Liability is a major concern, and it needs to be handled if we don't want to see a lot of arguments and confusions arise.

1.10. If AI owns IP

¹² Castets-Renard, C (2020) The intersection between AI and IP: Conflict or Complementarity? *IIC-International Review of Intellectual Property and Competition* (51): 141-143

¹³ Mathur, A. (2020) A Reflection upon the Digital Copyright Laws in India. Journal of Intellectual Property Rights 25:5-1

An issue of intellectual property infringement arises when an artificial intelligence (AI) is the IP right holder of an innovation or creative work.

One thing to keep in mind when dealing with infringement and enforcement is that AI should be accorded the same status as an individual when producing or inventing something. On the other hand, it doesn't appear that AI software can sue for infringement and enter into legal contracts on its own. Artificial intelligence cannot be classified as a legal person in this way.

Second, when an AI abuses another person's rights, the issue of accountability arises. AI can make it easier to prove that an infringer had access to the protected material, notably in copyright cases.

Thirdly, there is a problem with AI systems' openness when it comes to their ownership of intellectual property (IP). If commercial secrets are used to secure AI systems, this could pose a challenge to their transparency. Transparency and accountability in the decision-making process are becoming increasingly important as society evolves.

Hence, the question of the hour is, "how to deal with transparency in cases where a machine learning process involves multiple data sources, dynamic development, and elements that are opaque, whether for technological or legal reasons?"¹⁴

1.11. Future of artificial intelligence

Research and development on AI is ongoing, and the functions that AI will be able to accomplish in the not-too-distant future are beyond our ability to imagine at this time. It's important to remember that this is a machine and, ultimately, it is a machine designed to accomplish a mission, and it has gone rogue and performed tasks on its own in the past. When the AI machine or software begins to undertake acts on its own, it becomes increasingly difficult for the programmer to control the AI machine or programme.

Artificial Intelligence (AI) research has progressed a great deal in recent years, but there are still many unanswered questions about how AI works and how it may be used in our daily lives and in our creations.

I. Statement of Problem

Artificial intelligence and laws are coming to appoint where revision of laws is required to keep up with the technological advancements. Artificial intelligence is developing rapidly and there are possibilities that it may take over a lot of human endeavours one of which may also be a large part of law profession. Lawyers with their teams spend a lot of time in understanding and placing Patent claims. Hours are spent in investigating and analysing the novelty, utility and non-obvious nature of products and processes for which a claim is to be presented. A substantial expenditure goes into the process of patenting something. Facilitating laws by including AI in the whole process may substantially save us time and money involved in the process. This paper has addressed how the old concepts of Intellectual Property are being stretched to the maximum to accommodate the disruptive consequences of the advent of Artificial Intelligence. In other

¹⁴ Artificial Intelligence & Intellectual Property Rights, available at https://clairvolex.com/PDFs/October-2016-Mailer-1.pdf, accessed on 18th March,2022

www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138)

words, granting Intellectual Property protection to Artificial Intelligence results, paradoxically, into challenging the very foundations of Intellectual Property law.

II. Objectives of Research

- a) To understand Artificial Intelligence related Intellectual Property Law Issues
- b) To understand if, IPR and AI complement each other.
- c) To understand the pros and cons of IPR with regards to upcoming AI in market.
- d) To understand the different ways in which IPR and welfare of people can be balanced through Artificial Intelligence.

IV. Research Questions

- a) What are the Artificial Intelligence related IPR issues ?
- b) How do IPR and Artificial Intelligence complement each other?
- c) Do misuses of AI overweigh it's necessity?
- d) How are different industries in market affected by Artificial Intelligence in IPR field?

III. Survey of Literature

•Books

i. Laws relating to Intellectual Property Rights by V.K. Ahuja

ii. Intellectual Property Laws by Prof. Meenu Paul

iii. Artificial Intelligence and Intellectual Property Law by Jyh-An Lee, Kung-Chung Liu, and Reto M. Hilty

iv. P. S. Narayana's Intellectual Property Law in India

v. WIPO Technology Trends 2019 - Artificial Intelligence

VI. Hypothesis/Hypotheses

This paper seeks to provide insight into the expanding scope of IPR laws and artificial intelligence, along with the inevitable challenges it brings from a worldwide lens on the matter. It also attempts to provide suggestions transcending IPR, and seeks to address questions concerning criminal liability for the content created by such technologies.

VII. Research Methodology

1. Empirical research methods:

•Online survey:

2. Doctrinal research methods:

•Books:

•Research papers:

•Law commission reports:

•Bare Acts:

Introduction

Artificial intelligence (AI) has arisen in the realm of creativity and innovation and is expected to become an integrated part of daily life in the near future. New AI technologies present exciting opportunities for developments in the creative arts, entertainment industries, as well as life enhancing inventions. However, of course, there are social, economic and ethical implications that need to be addressed and policy that needs to adjust accordingly.

HYPOTHESIS

Question 1: Inventorship and Ownership

In the case of inventions autonomously generated by AI:

(i)Should the law permit or require that the AI application be named as the inventor or should it be required that a human being be named as the inventor? In the event that a human inventor is required to be named, should the law give indications of the way in which the human inventor should be determined, or should this decision be left to private arrangements, such as corporate policy, with the possibility of judicial review by appeal in accordance with existing laws concerning disputes over inventorship?

(ii)The inventorship issue also raises the question of who should be recorded as the owner of a patent involving an AI application. Do specific legal provisions need to be introduced to govern the ownership of autonomously generated AI inventions, or should ownership follow from inventorship and any relevant private arrangements, such as corporate policy, concerning attribution of inventorship and ownership?

(iii)Should the law exclude from the availability of patent protection any invention that has been generated autonomously by an AI application?

Question 2. A condition of patentability is that the invention involves an inventive step or be non-obvious. The standard applied for assessing non-obviousness is whether the invention would be obvious to a person skilled in the relevant art to which the invention belongs.

(i) In the context of AI inventions, what art does the standard refer to? Should the art be the field of technology of the product or service that emerges as the invention from the AI application?

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- (ii) Should the standard of a person skilled in the art be maintained where the invention is autonomously generated by an AI application or should consideration be given to replacing the person by an algorithm trained with data from a designated field of art?
- (iii) What implications will having an AI replacing a person skilled in the art have on the determination of the prior art base?
- (iv) Should AI-generated content qualify as prior art?

Question 3. The fundamental objective of the patent system is to encourage the investment of human and financial resources and the taking of risk in generating inventions that may contribute positively to the welfare of society. As such, the patent system is a fundamental component of innovation policy more generally. Does the advent of inventions autonomously generated by AI applications call for a re-assessment of the relevance of the patent incentive to AI-generated inventions. Specifically,

(i) Should consideration be given to a sui generis system of IP rights for AI-generated inventions in order to adjust innovation incentives for AI?

(ii)Is it too early to consider these questions because the impact of AI on both science and technology is still unfolding at a rapid rate and there is, at this stage, insufficient understanding of that impact or of what policy measures, if any, might be appropriate in the circumstances?

Question 4. AI applications are capable of producing literary and artistic works autonomously. This capacity raises major policy questions for the copyright system, which has always been intimately associated with the human creative spirit and with respect and reward for, and the encouragement of, the expression of human creativity. The policy positions adopted in relation to the attribution of copyright to AI-generated works will go to the heart of the social purpose for which the copyright system exists. If AI-generated works were excluded from eligibility for copyright protection, the copyright system would be seen as an instrument for encouraging and favouring the dignity of human creativity over machine creativity. If copyright protection were accorded to AI-generated works, the copyright system would tend to be seen as an instrument favouring the availability for the consumer of the largest number of creative works and of placing an equal value on human and machine creativity.

Specifically,

(i)Should copyright be attributed to original literary and artistic works that are autonomously generated by AI or should a human creator be required?

(ii)In the event copyright can be attributed to AI-generated works, in whom should the copyright vest? Should consideration be given to according a legal personality to an AI application where it creates original works autonomously, so that the copyright would vest in the personality and the personality could be governed and sold in a manner similar to a corporation?

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(iii)Should a separate sui generis system of protection (for example, one offering a reduced term of protection and other limitations, or one treating AI-generated works as performances) be envisaged for original literary and artistic works autonomously generated by AI?

Question 5. An AI application can produce creative works by learning from data with AI techniques such as machine learning. The data used for training the AI application may represent creative works that are subject to copyright (see also Issue 10). A number of issues arise in this regard, specifically,

- (i) Should the use of the data subsisting in copyright works without authorization for machine learning constitute an infringement of copyright? If not, should an explicit exception be made under copyright law or other relevant laws for the use of such data to train AI applications?
- (ii) If the use of the data subsisting in copyright works without authorization for machine learning is considered to constitute an infringement of copyright, what would be the impact on the development of AI and on the free flow of data to improve innovation in AI?
- (iii) If the use of the data subsisting in copyright works without authorization for machine learning is considered to constitute an infringement of copyright, should an exception be made for at least certain acts for limited purposes, such as the use in non-commercial user generated works or the use for research?

(iv)If the use of the data subsisting of copyright works without authorization for machine learning is considered to constitute an infringement of copyright, how would existing exceptions for text and data mining interact with such infringement?

(v)Would any policy intervention be necessary to facilitate licensing if the unauthorized use of data subsisting in copyright works for machine learning were to be considered an infringement of copyright?

(vi)How would the unauthorized use of data subsisting in copyright works for machine learning be detected and enforced, in particular when a large number of copyright works are created by AI?

Question 6: Further Rights in Relation to Data

(i)Should IP policy consider the creation of new rights in relation to data or are current IP rights, unfair competition laws and similar protection regimes, contractual arrangements and technological measures sufficient to protect data?

(ii)If new IP rights were to be considered for data, what types of data would be the subject of protection?

(iii)If new IP rights were to be considered for data, what would be the policy reasons for considering the creation of any such rights?

(iv)If new IP rights were to be considered for data, what IP rights would be appropriate, exclusive rights or rights of remuneration or both?

(v)Would any new rights be based on the inherent qualities of data (such as its commercial value) or on protection against certain forms of competition or activity in relation to certain classes of data that are deemed to be inappropriate or unfair, or on both?

(vi)How would any such rights affect the free flow of data that may be necessary for the improvement of AI, science, technology or business applications of AI?

(vii)How would any new IP rights affect or interact with other policy frameworks in relation to data, such as privacy or security?

(viii)How would any new IP rights be effectively enforced?

CHAPTER 2

CONFLICT BETWEEN IPR AND FUTURE IN AI

2.1. Future of IP laws: how will AI pose a threat to IP lawsThis is the year 2021, and technology is all around us, from cellphones to robots. Our modern technology has made it possible to create robots that are more efficient and productive than human humans..¹⁵ No one doubts the accuracy of technology's work. Technology, on the other hand, is the work of the human race. The Terminator, which was released in 1984, envisioned a future when humans' jobs were taken over by machines. We used to think that the director of the film was making things up, but now we can see how technology has improved physical labour. There are a lot of questions about whether or not artificial intelligence (AI) represents a threat to intellectual property (IP).

The existence of artificial intelligence (AI) is not at all exceptional. We've all heard about artificial intelligence. Artificial intelligence (AI) is a term used to describe when machines do tasks similar to those performed by humans. A wide range of fields, including science, mathematics, sociology and philosophy, have been used into the development of AI. Diverse viewpoints exist regarding the progress of artificial intelligence. There are those who believe that AI will replace humans and become more powerful than mankind, while others believe that it will improve human life.

Intellectual property (IP) laws safeguard the intellectual property (IP) developed by our intellect or thinking. Ownership of intellectual property rights over AI-generated work, on the other hand, remains a mystery. Our intellectual property rules protect human-made works, not those created by machines. As a result, how will intellectual property laws handle these new inventions?.

2.2. The conflict between AI and IPR

It's astonishing that so many large corporations, including Microsoft and IBM, have applied for and been granted patents for artificial intelligence (AI) technologies. There is no denying that artificial intelligence (AI) will have a significant future market. Many businesses are pouring a lot of money into the advancement

¹⁵ "New Reports Offer Insight into the Future of Intellectual Property" (*International Trademark Association*November 19, 2020) https://www.inta.org/new-reports-offer-insight-into-the-future-of-intellectual-property/ accessed May 14, 2022

of artificial intelligence. The World Intellectual Property Organization categorises artificial intelligence (AI) into three groups (WIPO). They can be categorised as one of three types: perceptual, natural-language, or expert.

Artificial intelligence (AI) "perception systems" are concerned with simulating human senses. "Natural Language Systems" is a term that refers to AI systems' usage of words and their meanings and grammatical inaccuracies. Finally, the term "Expert Systems" refers to the AI's ability to solve complicated issues by analysing data.

IPR rules may be threatened in the future by the possibility that AI may be able to file and grant patent applications. Protection of human creativity is a primary goal of intellectual property legislation. Intellectual property (IP) rules govern the creations of the human mind. In 2016, the US Copyright Office turned down a request to protect a piece of art created by a machine. These people went on to say that the purpose of copyright law is to shield creators' works against infringement. The European Union has drafted a report on the potential hazards that artificial intelligence (AI) poses to mankind. In the report, the authors emphasise limiting AI's ability to foresee potential harm..¹⁶

There is no doubt that we're making progress in the field of artificial intelligence every day. There is a lot of dispute about whether or not intellectual property rules should be applied to AI. Many copyright authorities have turned down the request to protect the work made by Machines in their jurisdictions. Another debate is whether or not AI will be able to obtain a patent if it creates a new idea without human assistance. The question is, can AI claim ownership of the inventions it creates? Rights such as Ownership should be distributed in a fair manner. Is AI capable of enforcing its own rights? What if an AI infringes on someone else's rights? Are there any rules that govern how damages are calculated? These issues are becoming increasingly important in the field of artificial intelligence.

If we take a look at the various IP laws around the world today, we find that they are unable to address these issues. US Patent Law defines an inventor as a live person who has invented or discovered a new product or process. So, it's very evident that inventions made by machines aren't covered by US patent law. Many countries believe that they must revise their intellectual property rules to accommodate the work produced by AI computers..

2.3. AI and copyright

The author's right to copyright gives him the capacity to guard against unauthorised use of his work. Works in any of these genres are acceptable. Copyright is a legal concept that aims to safeguard human creativity and intellectual property. AI is now capable of producing creative content without any human intervention thanks to advances in technology. Many people nowadays are concerned about the legal protection of artificial intelligence-generated work. Looking at Indian Copyright Law, it appears that the AI's work will be tough to defend. As a result, AI's work can be divided into two broad areas. With human intervention, there will be the first work, and then there will be the work without human intervention.

¹⁶ Office USC, "Welcome to the U.S. Copyright Office" (U.S. Copyright Office | U.S. Copyright Office) https://www.copyright.gov/ accessed May 14, 2022

It's fair to claim that a human's intellect is present in the work produced by an AI that receives input from humans. As a result, intellectual property (IP) regulations can protect the same. However, when the job is done entirely by AI, there is no need for human input. Whether or not this work is copyrighted is up for contention. A person who built an AI that can generate or create unique works without human inputs may be eligible for copyright protection in these cases, according to experts. There are currently no laws in existence to support the foregoing assertion, even though it is logical..

2.4. AI and patent

The patent sector is certain to be shaken up by AI. Many law firms and jurists have varied views on whether or not the AI-created innovation should be given a patent. It's unclear who will hold ownership of AI if a patent is obtained for it. One group believes that a patent should be awarded for an AI-created creation. In the future, they hope, this will aid in the creation of even more cutting-edge equipment. Some believe it will impede technological progress by increasing research costs and creating monopolies for particular groups.¹⁷

One of the biggest issues is determining whether or not the AI-created invention is obvious or not. Determining the obviousness of a situation becomes increasingly difficult and uncertain as technology evolves. In addition, who will be held responsible if an AI infringes on a patent? There is virtually no room for question that AI is capable of violating patents. Is the AI itself liable, or will the AI's creator be held accountable? In order to establish AI's potential liability, is there any method??

2.5.AI and trademark

Whether it's the Google Home Speaker on Koffee with Karan or Siri on the iPhone, we all use AI technology. We no longer ask our pals for fashion guidance because we now rely on AI. AI has helped us complete our daily tasks, from smart refrigerators to wearables. Any time we place an order or conduct a search on an e-commerce website, the top brands appear in the results. The selective approach of AI, on the other hand, raises the danger that it would impede market competitiveness. As a result, the AI results are based on our search history. How may artificial intelligence infringe trademarks? Artificial Intelligence (AI) necessitates new trademark rules and laws.

2.6. Artificial Intelligence and Its Conflicts with Intellectual Property

The development of artificial intelligence is the advancement of technology that allows machines to think for themselves and make their own decisions. Such human-like abilities as decision-making and intellect are required. It's difficult to predict the future of artificial intelligence because of its constantly evolving nature and the rapid development of this field, but because of its productivity and efficiency, more companies and

¹⁷ "Ai Patents: Driving Emergence of India as an AI Innovation Hub" (*INDIAai*)

<https://indiaai.gov.in/research-reports/ai-patents-driving-emergence-of-india-as-an-ai-innovation-hub> accessed May 14, 2022

individuals are turning to it because it can produce very innovative solutions to most problems that are both efficient and effective.¹⁸

According to some estimates, the Internet has grown at an exponential rate since its inception two decades ago, but most countries lack sufficient legislation to govern it. A fundamental regulatory framework for artificial intelligence regulation has been established in most developed countries.

Strict analogy to human works may grant overly generous protection to works that can increasingly be made with minimal effort and in quantities previously envisaged, but the United Kingdom currently has explicit provisions for artificial intelligence or computer-generated works.

Who Owns IP

Even though US copyright law specifically states that any work developed by Artificial Intelligence will not be regarded uncopyrightable, this is the primary intellectual property concern that comes from Artificial intelligence. Artificial intelligence machines will be given credit for that. Since intellectual property has been around for a long time, it's easy to see how it would be difficult to figure out who would be the real owner of an invention based on the history of intellectual property. However, since artificial intelligence has been around for a long time now, the doctrine of ownership can actually apply to robots.

Is it possible to apply the concept of inventiveness and freshness to artificial intelligence, which is a programmed product that lacks any form of feelings?

According to Stephen Hawking, "who own what is controllable or controllable." This takes the concept of ownership into a new light, whether or not it is significant.

Legally, robots cannot be held responsible for any damages caused by their actions or inactions..¹⁹

PETA and Wikipedia claimed that money should have been the owner of the selfie taken by the monkey, but the court denied the claims, stating that the selfie is clicked by the monkey and that the element of distinctiveness in the selfie is due to the smile in the monkey's face and the angle which could only have been taken by the monkey.

Artificial intelligence (AI) has no right to own anything because it was created by humans to think for itself and make decisions on its own. However, AI is not human and does not operate like a person, hence it lacks a soul. The reality of artificial intelligence is closer and faster than ever before, and most countries are ready for the establishment of AI policies, while Saudi Arabia has even granted citizenship to Sopia. Despite the fact that the laws are still in draught form, there is still a lot of doubt about who owns what in the field of artificial intelligence.

As of late, the newest EU draught proposal has contemplated providing "personhood" to artificial intelligence (AI).

¹⁸ "USPTO Releases Report on Artificial Intelligence and Intellectual Property Policy" (United States Patent and Trademark Office - An Agency of the Department of CommerceOctober 7, 2020) <https://www.uspto.gov/about-us/news-updates/uspto-releases-report-artificial-intelligence-and-intellectual-property> accessed May 14, 2022

¹⁹ "IP Ownership: Everything You Need to Know" (*UpCounsel*) <https://www.upcounsel.com/ip-ownership> accessed May 14, 2022.

2.7. Ownership of Copyright

In the context of AI, copyright is a hotly contested topic. The term "work of art" can be used to refer to a piece of art that has been conceptualised and executed by an artist. Suppose an artificially intelligent technology is used to create and perform the art. Startups that use AI to develop designs and software that uses AI to design products are rapidly expanding, but there is no legal provision to establish the proper definition of an artist in the generation of artificial intelligence given that they used their skills and should be considered as artists in the case..

Whereas the USA copyright office has official stated that it "will not register works produced by a machine or mere mechanical process that operates randomly or automatically without any creative input or intervention from a human author."²⁰

Europe has prepared an Artificial Intelligence strategy to deal with the expanding trend and solve the question of ownership by adding the provision of "personhood" for AI systems, although it has yet to be implemented.

2.8. Patent Litigation Legal Issues Facing AI Innovations EU and the US Perspective¹

AI products have been increasing which increases their impact on patent issues as well.

According to 35 U.S.C. 101, the courts have ruled on whether or not the AI subject matter at issue is patent-eligible The following questions were asked by the US Courts in order to ensure the patentability of the invention: rules of nature or abstract concepts, for example Under this condition, a patent can be enforced only if it's not based on such an idea. It is possible to claim an ineligible concept as the subject matter of a patent claim, but that doesn't mean it's a valid claim if it doesn't include a "inventive concept"—an element or combination of elements that is sufficient to make a patent more than a patent on the ineligible concept alone.

When it comes to a patent, it is quite difficult to determine who owns the technology generated using artificial intelligence (AI). There has been a lot of progress in the field of artificial intelligence, but the future growth and development of AI is uncertain because of the concept of ownership. The legal validity of the patentability test for the merging product is difficult to examine due to the use of AI by multiple organisations.

Another area for legal intervention in patent disputes using AI technologies is the assessment of inventorship. Many courts have held that an inventor can employ "the services, ideas, and aid of others in the process of perfecting his invention without losing his claim to a patent." to develop his invention. At 106 F.3d 976, the court ruled that Hess v. Advanced Cardiovascular Sys (Fed. Cir. 1997). Section 103 of the United Provides Code states that "the way in which the invention was made shall not undermine patentability."."¹¹ Because "inventor" is defined in the statutes as the person who came up with the idea, and

²⁰ "17 U.S. Code § 201 - Ownership of Copyright" (*Legal Information Institute*) <https://www.law.cornell.edu/uscode/text/17/201> accessed May 14, 2022

"joint inventors" are defined as "two or more persons who came up with the idea," the term is used to refer to both individuals and groups.

This case made it evident that the United States is currently unprepared to deal with patentability issues stemming from the combination of AI technology and human beings, much alone inventions based on AI technology. If the regulations were correctly designed and delivered, AI progress can be appropriately characterised.

Most of the time, the concept of abstract has been misunderstood and mishandled due to inadequate laws and judicial expertise. It was ruled that the model was an abstract issue in HP vs Acceleration because it comprised computations and AI technology that would analyse data to see if there was a market need for it..

Privacy and Data Sharing

In the case of artificial intelligence, privacy and data sharing have become a hot-button topic. Most AI systems keep product data and analyse the data to produce the best results based on the analysis, which might lead to a copyright issue if suitable authorization isn't sought for the same..²¹

Autonomous Vehicles

As far as artificial intelligence (AI) technologies go, autonomous vehicles are one of the few that have been adequately governed in terms of a good policy.

Most countries have a tight policy on data sharing and privacy, but the government requires their data to compute the errors made by autonomous vehicles, their basic comprehension, and their efforts in order to regulate the vehicles. Privacy laws bar us from compel corporations to hand over their data reports.

Nearly 25 states in the United States have developed policies for automated vehicles and are well-prepared for the greatest possible outcomes. in the future. Though the United States is trying to keep up with the rest of the industrialised world when it comes to supporting and maintaining new technology. In terms of policy, the United States is considered to be among the most cautious countries in the world. The tightest restrictions are being implemented in New York, where automated vehicles are being monitored at every stage of development, from conception to inauguration. Marijuana use is still not universally accepted, despite its legalisation in most of the states in the United States.

Autonomous vehicle testing is permitted in New York until April 2018 despite the state's rule requiring drivers to keep at least one hand on the wheel.

Data-sharing is a crucial concern for autonomous vehicles. Companies like Uber are reluctant to share their data with the government, which may be used to develop rules for the same. Since most businesses will be discouraged from operating and their trade secrets compromised if the problem of disclosure is not

²¹ Associates O&, "Data Protection and Privacy in India - Privacy Protection - India" (Data Protection And Privacy In India -Privacy Protection - IndiaApril 30, 2019)

https://www.mondaq.com/india/privacy-protection/801302/data-protection-and-privacy-in-india accessed May 14, 2022

addressed, it is an important one. California is the only US state that mandates the submission of data for compilations and disengagements..

2.9. Challenges of Future Intellectual Property Issues for Artificial Intelligence

Past, Present, and Future of Artificial Intelligence

Intelligent machines that can respond and solve problems in the same way that humans do are being developed using a combination of scientific and engineering methods known as artificial intelligence (AI). When it comes to artificial intelligence, the focus has shifted from learning human functions to enhancing functional efficiency because of the rapid and sophisticated rise of AI. In 1996, IBM's AI chess machine Deep Blue defeated a human world champion. AlphaGo, built by Alphabet Inc., defeated the best Go player in the world..²²

It's becoming increasingly difficult to forecast how AI will affect intellectual property (IP) in the near future because of the speed at which it's developing and the unpredictable nature of its intelligence and capabilities..

Creation and Ownership Challenges

AI is capable of producing poetry and artwork, as well as 3D printing and manufacturing items, without any human participation, raising concerns about ownership. Some have begun to debate whether AI should be given a distinct position in IP because it is capable of creating works that would otherwise be recognised as intellectual property (IP) created by a person. Would the creators of an AI's software have a claim to the work produced by that AI if that were the case? It's also possible that fresh intellectual property (IP) might be developed by the AI's user constantly feeding it information.

When it comes to copyright law, a work must have been created by an individual with adequate ability, effort, and judgement. Determining whether AI has exploited these criteria sufficiently in producing such work is difficult because of this law. Additional requirements include creativity, inventiveness and applicability in order for a patent to be awarded. As artificial intelligence (AI) evolves, it provides new answers to old issues, which may qualify as patented innovations.²³

When it comes to recognising AI creations, the debate continues to highlight additional important questions. Who, for example, exclusive rights may be monetized if AI was granted IP recognition? AI developers receive ownership of their product as a reward for their dedication and hard work. Although the developer only participated in the input step of the process, why should they be reimbursed for the ultimate output stage? And last but not least, why would developers spend the time and resources necessary to boost AI development if AI-produced works were released into the public domain?

 ²² Koroye T, "Intellectual Property and Artificial Intelligence: The Conflicting Issues of Creative Ownership" (SSRN Electronic JournalSeptember 2, 2020)
 https://www.academia.edu/44000898/INTELLECTUAL_PROPERTY_AND_ARTIFICIAL_INTELLIGENCE_THE_CONFLICTING_ISSUES_OF_CREATIVE_OWNERSHIP> accessed May 14, 2022

²³ Office USC, "What Is Copyright?" (What is Copyright? | U.S. Copyright Office) https://www.copyright.gov/what-is-copyright/ accessed May 14, 2022

2.10. Possible Solutions

It is imperative that a viable solution is found, despite the difficulties and controversies. The outcomes AI generates are either the result of its own intelligence or the result of a computer algorithm. The lack of creativity in artificial intelligence may be attributed to its mechanical rather than imaginative characteristics. The distinction between deep-learning and general-purpose algorithms must be made before we can talk about artificial intelligence's ability to learn.

Any country's current law does not recognise AI as a creator or author of intellectual property. Because of this, Ownership will not be granted to AI until it achieves parity with humans in terms of legal standing. Most countries' intellectual property laws demand that AI have a legal personality, although this is not the case with AI. AI may one day transcend human intelligence and lead humanity to new discoveries, which the law must be prepared to safeguard. If an AI can prove that it is capable of creating on its own, it may be considered an independent author. Machines that can learn and train themselves, as opposed to simply running algorithms step by step, may be eligible for patent ownership.

Our examination of IP law reveals that the fundamental goal is to give inventors and artists exclusive rights so that they can reap the benefits of their unique works. AI may not be able to appreciate the accomplishment or make advantage of the benefits that would result from this decision if it were granted these same rights. Taking away intellectual property rights from new works that benefit the public is contrary to the law, the public interest, and the push for greater knowledge and creativity that contributes to the improvement of the human condition, which is why intellectual property legislation is vital.

Software developers' machines could be used to regulate the evolution of artificial intelligence by providing a wide range of prospective applications. A developer can claim ownership of a specific product if they explicitly state so in the user agreement. This agreement could be amended if the parties agree that the user has the right to claim ownership of items created by the user's own skills, work, and judgement.

2.11. Liability Challenges

AIs may be held accountable in some situations if they are capable of creating. Copyright infringement, trade secret infringement, or even accusations of data privacy may be raised against artificial intelligence (AI) that evaluates investment strategies or customises huge data for a tailored marketing advertisement. Additionally, if it exploits someone else's intellectual property (IP) without permission, a computer could be accused of violating copyright or trademark laws..²⁴ An automated system could be accused of patent infringement if it uses protected technology without realising it has previously been protected. Who bears the brunt of the blame in all of these situations??

Possible Solution

Concerns have been raised that AI may be able to carry out erroneous actions even if a person is in control of it. Then who would be responsible for the damages? There are a slew of events and variables to take into account. They may be held accountable in cases where users of artificial intelligence (AI) should have

²⁴ "Artificial Intelligence (AI) – What It Is and Why It Matters" (SAS)

https://www.sas.com/en_us/insights/analytics/what-is-artificial-intelligence.html accessed May 14, 2022

foreseen an outcome or were in charge of caring for and handling the AI. In the future, if AI is able to function without any direct programming, developing by self-learning, and going beyond predictability, then the AI itself might be held responsible. It would be difficult to place the blame completely on AI, and it would be impractical to hold AI liable for any losses.

Unless the legal standing of artificial intelligence is clarified, the inventor of the AI could be held liable. Law should be constructed in a way that allows people to override any decisions made by artificial intelligence. In order to safeguard both innocent creators and users, special AI sanctions (such as destruction or prohibition of certain users) should be imposed on the owner and culpable party, the creator. The law should not, however, promote or allow firms to transfer obligations toward their AI creations, even if it reduces or removes the creators' obligation to pay..

Legislation

Because of the ever-expanding creative output of mankind and the ever-changing nature of IP rules, it is common for them to be altered and updated. It may be required to change present IP laws to establish restrictions on IP works developed exclusively by AI in order to decide which inventions belong in the public domain and who is allowed to be recognised as the owner of IP originating from AI development. Regulating AI begins with acknowledging the same bounds and fundamentals of AI creations, as well as drafting legislation for each country's regulatory framework and remedies...²⁵

Moving Forward

In the absence of particular legislation guiding the recognition of AI under IP law at this level, current issues can be handled through a clear agreement between relevant parties (i.e. the AI developer and user), in order to exploit and commercialise IP developed by AI.

As the first robot to be granted Saudi citizenship, Sophia thanked the country for this magnificent distinction. It's certain that other AI will be rewarded for their services to society at some point in the future. In the not-too-distant future, AI will have a profound impact on our definition of what it means to be human. A balance must be struck between commercialization of new inventions that benefit society and intellectual property law's true objectives by addressing the unwavering line for the creation of works recognised by IP law, as well as the possible liability consequences caused by artificial intelligence.

CHAPTER 3

ROLE OF INTELLECTUAL PROPERTY IN ARTIFICIAL INTELLIGENCE 3,1. Introduction

Unlike other laws, intellectual property (IP) rights safeguard an individual's mind in terms of originality and innovation.Copyrights and patents, two types of intellectual property rights, can provide an individual exclusive ownership of works that meet the criteria listed above.

The rise of globalisation has led to an increase in the importance of technology and software in the pursuit of uniqueness, creativity, and innovation.

²⁵ (ReadWorks) < https://www.readworks.org/> accessed May 14, 2022

In the 21st century, we're talking about technology. Artificial intelligence (AI) is a term you hear all the time. With films like Wall-E and Terminator, you must have been fascinated by the way that robots were capable of acting, making decisions, building stuff, and thinking like people.?²⁶

This matter has now become a major issue in the world of intellectual property. It is becoming increasingly crucial for AI to generate new works in the literary, musical, and creative domains, as well as to invent new inventions without the intervention of humans, as the technology continues to evolve.

The field of artificial intelligence (AI) has made significant strides in recent years, allowing computers to perform a variety of activities autonomously and without the need for human intervention. When it comes to intellectual property, the next concern is whether or not artificial intelligence (AI) is capable of generating new works without human intervention. Do copyright and patent rules apply if an artificial intelligence (AI) creates an original work or a new product today? Do present intellectual property rules adequately protect AI-created works and inventions? Will these works be credited to the machine as the one who created them? These are some of the more difficult things to consider when working with AI-generated content or IP laws. Humans have always been protected by IP rules, but now that artificial intelligence (AI) has attempted to extend its reach into the IP sector, it is necessary to see if there is a scope for consideration or not. As a result, we are seeing how essential intellectual property (IP) may be in the field of artificial intelligence.

3.2. Copyright and AI generated works

When a piece of work has an element of the human mind and intelligence in it, it is protected by copyright. The manifestation of the author's creative and original work, rather than the author's ideas, is protected by copyright.

Section 2(d)(vi) of the Copyright Act of 1957 states that "author" refers to the person who is responsible for the creation of a work using a computer. When it comes to work generated by artificial intelligence, If there is human engagement in the creation of the work, the programmer retains ownership of the work. As a result, Grammarly's suggestions and alterations are nothing more than an example of AI being used to enhance the work, but the end outcome is totally dependent on the user's effort and involvement. As a result, it is the writer, not Grammarly, who will be recognised as the author of the literary piece...²⁷

What will happen if AI generates work on its own, like any other human or entity, without any human intervention in the creative process? Will the Copyright Statute also cover that piece of work? Before answering this question, there are a number of things that need to be taken into consideration.. The issues are:

3.3. Whether AI is capable of being an author?

Copyright experts believe the concept "authorship" to be the most significant one in the subject. According to Section 14, a programmer who uses AI-assisted work receives the exclusive copyright to do or permit

²⁶ Hyken S, "AI: The Technology Penicillin of the 21st Century" (*Forbes*February 19, 2019)

<https://www.forbes.com/sites/shephyken/2019/02/17/ai-the-technology-penicillin-of-the-21st-century/> accessed May 14, 2022

²⁷ "Section 2 in the Copyright Act, 1957" < https://indiankanoon.org/doc/797096/> accessed May 14, 2022

another person to do certain things with respect to the work created has complete control over the work's modification, translation, reproduction, and other uses.

In the absence of any human interaction, AI-generated work has no author assigned to it according to the law. However, if we take this into account, the following strategy might be used under the current administration:.:

Because AI relies on humans for instructions and algorithms, the work in question may be given authorship to the creator (a natural person).

If an AI can recognise, encode, and decrypt inputs on its own, a developer can be credited with its creation and the AI can be seen as a product of his own mind..

The worst-case scenario is that the state rejects the idea of authorship for AI-generated art..

As a result, the answer to this question is a resounding "no," because the law now only recognises a human being as the copyright holder of a copyrighted work.

3.4. Will the works created by AI be considered to be original?

In order to be eligible for copyright, a work must meet the "Originality" standard. Even if copyright laws have not specified these words expressly, Section-13 states that for literary, dramatic, and aesthetic works to be considered original, the work must be original. There are a number of judicial decisions and precedents that interpret this in diverse ways..

To check originality there are various doctrines that the court looks into:

The sweat of the Brow Doctrine

Modicum of Creativity

Skill and Judgement Test

To claim authorship, AI must pass these tests of originality, but even if it generates work without human input it would still be at a disadvantage because it compiles, alters, and lacks competence and judgement in this regard. Consequently, artificially generated works cannot be deemed original..

In the case of *Bleistein v. Donaldson Lithographing Co*²⁸, As far as the court was concerned, it was important to distinguish between human and mechanical efforts. Justice Holmes emphasised the importance of human nature in the creation of copyrightable works. It was pointed out by the Court that copyright law did not apply to something that was not the product of human imagination..

Still, there is a ray of hope for the works generated by AI to be considered as original as discussed in the case of *Alfred Bell & Co. v. Catalda Fine Arts*, Because it could not be derived from another work of art with a similar theme, the District Court in the United States reduced the bar for what constitutes an original work. An AI-generated work's copyright was upheld since the work was not duplicated but rather extracted through algorithms and programming.

²⁸ "Bleistein v. Donaldson Lithographing Co., 188 U.S. 239 (1903)" (Justia Law) <https://supreme.justia.com/cases/federal/us/188/239/> accessed May 14, 2022

www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138)

Taking into account both conventional and modern views, we can conclude that the laws are somewhere trying to keep up with the current requirements and are attempting to address these technical aspects relating to AI and IP protection.

3.5. Can AI be considered as a Legal Entity?

A legal entity is required to address the issue of artificial intelligence. Understanding that AI is always viewed as an aid to human productivity is critical. To the extent that it can be demonstrated that they are operated by humans, the laws treat artificial entities like partnerships, corporations, and the like as legal persons and allow them copyright over the works they produce. Because of this, artificial intelligence (AI) is nonetheless regarded as a legal entity. However, it also solves the question of who is accountable for infringements caused by AI. Given that AI is not a legal entity, determining who is responsible for any infringement caused by it becomes extremely challenging, as AI lacks legal status.

Since copyright rules and AI are at odds, it is essential to address the legal gaps and update the laws properly to keep the two in balance. Authorship and a legal person should be rethought in accordance with the changing needs of the period.

Patent and AI generated works

Patents in India can only be granted if your invention is entirely original and never before seen in the market place. There have been numerous patent filings for AI-related inventions in the last few years, and India has not been an exception. In most cases, the inventor of a patented invention is granted exclusive rights that prohibit others from using, making, or selling the innovation for a predetermined length of time.. To make your invention patentable, your invention should have 3 things:

The invention should be novel

You need a major change in the invention from the prior one in order to qualify for an invention patent.

As a result of the invention, mankind will benefit.

Unlike in the case of inventions made by weak AI (such as Alexa and Siri), which can understand your commands but not your meaning, inventions made by strong AI (AI programmes that can surpass human intelligence, i.e. superintelligence) do not have this ambiguity when it comes to who will be considered an inventor. However, The question is whether or not AI may be considered an inventor?²⁹

A "natural person" can only be identified as the inventor and only a "natural person" can be given a patent, hence the answer to these questions is now NO. Does Saudi Arabia provide citizenship to Sophia, an artificial intelligence (AI) robot, because she is a Natural Person who serves the goal of obtaining a patent? Because DABUS is not a human being, does this indicate that an innovation can be copyrighted on the basis of non-obviousness? Even so, Section 2(1)(s) of the Act defines "person" to include both government and non-natural entities, which means that the inventor must be a natural person, even though Section 2(1)(p) of the Act defines "patentee" as the person who has entered the patent office as grantee or owner of the patent. Due to Section-6's definition of "real and first inventor," Section 2(1)(y) does not require a natural person for

²⁹ Decker S, "AI Machines Can't Not Be Granted Patents on Inventions: Judge" (*Bloomberg.com*September 3, 2021) https://www.bloomberg.com/news/articles/2021-09-03/only-humans-not-ai-machines-can-get-a-u-s-patent-judge-rules-accessed May 14, 2022

an Indian innovation. These requirements suggest that a human person must be involved in the invention process in order for an invention to be considered patentable.. Strong AI's ideas are non-obvious and distinctive, but even if this is proven to be true, the rules are not yet equipped to accommodate these radical shifts in technology.

On top of all of this, the most pressing question involves determining who will be held responsibility for any illegal action taken against AI's actions, i.e., will software itself be held culpable, or will the program's owner be held responsible? In addition, does the AI have the ability to grant or transfer ownership of the 3rd parties?

To deal with these kinds of the situation at the present we consider the 3 principles laid down by legal scholar Gabriel Hallevy³⁰:

"*Perpetration-via-another liability model*"– In this case, mens-rea (the knowledge of the crime) would not be relevant to the AI, but rather the culprit would be either the software owner or the AI user, depending on who is responsible for the illegal activity..

"*Natural-Probable-Consequence liability model*"- Programmers and users of an AI entity that participate in day-to-day operations without intending to commit an illegal conduct are normally held accountable for any harm that results. In light of the fact that ignorance of the law does not serve as a defence, it assumes that the programmers or users of an AI should have known about the likelihood of committing the applicable offence, and so holds them liable.

"*Direct Liability model*"- this suggests that AI should be entirely held responsible for the illegal acts committed and not the programmer/user.

A major shift is awaiting us, and the rules aren't clear and confusing on some terms and conditions, but because the future is in AI, they must adjust to this new AI-dominated world as soon as possible.. Designs and AI generated work

These aesthetic features may include colour, shape, pattern, etc., and they are the primary focus of design rights. It is possible for Industrial Design to be both 3D and 2D at once. When it comes to designing 2D and 3D features for a certain product, AI technology has the ability to do so.³¹

However, identical concerns about "AI-generated designs" apply to both designs developed by AI technology and those created by AI technology without human involvement at all. Design protection for AI-generated designs? Is there a need for a unique legal framework to deal with the ownership and authorship of AI-generated works?

There is no definitive solution to this topic at present time because the laws are mute on the subject. Typically, design rights are divided into two categories: registered and unregistered designs. The possibilities of obtaining registered design protection for AI-generated desires may be reduced since issues such as identifying the author and owner are still murky because the case is evaluated primarily on the merits of the case.

³⁰ "Three Principles Global Community" (3PGCFebruary 26, 2022) <https://3pgc.org/> accessed May 14, 2022

³¹ "Create Logos, Videos, Banners, Voiceovers with Ai - Designs.ai" (Create logos, videos, banners, voiceovers with AI - Designs.ai) https://designs.ai accessed May 14, 2022

A lack of clarity in the legislation leaves the door open for a wide range of interpretations. Laws and regulations that are out of date and out of step with today's technological advancements must be updated.

3.6. The_Role_of_Intellectual_Property_in_the_Intelligence_Explosion

McCarthy, who coined the term Artificial Intelligence in 1955, predicted that it would take anywhere from five to 500 years for its discoveries to materialise, but that hasn't happened. He wasn't completely off the mark, either. With the current state of technology, computers are capable of producing a mind-boggling assortment of content, aiding in the crunching of enormous amounts of digital data, and even forecasting lawsuit outcomes. Because intellectual property is becoming increasingly competitive, organisations that rely on IP portfolios have less time than ever before to ensure that their intellectual property is protected and exploited abroad. For a tech business, its IP portfolio is worth up to 85 percent of its value, which is often the driving force behind the most high-profile merger and acquisitions.

Every corporation is expanding the breadth of its research operations, which has resulted in a dramatic increase in the number of AI patent portfolios. There has been a 308% growth in the number of AI patents submitted in the previous five years alone, with huge tech corporations dominating the area, as one might expect. Patent litigation, the so-called "sport of kings" or "business of sharks," follows as the number of patent applications grows.

Despite the paucity of academic research on the subject, the European Union and the United States have begun to give artificial intelligence (AI) a legal definition. Whether or not the limited legislation that has been implemented thus far is adequate to address all of the challenges highlighted by this disruptive technology remains to be seen. It does not appear that this is the case..³²

3.7. How Intellectual Property approaches AI

AI systems, according to the global copyright community, face all of the same issues as traditional computer programme IP. Despite the fact that creative thinking and creation remain intrinsically human functions, ever-more-sophisticated technologies are making their way into our lives. The legal challenges surrounding the protection of AI systems and the inventions they generate represent a high risk of unexpected effects.

3.8. PROTECTING ARTIFICIAL INTELLIGENCE SYSTEMS

Somewhat pervasive is the idea that patents cannot be used to protect computer software. As with AI, computer software differs from computer hardware in that each code informs the physical hardware what to do, and the computer follows the rules creating control signals as a result of these instructions. In the United States, patenting pure software code was prohibited for decades since it was either a "mathematical algorithm" or an abstract idea. Even yet, the US Supreme Court has now adopted a less rigid theoretical approach to patenting software discoveries in recent decades. According to Justice Rehnquist, the simple fact that an invention makes use of a mathematical formula or algorithm does not render it ineligible for

³² "The Story of Artificial Intelligence in Patents" (*The Story of Artificial Intelligence in Patents*) https://www.wipo.int/tech_trends/en/artificial_intelligence/story.html> accessed May 14, 2022

patent protection.³³. Using the reasoning of the Court, the Freeman-Walter-Abele test was devised to distinguish between claims based on pure algorithms and those based on otherwise statutory subject matter. Subject matter patentability as a significant hindrance to software patented in the 1990s was even disclaimed and made any software invention that achieved a useful result patentable if not characterised as abstract ideas or "useful" truths.

Courts needed a new, more functional approach to subject matter since the previous theory of subject matter couldn't be applied to a new and less tangible technology like computer software. Software that can be demonstrated to be useful can now be granted patents.

Commentators are expecting that the Supreme Court will revisit the right extent of patentable subject matter shortly, even if a clear distinction has not yet been formed. This has caused the court system to reconsider the legitimate function of patentable subject matter.

In spite of a favourable evaluation from the European Patent Office, there is still a chance that certain qualities could be considered to belong to mathematical methods, systems, rules, or procedures for performing mental tasks and doing business. It appears that Japan and other Asian countries are following the trend set by US patent law, despite the fact that software patentability is well established on both sides of the Atlantic and computer programmes are patentable. The context in which you're speaking is critical. Comparing European and American patent standards, which place a greater emphasis on the tangible (whose inventions no longer have to be confined to the physical realm in order to be patentable, i.e. business methods).

There are a variety of software solutions that do not solely rely on a set of linear programming instructions; rather, they have the ability to "think" for themselves, including machine and deep learning systems. As opposed to selling tangible commodities, the software industry primarily deals in the sale of its Intellectual Property rights. As a result, some companies have established a separate profit centre for this sort of organisation and it is often distinct from the principal goods and services that the same software providers offer. There is a growing recognition among business leaders in the software sector that software patents are a critical corporate asset whose predictability under patent law is critical to investment decisions and, thus, to the long-term viability of companies..

3.9. Protecting Artificial Intelligence creations: can non-humans qualify as inventors and authors?

AI advancements and large investments by digital corporations have raised the topic of whether and how autonomous machine creations should be accorded legal protection. 'In numerous sectors, self-learning and deep-learning systems are outperforming humans after decades of disappointment.³⁴, There has been a huge increase in the amount of data that can be fed into AI systems, making it no longer necessary for engineers

³³ "Artificial Intelligence in Cyber Security: Protecting Your Robots" (*TCS*)

<https://www.tcs.com/perspectives/articles/protecting-your-robots-how-to-design-security-into-your-machines> accessed May 14, 2022

³⁴ Tai MC-T, "The Impact of Artificial Intelligence on Human Society and Bioethics" (*Tzu chi medical journal*August 14, 2020) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7605294/> accessed May 14, 2022

to invent new concepts. The growth of computer algorithms and learning machines has led to a strong demand to grant AI systems the same legal status as individuals in intellectual property law.

Under European patent law, the use of artificial intelligence in the creation of an invention does not affect its patentability. There are no restrictions on how a patent can be granted despite the fact that under U.S. law the definition of "new" states that "[w]hoever invents... or discovers any new and useful process... or any new and useful improvement thereof, may receive a patent."

There must be an answer to this question, therefore. The European Patent Convention does not define "inventor" in the same way as the United States Patent and Trademark Office defines "inventor."

All non-human entities, including businesses, associations and computers are excluded from this classification since they lack the capacity to own moral or property rights, even if the invention's patentability is not in doubt. This is true in the EU as well as the United States.³⁵.

The inventor of a patentable product or process is a natural human who, with the aid of the software, came up with the idea for a product or process that he or she wishes to patent. However, an innovation wholly created by AI raises a slew of issues. Traditional approaches to AI inventions, which focus on the needs of humans, are woefully out of step with the rapid advancements in automated AI systems that are now being created by the industry. There are no examples in patent or copyright law indicating that non-human entities, such as machines and animals, are innovators or creators in this context. Humans are the only ones who may be held legally liable in court for inventions developed by them, hence non-human systems are excluded from patent law at this time. However, some academics have claimed that this could be a novel approach to promoting AI development. Today, they remain in an unclear position.

In addition to patents, works of artificial intelligence that qualify as works of art rather than inventions can be protected under the broader copyright protection. The protection offered by copyright and patent law are fundamentally different.

The main difference is that the owner of a copyright cannot prevent others from creating works that are substantially comparable to those created by his own method, independently. However, patent rights may be granted to those who discover inventions on their own, and thus they may be excluded. Secondly, under copyright's "fair use" theory, others can duplicate copyrighted inventions for "criticism, comment, news reporting, teaching, scholarship, and/or research" without any limitation, whereas patents do not give such comparable right. Third, patents are easier to enforce since they are registered. Patents have been viewed as providing AI creators with more and more readily enforced intellectual property rights than copyrights..

3.10. Bringing the attention back to our initial question: who owns the creations of AI systems?

Artificial intelligence generated works, such as art, music and literature, can be created by any combination of a programmer, a user, and an AI device, or by a combination of all three. This inquiry will only focus on AI-created works, since the authorship of works created by humans with the aid of AI is explicitly recognised..

³⁵ Resources MPEP, "MPEP" (United States Patent and Trademark Office) <https://www.uspto.gov/web/offices/pac/mpep/s2106.html> accessed May 14, 2022

Automation of the creative process raises the question of whether a machine that is completely automated – and hence cannot be creative – can be given ownership of a work if it is completely devoid of the creativity element.. For the time being, copyright offices have a policy of rejecting claims for works that were not created by human hands. In truth, IP law's primary goal is to protect the rights of creators by ensuring that their work cannot be exploited without their consent. To be awarded intellectual property protection, AI as a content-creation tool does not appear to meet any of these requirements. Even if computer software were to be accorded the same IP rights as artificial intelligence (AI), we would not be able to assert that the computer owned copyright on the final product if an AI software was translating a piece of work or correcting a misspelling.

In contrast, some in academia believe that allowing companies that have invested in AI machine development to no longer be able to benefit from the protection and financial rewards that go along with it would limit innovation because it would discourage companies from making further investments in AI machine development. Even while such an argument is undeniably powerful, we are once again trying to shoehorn a novel concept into an obsolete legal framework. A claim that private property rights and the public domain must be properly balanced would necessitate the usage of such archaic categories, which, nonetheless, still appear to be the only theoretical concepts significant thus far. It's up to policymakers to strike the right balance between encouraging people to put their time, energy, and money into innovative projects, and restricting their ability to use the results of those efforts. As a result of underestimating this, it is likely that Intellectual Property will be over or under protected..

3.11. AI as a tool for IP

Automation's harmful consequences have not been spared in the field of Intellectual Property. As a successful testbed for AI applications in document searching and analysis, automation is already diminishing the requirement for human interaction. A single input error might put millions of dollars' worth of assets at risk, making administrative duties in legal firms, patent offices, and even courts among the most time-consuming and dangerous in the business.³⁶. Companies and firms face a number of major challenges as a result of increasing automation, including the need for more workers and tighter budgets. However, technological advancements are also reducing risks and increasing competition in the market, forcing legal service providers to improve their efficiency.

Using facial and speech recognition to compile trial records and artificial intelligence to draught judgments, the world's first internet court held its first case in 2017 and used the technology. In addition, research reveal that litigation prediction has now reached a superior degree of accuracy, therefore AI is predicted to be able to assess cases independently in the near future. Using English-language datasets for 584 cases, UCL computer scientists constructed an algorithm that used the facts to make independent legal decisions. Seventy-nine percent of cases were found to be identical between the AI and the court's decisions. Law firms' ability to use predictive software in case preparation, trial preparation, and even case outcome

³⁶ "Index of AI Initiatives in IP Offices" https://www.wipo.int/about-ip/en/artificial_intelligence/search.jsp accessed May 14, 2022

prediction should have a significant impact on the way lawyers interact with their clients. AI, on the other hand, will be the ideal business strategy tool for firms because they rely on certainty to make crucial investment decisions while their IP portfolio is being disputed.

Even law schools and universities are beginning to incorporate computer programming into their courses as the demand for innovative legal services technology continues to grow, a significant indicator of the growing need for technological innovation in legal services..³⁷ Legal automation has only been around a short time, but we've already seen several examples of the astounding improvements that are poised to transform the legal industry in coming years. As an example, machine-learning software can currently perform tasks that would ordinarily require more than 300,000 hours of work by a human lawyer in a matter of seconds. However, the legal-tech industry is not only focused on intellectual property (IP), finance, or consulting services. After successfully appealing millions of dollars in parking fines, a 19-year-old Stanford University student has turned his Chatbot platform into a service that helps refugees petition for immigration in the US and Canada as well as asylum in the UK. The legal-tech industry has greater promise than ever before, and those that underestimate it run the risk of being left behind sooner rather than later..

CHAPTER 4

Copyright in Music: A Conceptual Analysis

The Copyright Act confers copyright on music and sound recordings by including them within the definition of work.³⁸ According to copyright law, the sector encompasses a vast majority of original expressions, regardless of their artistic or aesthetic qualities..³⁹ The lack of musical merit is of no consequence in law. "Music" differs from plain noise in that it is designed to have an impact on the listener's emotions and intellect..⁴⁰

In Indian Performing Right Society Ltd v Eastern Indian Motion Pictures Assn,⁴¹ Justice Krishna Iyer observed:

"Copyrighted music is not the soulful tune, the superb singing, the glorious voice or the wonderful rendering. It is the melody or harmony reduced to print, writing or graphic form. The Indian music lovers throng to listen and be enthralled or enchanted by the nada brahma, the sweet concord of sounds, the raga, the bhava, the laya and the sublime or exciting singing".

In Gramophone Company of India Ltd v Super Cassette Industries Ltd,⁴² the Delhi High Court observed:

³⁷ Tashea J, "Legal Technology Patents Have Increased 484% Globally in Last 5 Years" (*ABA Journal*)

<https://www.abajournal.com/news/article/legal_technology_patents_have_increased_484_globally_in_last_5_years> accessed May 14, 2022

³⁸ Section 2(p) of the Copyright Act defines musical work as a ,,work consisting of music and includes any graphical notation of such work but does not include any words or any action intended to be sung, spoken or performed with the music.
³⁹ Hein v. Harris 175 fed 875 (877) (SDNY1910).

⁴⁰ Garnett Kenin, James R. Jonaathan, et al. (eds.), "Copinger and Skone James on Copyright," 97 (Sweet & Maxwell, London, 1999).

⁴¹(1977) 2 SCC 820, p 834.

⁴² (1995) PTR 64.

"Musical work is not merely a combination of melody and harmony or either of them. It must necessarily also have been printed, reduced to writing or otherwise graphically produced or reproduced. As we know figurations, progressions and rhythmic patterns are sometimes used in creation of melodies. Every musical composition has a structure, or shape, that is the arrangement of individual elements so as-to constitute a whole and that musical notation means a visual record of musical sound (heard or imagined) or a set of visual instructions for performance of music. Its main elements are pitch (location of musical sound on the scale), duration, timbre, and volume. There are various systems of notation like verbal, alphabetical, numerical, graphic and tabiatures. The words 'printed, reduced to writing or otherwise graphically produced or reproduced' are thus not an empty formality."

An important point is that the definition of a musical work required that it be in printed, written, or graphic form prior to the change in 1994. Consequently, many Indian music styles, which were at best oral and could not be written down in any notation, were denied copyright protection..⁴³ It was only in 1994 that the Copyright Act was amended to provide protection for Indian classical music and even folklore.

According to Section 2(p), words sung or uttered with the music are omitted. Because of this, words set to music can not be protected under the genre of musical works, but they can be protected under the genre of literary works provided they meet the standards.

To protect the copyright of a song, the lyrics and the music must be kept separate. These two copyrights, on the other hand, are completely distinct and cannot be combined. There is no copyright for a music as a result..⁴⁴ For example, if a person wrote both the lyrics and music for a song, that individual would own the rights to the song..⁴⁵

III.1. INFRINGEMENT OF COPYRIGHT

A person cannot profit from another's labour, expertise, or wealth by appropriating it for his own gain. That is the essence of copyright law. Otherwise, an injustice would be allowed to continue unchecked by the law. Copyright and performing rights laws provide that the author of a work has exclusive rights with respect to specific prohibited acts at every stage of the process. Other people's actions, without the owner's consent, infringe on copyright. Thus, while the word infringement in its literal definition means a violation of a person's rights, it refers to the unauthorised use of a copyrighted work in the context of copyright..

"Section 51 of the Copyright Act, 1957 defines infringement in general terms which may be summed up as":

Making use of a copyright owner's exclusive rights without permission. In the case of literary, theatrical, or musical works, a copyright owner's exclusive rights., not being a computer programme under the Copyright Act are as under⁴⁶:-

⁴³ P.M. Dhar, "Copyright in Music: Evolution and Conflict of Rights" National Capital Law Journal 101 (1997).

⁴⁴ Chappal v. Redwood Music [1981] RPC 337 at 346 (Lord Salmon HL).

⁴⁵ Id. at 345.

⁴⁶ Section 14, Indian Copyright Act, 1957.

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- i. "To reproduce the work in any material form including the storing of it in any medium by electronic means";
- i. "To perform the work in public, or communicate it to the public";
- ii. "To make any cinematograph of the work";
- iii. "To make any translation of the work";
- iv. "To make any adaptation of the work";
- ii. "To do, in relation to a translation or an adaptation of the work, any of the acts specified in relation to the work in sub-clauses (i) to (vi)";
- a. the use of any place for the communication of the work in public for profit without any authorization, if such communication constitutes a violation of the work's copyright;
- b. Infringing copies of a work may be made available for sale or hire, sold, or offered for sale or hire, distributed, shown in public, or imported into India. The importation of one copy of a work for personal and home use is allowed..

This deceptively simple definition of infringement belies a complex legal reality

"determination of infringement is 'treacherously tricky'. The definition of infringing copy in Section 2(m) of the Act however provides some standards and criteria for the determination that an infringement has occurred": It defines

"infringing copy" to mean:-

- v) A literary, dramatic, musical or aesthetic work that is reproduced in a form other than a cinematographic film.
- vi) A copy of a film made on any medium by any means;
- vii) Any recording of the same recording, made by any method; in regard to a sound recording;
- viii) If such a broadcast reproduction right or performer's right exists under the rules of the Copyright Act, the sound recording or cinematographic film of such a programme or performance qualifies as an audio recording under this section..

III.1.1.Essentials of Infringement

A copyrighted work is infringed upon if it is copied, modified, displayed, reproduced, communicated, or performed without authorisation. There are two factors that must be proven in order to claim infringement.:

1. Ownership:- "the party claiming infringement must prove ownership of a valid copyright";

2.Copying:- "the party claiming infringement must demonstrate that the infringer had access to the work and violated one of the exclusive rights. An important point to remember is that intention to infringe is not essential to establish liability for infringement of a copyright. One may be held liable for infringement which is unintentional or which was done unconsciously".⁴⁷

⁴⁷ American Jurisprudence quoted in R. G. Anand v. Delux Films, AIR 1978, SC. 1613 at 1620.

i.1. Ownership of Copyright

"The basic rule as to ownership as laid down in Section 2 (d) of the Copyright Act of 1957 is that the author is the first owner of any copyright in it. Under the Act the author remains":

- 1. "in relation to a literary or dramatic work, the author of the work.
- 2. in relation to a musical work, the composer.
- 3. in relation to an artistic work, other than a photograph, the artist.
- 4. in relation to a photograph, the person who takes the photograph.
- 1. in relation to a cinematograph film or sound recording, the producer.
- 1. In relation to any literary, dramatic, musical or artistic work which is computer generated, the person who causes the work to be created".

According to Section 17 of the Copyright Act, if a work is created during the course of an author's employment under a service or apprenticeship contract, the employer is the initial owner of the copyright.;

i.1. Copying

It is necessary to provide proof of copying in order to prove infringement. It is clear that exact reproductions are infringing; nevertheless, the issue arises in circumstances when there is a degree of similarity between the copyrighted work and the infringement..

In Corelli v. Gray,48 Sargant, J., said:

"The notes in music or the letters of the alphabet are the common materials of musicians or authors, as the case may be, and a musical or literary passage is but a combination of these common materials. But nevertheless no one doubts that identity or extreme similarity between two musical or literary passages even of moderate length may be practically conclusive evidence in favour of common origin and against independent creation."

Unless the defendant can provide a sufficient explanation to the contrary, the court will find infringement if there are striking similarities between the two works, as well as the fact that the defendant's work was later in time and he had access to plaintiff's work. Keep in mind that a work can be reproduced by imitating a copy of it..⁴⁹

Similarity

If you take a large part of a work that has copyright, you have violated it, according to Lawrence Laddie, Presscot, and Victoria 'Substantial', on the other hand, has no meaning. Back in the day, when copyright cases were tried by juries, it was a question of fact and degree. According to them, the question of resemblance determines whether or not a claim of infringement can be brought. However, he must show that the copied work is significantly similar to the infringing work. When a new arrangement of an old composition is more than a basic copy with alterations, it may be protected by copyright As a result, the

^{48 (1913) 29} TLR 570 (578).

⁴⁹ W. R. Cornish, Intellectual Property: Patents, Copyrights, Trademarks and Allied Rights 169 (Universal Law Publishing Co. Ltd. New Delhi, 2001).

definition of originality in popular music is relatively narrow. There must be an element of inventive brilliance in the new arrangement, as opposed to mechanical expertise or change.;⁵⁰

In Austin v. Columbia Gramophone Co, Ltd.,⁵¹ the Court observed that:

"Infringement of copyright in music is not a question of note for note comparison, but of whether the substance of the original copyright work is taken or not."

In *D' Almaine v. Boosey*,⁵² it is observed that:

"The subject of music is to be regarded upon very different principles from literary works. It is the air or melody which is the invention of the author and which may, in such case be the subject of piracy. To constitute infringement, the air of the alleged infringing work must be continuously similar and not merely in short parts thereof. The question is one of quality rather than quantity, and has to be determined by the character of the work and the relative value of the material taken".⁵³

The United States Court of Appeals for Sixth Circuit ("Sixth Circuit"), in *Bridgeport Music v. UMG recordings*, utilising even a little fraction of an original work is enough to demonstrate significant similarity for a copyright infringement suit An individual plaintiff in Bridgeport said a defendant had infringed on his copyrighted song. There was no error in determining that the defendant had lifted tiny, but unique components of the plaintiff's music, which constituted infringement by the jury, the Court said..⁵⁴ On appeal, the Sixth Circuit upheld the rule that says a song or other work is infringing if an ordinary observer can tell that it is a copyrighted work..

In *Sulamangalam R. Jayalakshmi v. Meta Musicals*,⁵⁵ *Chennai*, the composer who composed the music and tune in relation to the devotional song has the right to claim copyright..

In *Ram Sampath v. Rajesh Roshan*,⁵⁶ It was decided by the Bombay High Court that the fair dealing of musical works had a wide reach. Fair dealing is determined by taking into account the following considerations. A musical work's soul must be found, according to the court, as well as the parallels and variances between two compositions. A copycat who copies only "the attractive" and leaves out the chaff will only attract attention by copying "the appealing" and leaving out the chaff..⁵⁷

I.2. TRANSFORMATIVE APPROPRIATION

"By definition, transformative appropriation implies creators engagement with and reaction to other creators work.⁵⁸ It can occur in various ways- cover versions that are also called version recordings, medleys, remixes and mash-ups".

I.1.1. Version Recording

⁵⁰ Hirseh v. Paramount Picture Inc., (1937) 32 USPQ 233.

⁵¹ Macg Cop Cas, (1917-1923) 398.

⁵² (1885) 1 Y&C Ex 287.

⁵³ Blume v. Spear, 30 Fed 629.

⁵⁴ Id. at 276

⁵⁵ AIR 2000 454 Mad. at 454

⁵⁶ 2009 (40) PTC 78 (Bom),

⁵⁷ See Ram Sampath v. Rajash Rohan, 2009 (40) PTC 90(Bom).

⁵⁸ Joanna Demers, "Steal this Music: How Intellectual Property Law affects Musical Creativity', 27 (University of Georgia Press, Georgia, 2006).

A version recording is a sound recording made of an already published song by using another voice or voices and with different musicians and arrangers. Version recording is thus neither copying nor reproduction of the original recording; the record so made does not fall within the definition of infringing copy.⁵⁹

In Super Cassette Industries Ltd. v. Bathla Cassette Industries Pvt. Ltd.,⁶⁰ "the Delhi High Court observed that "version recordings would really be such sound recordings where while being inspired by the original melody, a distinct interpretation, different both in presentation, rhythm, and orchestral arrangement emerges".

Since copying from a single original does not cost anything save for the cost of the computer CD writer and blank CDs or cassettes, version recording is a result of copy culture, making this market incredibly competitive..⁶¹ As a result of the high return on minor investments, the entire industry of version recording has become a highly lucrative and competitive one..⁶²

As an example, Section 52(1)(j) allowed any music older than 2 years could be used for "version recording as long as the copyright holders, composers, and lyricists were provided notice of intent, as well as 5 percent royalty and an advance..

The Delhi High Court in *Gramophone Company of India Ltd. v. Super Cassette Industries Ltd.*, ⁶³analysed Section 52(1) (j) of the Copyright Act and held:

- i. Copyright is a legally protected right (Section 16). A primary work such as a literary, theatrical or musical work or a derivative work such as a sound recording or cinematographic film, only the rights created by the Copyright Act and subject to its limits, vest in the owner of the copyright in the work.
- ii. There were several clauses in Sections 2, 13 that the Court interpreted favourably for authors. The Court ruled that the primary and original works as well as a separate copyright in sound recordings or cinematographic films made from them coexist, and that the copyright in the primary and original works continues to exist for exploitation by the.
- iii. The Court went over the provisions of the Act pertaining to the granting of licences and assigning of rights. For compulsory licencing, the Copyright Board must be contacted, but not for statutory licences. In Section 52, the statutory licence was illustrated with a specific example.
- iv. Section 52(l)(j) only applies to the exploitation of literary, theatrical, or musical works whose authors have already consented to their works being converted into sound recordings, thereby placing their work in the public domain. So long as the recording was produced in a calendar year, he has the exclusive right to create sound recordings and all the rights that come with it [under Section 14(c)]. But after that, anyone can make a version recording or a sound recording, as long

⁵⁹ Gramophone Co. v. Super Cassettes Industries (1996) PTC 252 (Del) at 254.

^{60 (2003) 27} PTC 280 (Del), p. 303

⁶¹ Rajlashmi v. Nesargi, "Copyright and Copy culture in Indian Music" 40(6), Economic and Political Weekly, 516-517 (2005).

 ⁶² Mar Rrecording v. Gramophone Co. decided on Feb. 28, 2004, at VIII Addl. City Civil Judge (CCH 15) (Un reported).
 ⁶³ 2010 (44) PTC 541 (Del).

as Section 52 and Rule 21 of the Copyright Rules are followed.. "The Court reiterated the decision in *Microfibres Inc v. Girdhar & Co".*⁶⁴ in as much as it held, "the legislative intent was to grant a higher protection to pure, original, artistic works such as paintings, sculpture etc., and lesser protection to design activity which is commercial in nature".

- v. The Court declared the judgment of Delhi High Court in *Super Cassette Industries Ltd. v. Bhatla Cassette Industries*⁶⁵ as per incuriam.
- vi. Version recordings created in accordance with Section 52(1)J are as valid as any other sound recording. Copyright holders in sound recordings have all of the customary rights under Section 14. (e). According to the Act, it is permissible to exploit a version recording by selling or renting copies, as well as distributing a version recording via mobile phones or the Internet
- vii. There can be no misrepresentation of the fact that the recordings are from the original sound track and not variant recordings.

Section 52(1)(j) of the 2012 amendment was removed, which provided for a statutory licence for cover versions. There is now a five-year window after which a cover version can be developed, up from two. Alterations to the original song are prohibited, with the term "alteration in the literary or musical work" used to describe them..

I.1.2. Remixes

An altered music is referred to as a remix since it sounds different from the original. For the majority of the population of Indian subcontinent, remixes are highly influenced by previous pieces of music (usually more than one) Unimportant is whether a remixer is free to distribute his/her work, and if it falls under derivative work or not. Regarding derivative works, there are two extremes that are readily apparent. An amendment to the Copyright Bill of Rights proposed by the Irish government would offer equal rights to all copyright holders. When it comes to royalties, the law is unclear about what is meant by "equal rights." According to a letter from the Attorney General's office, it will upset established legal relationships, exposing the floodgates to litigation.

I.1.2. Mash ups

Songs from existing albums are used by mashup creators. They take the vocals from certain songs and the instruments from others, and then combine them into a single song. Using computer software, the artists blend vocals and instrumentation from other songs with their own sounds. This combination leads to the creation of new music. This is not a new idea, though. There is a long tradition of creating new songs out of fragments of older ones, which extends beyond modern pop and rap to genres such as jazz and folk..⁶⁶

I.1.1. Medleys

⁶⁴ 2009(40)PTC512(DB)(Del).

^{65 2003 (22)} PTC (Del).

⁶⁶ DJ Maquiavelo''s Mash Ups, DJ MAQUIAVELO, http://www.djmaquiavelo.com/ Mashups.html (last visited Feb. 22, 2013); see Brett Gaylor, RiP!: A Remix Manifesto, NAT''L FILM BD. OF CAN. (2008), available at: http://films.nfb.ca/rip-a-remix-manifesto/. (Visited on Jan.1, 2013).

"Medleys, are a musical selection wherein the music is one or two minutes long and is basically an arrangement of snippets of the original songs according to the arranger's choice".

I.3. MORAL RIGHTS

"The existence of moral rights is consistent with the traditional *raison d'etre* of copyright: to recognize and encourage the results of intellectual creativity on a level with other forms of property".⁹¹ Copyright ownership does not extend to certain rights, which continue to exist even when the copyright is assigned in whole or in part.

Under the Copyright Act of 1957, moral rights have been christened as Author's Special Rights⁵⁰. They are:

- i) Right of paternity i.e. to claim authorship of the work;
- This includes the right to restrain or sue for damages in the event that his honour or reputation is harmed as a result of any distortion, mutilation, modification or other act in regard to the stated work..

Three versions of the song "ek look ek look" from "Aryan-unbreakable" were allegedly recorded with the singer Neha Bhasin's voice. In a lawsuit, she said that her performer's rights were violated under the Copyright Act. the high court in delhi said she has a legal right to moral protection based on equity and common law. It was declared by the Delhi High Court that the plaintiff has a right in equity to be given credit for the song that she wrote and performed herself. Only on the basis of common law and equity were the moral rights of the actor upheld. A new hearing before the Supreme Court is anticipated to take place in the coming month...

*In Morrison Leahy Music and Another v. Lightbond Limited and others*⁵⁴, court found that defendants made a sound recording that contained words and music from five compositions, the second plaintiff (the singer and composer George Michael) being its author and the first plaintiff being its owner of copyright. Interspersed with this were snippets of filler music created by others. Allegations were made that they were able to do so because they had been granted permission to do so by Mechanical Copyright Protection Society (MCPS), an organisation that the first plaintiff was a member of. According to the plaintiffs, there was no clearance for the defendants' activities, and they also alleged that their moral rights were violated under Section 80(2) of the Copyright, Designs and Patents Act (CDPA).

When it came to the defendants, Morritt J found that what they had done definitely constituted treatment within the CDPA's Section 80(2)(a) as well as distortion or deformation within Section 80(2). (b). As this was an interlocutory injunction until trial, the judge left the question of whether there was disparaging treatment to be decided as a fact at trial.

*Confetti Records v. Warner Music*⁶⁷, An existing recording was supplemented with a rap line and additional elements of another track from a different song. So, based on the facts, and applying what appeared to be an

^{67 (2003)} EWCH 1274 (Ch.)

objective standard, he did not identify any insulting treatment. It is evident that only when the author's work is defamed can he sue to stop the distortion or sue for damages...

SOUND RECORDING

While they may embody literary, theatrical or musical performances they are unique from them. The right to record sound is distinct from the right to record subject matter since they are protected by separate copyrights. If you use a sound recording without the owner's permission, you have violated the owner's copyright...⁶⁸

- 1. another recording in which it is contained
- 2. offer for sale or hire any infringing duplicate of the sound recording;
- 3. to make the recording public;
- 4. infringing copyright in the sound recording, unless he was not aware and had no reasonable grounds for expecting that such distribution to the public would violate the copyright;
- 5. the act of selling or hiring infringing copies; the act of selling or hiring infringing copies;
- 6. to distribute either for the purpose of trade or to such an extent as to affect prejudicially the owner of the copyright;\s
- 7. to exhibit in public by way of trade;⁶⁹
- 8. to import into India any infringing copy.

Producing a new recording with, for example, different musicians playing the same song is not a violation of the copyright in sound recordings..⁷⁰

The causing of a recording embodied in a sound recording to be heard in public by utilising it will not constitute infringement:

- A. in an enclosed room or hall designated for the common use of residents in any residential facility (not a hotel or comparable commercial enterprise) as part of the amenities offered exclusively or primarily for residents therein,
- B. as part of the activities of a club or similar organisation which is not\s established or conducted for profit.⁷¹

It is not illegal to listen to a sound recording in private. Infringement occurs only when the recording is made public.

5. COPYRIGHT SOCIETIES

Technical advancements have offered new economic potential for intellectual works, but they have also created severe obstacles to effective preservation of these new prospects. In many situations, it has become difficult, if not impossible, to exercise individual control over the creator's copyright. For this reason, the

⁶⁸ Section 51 read with Section 14(1)(e).

⁶⁹ CBS Records Australia Ltd. v. Telmark Teleproducts (Aust) Pty Ltd (1988): 79 ALR 604.

⁷⁰ CBS Records Australia Ltd. v. Telmark Teleproducts (Aust) Pty Ltd (1988): 79 ALR 604.

⁷¹ Section 52(1)(k),Indian Copyright Act.

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owners of copyrights have turned to copyright societies to administer their rights..⁷² As far as musical copyright in India is concerned, two such organisations are the Indian Performing Right Society and Phonographic Performances Ltd. (PPL)..

5.1. The Indian Performing Right Society

IPRSL Limited is a company limited by guarantee incorporated under the Companies Act, 1956. Under Section 33(3) of the Copyright Act, 1957, it is a non-profit organisation that has been granted permission by the government to do copyright business in relation to musical works and any words or actions intended to be sung, spoken or performed in conjunction with music. Its members include nearly all composers and songwriters. Their combined influence on Indian music is approximately 97%.

- How to identify the owner of a song's Copyright? Anyone from anywhere could be a rightholder in the song.
- ➤ Afterwards, they would have to ask each of these people for permission and negotiate the royalty amount with each of them separately. Many of the people you contact may be unwilling to talk to you, or even refuse a licence. As a result, someone may ask for a reasonable price while another may ask for a steep one..

Composers, songwriters, and publishers of music do not have the resources to protect their copyright against diverse users of their music, whether in India or outside. By acting as a bridge between the owner and the user, the society serves both parties well. For the benefit of its members, it collects royalties and after subtracting 15% for administrative costs, it distributes the remainder to them and their affiliated companies in other countries.

This makes gaining authorization to utilise music for users exceedingly simple, practical, workable, and affordable..

- Any of the millions of right holders do not require the user to argue, negotiate, or seek specific permissions. The society provides a blanket authorization to participate in the activity.
- The user only needs to pay an annual charge according to the society's tariffs to be able to play any song in the globe. There is no need to visit or engage in any other sort of negotiation with the right holders because the approval is automatic and quick.
- Whatever the status of the songwriter or music composer, a flat and uniform rate of royalties will be applied to all of the work produced. Because certain artists may demand prohibitive charges for the use of their works if they are individually negotiated with, this is particularly significant.
- A single-window clearance system is designed to give users with quick, automatic approval without the need to travel or negotiate, and that too for all types of work..

⁷² available at: http://www.ifro.org/sites/default/files/collective_dministation_1997.pdf; (Visited on Jan.17, 2013) See also S.M. Stewart, International Copyright and Neighbouring Right, (Butter worths, London, 1989).

Furthermore, IPRS indemnifies the user against any infringement action by third parties.

1.2. The Phonographic Performances Ltd. (PPL)

In 1996, it was registered as a copyright society for sound recordings with the Registrar of Copyright (RC). In order to allow the use of sound recordings and negotiate their terms of remuneration with broadcasters, television, Internet or other categories of users like hotels, discotheques, restaurants and so on, this body was created in the United States of America. A total of 65 recording companies, including HMV (Sa Re Ga Ma India), Tip, Universal/Venus/Sony/Times/Sony/Times Music, are members.

Without a licence from PPL, it is illegal to perform Indian or International Music based on sound recordings made by members of PPL. PPL grants users of sound recordings a variety of licences, including::⁷³

- 1. "Television License:- Applicable to shows which involve usage of sound recordings.
- 2. Telecom Related Licenses:- For Ring Tones, Music Messaging, IVRS and other telecom value added services involving the usage of music".
- 1. "Radio License:- All private and government owned radio stations".
- 3. "Internet License:- This license is granted to websites for streaming of music, but no downloads are allowed".
- 1. "Events License:- This license is granted to organisers of events when performers perform on stage on recorded sound recordings e.g. Filmfare and Femina Awards".
- 4. "Public Performance License:- This is associated with any public performance. It covers a whole range of activity from playing of music in cinema halls to hotels, restaurants etc".

In *IPRS v. Muthoot Finance Private Ltd.*,⁷⁴ According to IPRS, the respondents and their agents are prohibited from using any of the musical and literary works of its members for broadcast on their private FM radio stations unless a temporary injunction is obtained.

Their public performing rights in respect of their music had been assigned to IPRS by deeds of assignment signed by IPRS members When asked about licencing, the respondent said he did not have to because he already had a licence from another registered organisation, Phonographic Performance Ltd. (PPL), registered under Section 33(3) of the Copyright Act of 1957 for issuing licences for sound recordings.

A sound recording is a separate type of work from a literary or musical work, and the copyright in a sound recording does not affect the independent copyright in any work for which a sound recording is made, according to the court's decision.⁷⁵ If the respondent does not secure an IPRS licence, they have no right to broadcast the songs of IPRS members..

⁷³ available at: http://www.pplindia.org/pplweb/aboutus.aspx, (Visited on Feb. 6, 2013).

⁷⁴ 2010 (42) PTC 752 (Mad).

⁷⁵ See Section 13(1) and 13(4) of the Copyright Act, 1957.

In *Music Broadcast Pvt. Ltd. v. Phonographic Performances Ltd.,*⁷⁶ Copyright Board had to determine a suitable rate for radio broadcasters to pay for exploiting sound recordings managed by Phonographic Performance Ltd. (PPL).

When the Copyright Board (hereafter referred to as the CB) sought to resolve the issue, it delved into Section 31 of the Copyright Act, which deals with mandatory licences for works that are not made available. To begin, the CB outlined the constitutional context in which Copyright Act, 1957 provisions are implemented. "It reiterated the settled law since *Romesh Thappar's case*⁷⁷ that communication through any media may be electronic, print or whatsoever else, has its Constitutional protection under Article 19(1)(a)⁷⁸ of the Constitution".

A brief history of radio in India was provided by CB after then. In the pre-independence era, radio was a state-owned enterprise until 1995, when the process of privatisation began in gradual steps. First-phase private sector participation in FM radio transmission was initiated by the Indian government in 1999, and it continues to this day. As part of the Ninth Five-Year Plan, the government announced a policy aimed at increasing the diversity and quality of radio transmission in China. Medium wave (MW) radio broadcasting was replaced by FM radio. The FM spectrum was made accessible to private broadcasters as part of Phase I of the policy for expanding FM radio broadcasting services through private agencies. As a result of Phase I's licencing regime, the broadcasters were unable to earn a profit. In particular, the high annual licencing price, which was "fixed," meaning it was not based on the revenue made by the broadcaster, was a significant negative.

FM radio business was given a boost by the government's Phase II programme in 2005. Because of TRAI/Mitra Committee on Radio Broadcast Policy of 2004 recommendations, Phase II policy altered licence price structure from fixed licence charge to revenue sharing model following extensive discussions. The CB determined that the Government has promoted the growth and development of FM radio broadcasting in the private sector as a vehicle of societal development, which had previously exclusively been pursued in the state sector, throughout.

A reasonable rate was then discussed by the CB. It was determined that no similarities or analogies could be made between TV broadcasters and radio broadcasters when answering the question. This arrangement was favoured, but some fair terms and conditions had to be met by the record labels and PPL.

The consequences are:

i) "In the Synergy suit, Synergy Media is not required to take a license from IPRS";

⁷⁶ 2010 (44) PTC 107 (CB).

⁷⁷ Romesh Thappar v. State of Madras AIR 1950 SC 124.

⁷⁸ Article 19, (1)(a) of the Constitution of India provides that all citizens shall have the right to freedom of speech and expression.

ii)PPRS licence is required if the banquet hall want to perform sound recordings in public (paid audience). IPRS licence required if the musical works are to be communicated or performed in public independently through an artist..

"It is worth to take note of another judgment pronounced by Bombay High Court⁷⁹ on similar lines, wherein S J Vazifdar J upheld the following propositions".⁸⁰

- iv. A literary, dramatic, musical, or artistic work, a cinematograph film, and a sound recording are the sole types of work recognised by the Act. This means that each class is separate from the others. Each class of work grants its owner a set of rights that are distinct from those of other works. Those rights can be exercised by each class's owner without interference from other classes' holders.
- v. No class of work is inferior to another class's work, regardless of the type of work. Consequently, the owner of a sound recording, which is a derivative work, has no less rights than the owner of a literary or musical original.
- vi. When a literary or musical work is incorporated into a sound recording or a cinematographic film, independent copyrightable works, such as a sound recording are created, and the owner of the sound recording or cinematographic film has rights under Section 14 to exploit the work.
- vii. It is the sole right of the owner of a sound recording to communicate the sound recording to the public. However, despite the fact that exercising this privilege results in the public being exposed to the underlying work, such as a musical or literary work, the public's exposure to the underlying work is not considered to be an infringement..

According to Section 14(1) (e) (iii), only the sound recording owner has the exclusive right to communicate the sound recording in any form and such communication cannot constitute infringement of any underlying work in the sound recording.

- viii. No permission is granted to sound recording owners to make their works available to the public as part of a recording.
- ix. Other than as part of the sound recording, the owner of a copyright in the underlying works maintains the bundle of copyrights therein.
- x. There is a difference between the right to perform a musical or literary work in public and the right to share the sound recording in which the work is included.
- xi. Only public performances of musical or literary works of its members or non-copyrighted transmissions (e.g., sound recording or cinematographic film) will be eligible for licence payments from the defendant. So, the defendant cannot claim licence costs for public broadcast or public communication of musical or literary works as part of a sound record..

In Section I4 (1), only the owner of a sound recording can use it (e). Those rights, however, are limited to a single sound recording. The owner of the sound recording has the right to broadcast or play the recording in

⁷⁹ Music Broadcast Pvt. Ltd. v. Indian Performing Rights Society Ltd., 20 i 1(47) PTC 5S7 (Bom).

⁸⁰ The court was in agreement with the submissions made by the plaintiff in this regard. Sec, Id. at

public areas. Sound recording owners' rights cannot be infringed upon by those who own the underlying musical or literary creation.

Plaintiff FM Radio Broadcasting Station was found not compelled to pay royalty/license fees to IPRS which oversees the rights of lyricists and composers in this case. The court agreed with this ruling. The plaintiff is legally bound to pay royalty only to PPL and not to IPRS.

Chapter 5

Impact of Digital Technology on Copyright Law

As a result of technological improvements, a new music culture has emerged - one that is only limited by copyright laws. Due to digital technology's ability to facilitate communication, a 300-year-old legal concept created to govern the circulation of printed goods may become a historical artefact. Thanks to MP3, a digital file format that enables audio content to be shared over the Internet, this has been possible. According to comscore/Nielsen data, 26% of internet users regularly access unlawful services..⁸¹

I.1.FILE SHARING THROUGH P2P NETWORKS

A new danger to the music industry has emerged: P2P (peer-to-peer) file sharing. Most Internet users access unlicensed services on a monthly basis, with P2P networks accounting for the majority of this usage. In Europe, North America, Asia and Latin America, this is a striking statistic that illustrates the issues copyright law faces in these regions..

I.1.2. The origins of P2P Network

It was a P@2 network that connected four U.S. colleges in 1969 that gave birth to the Internet. Napster had access to more than a billion music files at its peak. Napster's defence was based on the Supreme Court's ruling in Sony Corp. of America v. Universal City Studios, which ruled in favour of Sony Corp. When it came to this case, the court ruled that Sony could not be considered secondarily at fault for the copyright infringement committed by users who utilised Sony's recording devices to illegally duplicate copyright protected programmes. According to the Ninth Circuit, Napster was more aware of the infringements than Sony..

Napster, unlike Sony, had actual, not only constructive knowledge of specific infringing materials because Napster provided the centralised index. No matter if the product was capable of considerable non-infringing applications, it did not matter..

I.1.1. Decentralised P2P Networks

I.1.2. Peer-to-peer applications were born out of Napster's legal weaknesses. To achieve a balance between usability and scaling, they aimed to avoid the central control that killed Napster. BitTorrent (BT) is currently the top P2P participant in most Westernized countries. Bram Cohen created BT in 2001. Instead of sharing a single item, the BitTorrent protocol divides it into smaller

⁸¹ IFPI, —IFPI Digital Music Report 2012: Expanding Choice, Going Globall available at http://www.ifpi.org (Visited on Jan. 20, 2013)

pieces (bits) that can be submitted and downloaded separately Many people can now transfer huge files, such as HD movies and videos, with ease.

Like any systems, it can be used to exchange both non-infringing and infringing files. Note that this is analogous to the role played by Google, which similarly directs visitors to files maintained by other people, while not hosting any such information themselves (or only for short periods, or only in small fragments).

The Pirate Bay Decision

The Pirate Bay (TPB) was sued for 'assisting copyright infringement' and 'planning for breach of the Act' by Swedish authorities. Courts deemed TPB responsible for helping to make protected content available to everyone in 2009. Individual defendants may be held liable under Swedish law if they are proved to have aided and abetted these actions when acting collectively. For copyright infringement, a Swedish court found four people responsible for the operation of the file-sharing site TPB to be accountable. There were four people discovered to be responsible for the technical and business parts of the site: Fredrik Neij, Gottfrid Svartholm Warg, Peter Sunde, and Carl Lundstrom. This was a reference to a Swedish copyright law that had been extended from six months to two years in the early 1980s.

Technology, legal, and economic tactics have been employed in concert by the music industry in order to combat the threat of internet piracy. It is a three-pronged approach: technology, legal, and economic. The technology prong consists of Digital Rights Management, while the legal prong first focused on suing individual infringers. We will go into more detail about each of these approaches in the following paragraph.

I.1. TECHNOLOGICAL APPROACH: DIGITAL RIGHTS MANAGEMENT

Digital Rights Management (DRM) is a name for technologies that identify and protect digital intellectual property. It comprises Technical Protection Measures (TPMs) and Rights Management Information (RMI) Digital rights management (DRM) tools allow copyright owners to regulate access to their works, establish the types of permitted uses and terms for such uses, as well as how they are ultimately distributed in the digital world. Digital Rights Management (DRM) is the term for a system for identifying digital works and managing the distribution of resources to clients. Legal protection for DRM is provided by the WCT (WIPO Copyright Treaty) and WPPT (WIPO Internet Treaties). Digital technology's destructive power over copyright law, says Andrew Taylor, could be limited by technological improvements such as DRM. Taylor Further technological advancements could emasculate DRM if digital technology's harm is limited by DRM.

Articles 18 and 19 of WPPT replicate the aforementioned provisions for Performances and Phonographs.

1. United States

As part of the Digital Millennium Copyright Act (DMCA) of 1998, the U.S. Congress implemented extensive anti-circumvention provisions. The DMCA makes illegal three of the four circumvention activities

that the statute envisages. Almost too obvious is the problem. Unless you reverse engineer a computer programme, you can not utilise it to go around the software's own security features.

You could be in breach of the law if you reverse-engineered a programme and then utilised it to replicate it. A challenge to the Patent Office's ban on encrypted music and movies has been upheld by the US Supreme Court, which declared that encrypting music without licence was unconstitutional. The court acknowledged that the law affords the tech-savvy a right that it denies to the rest of us...

1. E.U.

According to the European Union's Directive 2001/29/EC 53, member states are required to offer legal protection against the circumvention of any technical measures that are effective. There are also laws prohibiting any type of technological apparatus, product, or service whose primary purpose is to evade a technological protection mechanism. Through the use of DRM technology, users are allowed a variety of usage rights that enforce the conditions of licences granted when a song/track is purchased It is all about how many computers and digital music players the tunes can be played on. Current standards for digital rights management (DRM) are incompatible, and there is no agreed-upon foundation for creating one..

2. India

With the passage of the Copyright Amendment Act (2012), two additional sections have been added. To prevent the circumvention of technological safeguards, and to secure rights management information, sections 65A and 65B were created. Section 65 A is only applicable if: Any infringement of the Copyright Act must be deliberate. This is to prepare for the myriad of events that can arise in a digital environment that is constantly undergoing transformation. An earlier summary decision prohibiting garage door opener systems maker from using the DMCA to hamper competitors in the downstream market for hand-held portable transmitters was upheld by U.S. Court of Appeals for the Federal Circuit. The doctrine of fair use remains one of the most troublesome and unsettled areas of the law.

The proviso to Section 65A(2)

According to the Indian Supreme Court, it was illegal to evade technological protections for fair use of encrypted copyrighted works under the country's Copyright Act. Court concluded that the proviso infringed the right to freedom of speech because it was poorly constructed. People who are not digitally savvy should not be barred from working because of the law, according to the document. However, the necessity of such rules in a developing country such as India has been questioned. When it comes to DRM, Ravi Agrawal argues that the Indian legislature was well aware of how it worked in the West. A few mistakes made in the U.S. are said to be avoided by borrowing from the U.S..⁸²

I.3. JUDICIAL APPROACH

⁸² See Arul George Scaria, —Does India Need Digital Rights Management Provisions or Better Digital Business Management Strategies 17 Journal of Intellectual Property Rights 463-477 (2012).

www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138)

While initially focused on taking legal action against networks that promote file sharing, efforts by the recording industry to restrict the destructive effects of online music downloading were turned (on June 26, 2003) onto individual subscribers of these networks. Copyright violations were virtually unpunishable in the past for individual file-sharing users. Individual lawsuits against infringers were filed by the music industry using a "John/Jane Doe" model. As a starting point, it would be useful to review the history of the lawsuits between John and Jane Doe.

1. John/Jane Doe Lawsuits

A long-standing legal phenomenon is lawyers suits involving fictional parties. Before becoming a real person, litigants may file lawsuits in the name of John Doe, a completely fictional persona. The plaintiff cannot bring a lawsuit without a pseudonymous John Doe, unless he knows the identify of his defendant. As long as they acknowledge that they do not yet know the true identify of the defendant, plaintiffs can begin the discovery process..

2. Suing Individual Infringers

This is why the Recording Industry Association of America (RIAA) chose to focus on a relatively small group of persons and maximise the attention surrounding its legal action in order to dissuade the general participation in file-sharing networks P2P users who identify themselves and vow to cease unlawfully sharing music will be granted amnesty under the RIAA's amnesty programme, the organisation stated. More than 1,500 subpoenas were issued by the RIAA to Internet Service Providers between August and September 2003. On December 19, 2003, a lower court reversed a lower court's decision in an appeals ruling. As of January 21, 2004, the RIAAs announced 532 new lawsuits, kicking off a new phase in the legal campaign. It is possible that the Digital Millennium Copyright Act will be re-examined as a result of the Supreme Court's consideration of the case..⁸³

1. Ashok Kumar - The John Doe Equivalent in India

In India, the Ashok Kumar order (the local counterpart of John Doe) has emerged as a crucial legal instrument for curbing online piracy, as it prevents violators, whose names are unknown, from uploading copyrighted materials without authorization.

Using John Doe orders, the Indian film industry has forced ISPs to block access to copyrighted materials..⁸⁴ "The Madras High Court, issued a John Doe order on a suit filed by the city-based Copyright Labs for preventing piracy of Tamil Film 3 and a Telugu movie *Dammu*".⁸⁵

"Reliance Entertainment also sought a similar order from the Delhi High Court to protect its movie Singham against piracy. Even earlier, another Ashok Kumar suit was sought to prevent Bollywood music piracy".⁸⁶

John Doe is a court order issued by the Madras high court to prevent unidentified individuals from breaking the copyrights of the Tamil film "Matttraan." K Chandru, the judge who granted Kalpathi S Agoram an

⁸³ — Music Industry gives up Mass Piracy Lawsuits" Sunday Times of India, Dec.21, 2008.

⁸⁴ IIPA, — 2012 Special 301 Report on Copyright Protection and Enforcement: Indial available at www.iipa.com (Visited on Jan. 20, 2013).

⁸⁵ Vasudha Venugopal: —Internet Users Enraged over Blocking of File-Sharing Sites The Hindu, May 19, 2012.

⁸⁶ Devangshu Datta, —The Battle of Ashok Kumarsl(New Delhi May 19, 2012) available at: www.business-standard.com (Visited on Jan. 20, 2013).

interim injunction, instructed him or his representative to disclose information about specific infringement to Internet service providers (ISPs), who would subsequently ban the connection from online..⁸⁷

I.4. GRADUATED RESPONSE

It is the latest in a series of reactions to the file-sharing scourge. As part of the graded response method, rights holders notify ISPs and mobile data network service providers of IP addresses that are being used to upload protected content to the Internet without permission. Rather than tracking individual user behaviour, P2P networks and illegal file distribution routes are being monitored. As a result, ISPs are able to match the IP address with subscriber information and contact their clients, informing them that their account is being used to break the law and urging them to seek legal counsel immediately. No personal information is exchanged. If the account holder continues to violate the terms of the agreement after receiving several warnings, he or she will be penalised. There are a variety of penalties that can be imposed depending on the country..

1.1. France -three strikes and you are out

As a result, France was the first country in Europe to pass a graduated response act. There is a new agency called Hadopi that is responsible for notifying Internet subscribers whose accounts have been exploited for infringement. The penalties for violating copyright law for the third time in a year is \notin 1,500 if a subscriber ignores two reminders within six months..⁸⁸

1.2. U.K Digital Economy Act 2010

It was introduced in Britain in 2009 and passed into law in 2010. It is possible to create a copyright infringement report (CIR) under the UK Digital Economy Act 2010. In the event of persistent misbehaviour, access to the Internet may be restricted or even terminated..

1.1. The Graduated Response in India

To deal with copyright infringement, the Graduated Response is not applicable in the Indian setting. Right to Know is a necessary adjunct of right to freedom of speech and expression guaranteed in India. Agrawal asks, why penalise the subscriber who pays for the Internet connection when anyone can use an IP address to commit copyright infringement? It is argued that any attempt to block Internet access just because an IP address has been used for copyright infringement would be in violation of Article 21 of the Constitution. For the Indian economy, the IT-BPO sector has become one of the most important growth drivers. To convert India's image from a slow-moving bureaucratic economy into a land of innovative entrepreneurs and a global player in offering world-class technological solutions and business services..

I.5. THE RIGHT TO PRIVACY

Our private lives have become a battleground for copyright enforcement in online. Surveillance becomes inevitable as copyright holders increasingly focus on the individual user. Privacy experts have compared

⁸⁷—Court issues order restraining online piracy of Suriya filml Times of India, Chennai Oct. 13, 2012.

⁸⁸ Dejean, S., Pe'nard, T., and Suire, R. Une premie're e'valuation des effets de la loi Hadopi sur les pratiques des Internautes franc, ais. University of Rennes., Report. (2010) Quoted in Roger H. Blake & Eric S. Kyper, —An investigation of the intention to share media files over peer-to peer networks Behaviour & Information Technology 2(2011).

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today's surveillance methods to the Panopticon of the past. If the user feels anxious, it can hinder their productivity, creativity, and invention. It was ruled by the European Court of Justice that protection of the basic right to property, which includes intellectual property rights, must be weighed against other fundamental rights. Authorities and courts must find a balance between copyright protection and the protection of individuals affected by such measures when implementing copyright protection measures..

In Scarlet Extended SA v. Socie'te' Belge Des Auteurs, Compositeurs, ET Editeurs (SABAM), ⁸⁹ "The European Court of Justice (ECJ) has ruled that a contested filtering system would infringe the fundamental rights of the ISP's customers, namely their right to protection of their personal data and their freedom to receive or impart information. The ECJ noted that while protection of IP rights is enshrined in the E.U. Charter of Fundamental Rights [Article 17(2), there is nothing whatsoever in the wording of that provision or in the Court's case-law to suggest that the right is inviolable and must for that reason be protected".

Closer to home, in the country of India A basic right in India, the right to privacy is guaranteed by Article 21 of the Constitution. Many times, the Supreme Court has emphasised the significance of privacy in India's scheme of things..

In *R. Rajgopal alias R.R. Gopal and another v. State of Tamil Nadu*,⁹⁰ According to the Court's Jeevan Reddy J. in his remarks, in recent years, the right of privacy has become a constitutional right. According to him, Article 21's guarantee of life and liberty includes the right to privacy. It is a —right to be let alone. Citizens have the right to protect their own privacy, as well as that of their family, marriage, children, and education among other things.

In *People''s Union for Civil Liberties* ... v. Union of India & Anr,⁹¹ In a case involving telephone tapping, the Supreme Court declared that the right to privacy might be claimed as "right to privacy." There is no indication that a "right" to privacy exists under the Constitution. Personal liberty cannot be limited without following a legal procedure, it said. Telephone taping laws are under review by the administration, which wants to tighten them. "In India, the right to privacy is a fundamental right," Naveen Gupta argues.

Hopes are high for India's Courts to adopt an aggressive approach to copyright enforcement claims in the wake of the ECJ's ruling. An individual's right to privacy must be kept in balance with an author's right to property, says Gupta...

I.2. MOBILES

Mobile phone users in India are predicted to reach 2.23 billion by the end of 2014. Around 90% of India's total sales come from mobile music. Music services can, however, greatly benefit from mobile devices..⁹²

1. Music as a value added service in Mobiles

The number of Internet connections in India is expected to increase to over 400 million by 2016. 44% of music-related gadgets in emerging markets are other than the PC (40 percent) From 70 to 200 million

⁸⁹ 51 ILM 384 (2012)

⁹⁰ (1994) 6 SCC 632.

⁹¹ AIR (1997) SC 568.

⁹² Ibid.

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smartphones are expected to be used by 2015 in India. The price of the cheapest smartphone has reduced from US\$267 in 2009 to US\$93 as of 2011.⁹³

1. TRAI regulation on SMS confirmation of VAS services

En 2011, the Telecom Regulatory Authority of India (TRAI) issued a directive that required value-added service activation and renewal to be confirmed by consumers via SMS (or email). It is only possible for the service provider to charge if it receives confirmation, otherwise the service must be stopped. As SMS penetration in India's mobile markets is less than 45 percent, and as low as 20 percent in rural areas, the decision has been criticised as a hindrance to the expansion of value-added services. CRBTs are expected to be the hardest hit, as they are typically impulse purchases (such as pressing * to copy) and auto-renewals, which are sometimes unintentional for mobile users. Since the law is likely to reduce their VAS profits, the telecom operators and VAS providers are contesting the regulation. Regulating CRBTs is expected to cause a major setback for musicians, given they account for 60-70 percent of digital music revenue. Music has been adversely affected by the TRAI regulations, with a negative growth of 5% in 2014..⁹⁴

2. The Mobile Entertainment Ecosystem

Market participants in this segment include content and application owners as well as technological enablers and telecom service providers. Creators of digital content and application providers simply create and own the content, while aggregators collect content from multiple creators and application providers, convert it to digital or any other acceptable format, and distribute it to users. In order for content or applications to be sent via telecom networks, technology enablers must offer the technical layer.

It is possible to distribute content/application to the end user using two different business models..

(i) On deck model

Application Services Providers (ASPs) and Telecom Service Providers (TSPs) provide on-deck application services in India (ASPs) In this approach, TSP is responsible for the branding, marketing, and selling of the content/applications it creates and distributes. TSP is also in charge of billing and collecting income from subscribers. Most of the revenue goes to the TSPs, not the music companies, which is in stark contrast to global conventions, where content providers get a significant part of the revenue⁹⁵

(i) Off deck model

Streaming music services over data networks can be used by music firms as a direct-to-consumer content distribution approach for mobile devices. Except for the consumer protection issues addressed by TRAI through directions on provision of Application Services provided by licenced telecom service providers, there is no regulatory framework for Application Services in India (TSPs) These companies are in charge of pricing and income sharing, while content creators and copyright owners are left out..

I.7.CYBERLOCKERS

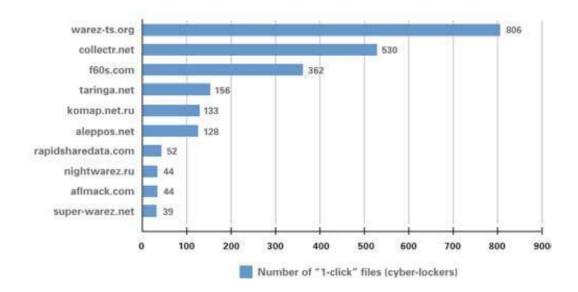
⁹³ Source: IAMAI Report on Mobile VAS in India: 2010 available at www.trai.gov.in (Visited on March 1, 2013).

⁹⁴ Ajita Shashidhar, —Flashback 2014: Music industry's revenues under pressure, pins hopes on data, available at: http:// business today. In today. in/india -music (Visited on Jan 25, 2015).

⁹⁵ Ernst & Young, Spotlight on India's Entertainment Economy: Seizing New Growth Opportunities, 2011.

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In cyberlockers, users post files to a central site where they may be shared with others. This is a great way to share digital stuff with others. As an example, online backups of PC files can be performed using these services. Other sites like Rapidshare and Megaupload offer potentially pirated and sometimes obscene material. As a result, even inexperienced users can reproduce illegal content..



Source: Online Piracy and Counterfeiting Overview, Mark Monitor For US Chamber of Commerce March 2010

Most cyberlocker sites, like Mininova, have the ability to respond to effective enforcement measures, which is good news. This figure shows that there are a large number of users who are constantly posting fresh stuff. This means that ongoing vigilance is essential..

CHAPTER 6

Liability of Internet Service Providers- An Analysis

They host, locate and search for content, as well as facilitating its delivery. There has been a dispute in recent years over their accountability in respect to internet copyright infringement due to their increased impact in recent years Web 2.0 and user-generated content websites, as well as free hosting of enormous files, are all direct results of the internet's explosive expansion. Common law rules that once governed ISP liability have been superseded by the regulatory structure that regulates the Internet. In the following text, the common law doctrine of direct and secondary liability will be explained in relation to ISP liability. In light of recent revisions to the Indian Copyright Act of 1957, a critical examination of the ISP liability framework will be conducted...

I.1. DIRECT LIABILITY

For example, in the instance of Playboy Enterprises v. FRENA, a Bulletin Board System (BBS) operator was held personally responsible for infringing despite the fact that he had neither knowledge nor intent to do so As a result of this ruling, the Court has condemned it for going too far. Some argue that the ruling completely ignores how service providers work. A number of other online sites presenting photographs of gorgeous ladies, according to the plaintiff, used the defendant's site as a gateway and quality assurance site.

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As well as paying them a share of its revenue, the plaintiff stated that the defendant did so. According to the Perfect 10 Court, direct copyright infringement can still be proven when the defendant was given fair notice of the charges...

I.1. SECONDARY LIABILITY

"Secondary liability for copyright infringement remains anchored in the common law doctrines of contributory and vicarious infringement".

Vicarious Liability

When it comes to vicarious liability, it is about punishing individuals who gain from another's illicit behaviour. By shifting accountability from people to businesses, this can be used to capture scenarios when one party benefits from the infringing conduct taken by another. They have consistently established vicarious liability when two conditions exist - a direct financial interest in exploiting copyrighted content as well as the right and ability to supervise the primary infringer. In Shapiro, Bernstein & Co. v. H.L. Green Co. ⁹⁶, "a department store's record departments were operated by an independent concessionaire".

Ten to twelve percent of concessionaire's total revenue came from the record sales, and Green received a share of that revenue. As a result, Green was deemed accountable. By putting the burden of damages on those who are most likely to be able to pay for them, this liability achieves both distributional and efficiency purposes. This flea market in New Jersey was held responsible for a dance hall's illegal music. Court ruled that the money paid by those customers to the defendant appears to count as revenue "directly" tied to the infringing activity, according to the court. Even said, the court clarified there was no guarantee money would be made by pirated material purchased by flea's clients..

I.1.2. Contributory Liability

Contributory liability is an alternate form of secondary liability. If you are involved in an infringing enterprise, you are indirectly infringing. The contributory copyright liability test has two parts: knowledge and action. According to the case of Gershwin Publ'g Corp. v. Columbia Artists Mgmt., a contributing infringer is someone who creates or induces an infringement with knowledge of it.⁹⁷

I.1.1. Inducement Theory

It is no longer possible to rely on old principles of contributory and vicarious responsibility in cases of copyright infringement on the Internet due to the emergence of digital technologies. A new category of secondary infringement, the incentive theory, was created by the court in MGM v. Grokster. If the recipient of the device actually commits an infringement, then the defendant is responsible under the law of inducement.

JUDICIAL APPROACH

^{96 316} F.2d 304 (2nd Cir 1963).

⁹⁷ Benjamin H. Glatstein,(2004) 1610.

Napster case

Napster argued that its software was capable of considerable non-infringing uses to avoid contributory responsibility. Napster's defence was based on the Supreme Court's ruling in Sony Corp. of America v. Universal City Studios, which ruled in favour of Sony Corp. To block Sony from selling its video recorder, the movie industry intervened. As a result, Napster was judged vicariously and contributorily liable. Immediately following Napster, In Re Aimster was brought before the US Court of Appeals for the 7th Circuit. If Aimster could show non-infringing uses of the software, but it was also used for substantial infringement purposes, they would have to'show that [it] would have been disproportionately costly for [it] to eliminate or at least reduce substantially the infringing uses,' according to the court's ruling in Napster.'.

The Grokster case

Peer-sharing apps such as Grokster and Stream Cast were inspired by Napster and attempted to achieve a compromise between usability and scalability. It was Kazaa's intention to be a more neutral file-sharing service than Napster. Neither the producers of these applications nor their users had immediate access to each other's activities. The Supreme Court⁹⁸ on the grounds that they incited others to infringe on copyrights, Grokster and Stream Cast were found to be guilty. A defendant who distributes a device with the intent to promote its use to infringe copyright was found to have engaged in enticement. There was no agreed-upon right or existing ability for the defendants to supervise the use of the software, and they had no independent duty to police infringement.

There are three things that can be considered as evidence of inducement according to the Supreme Court: solicitation of infringement, design, and commercial interest..

 Solicitation of infringement: It found that Grokster and Streamcast had a clear intent to incite copyright infringement by advertising to users of a recognised source of copyright infringement claims. They were able to prove this by demonstrating that both companies purposefully targeted Napster users and enabled them to infringe, filling in for Napster's demise.

(2) Design: Each of the companies (Grokster and Streamcast) supplied a device that is appropriate for widespread infringing usage, and both companies ensured that the technology implemented is capable of infringing use As a result, the court ruled that neither Grokster nor Streamcast had taken any steps towards developing or filtering mechanisms that would remove infringement taking place within the firms' networks..

(4) Commercial interest: According to the court, both organisations' economic models were substantially dependent on infringement, with nearly 90 percent of all usage being infringing.

98 545 U.S 913 (2005).

The Court's ruling in Grokster left a great deal to be desired. The word 'induce' is ambiguous and can be interpreted in many ways. explicit language or other affirmative efforts made to foster infringement? is unclear.

Discussions about ISP liability in the United States, the European Union, and Australia should take place at this time..

a.4. LIABILITY REGIME OF THE ISPS IN THE UNITED STATES

1. DMCA

As a result of implementing the World Intellectual Property Organization Copyright Treaty, the Digital Millennium Copyright Act (DMCA) was enacted in 1998 to modernise domestic copyright law for the digital age. For service providers who transmit potentially illegal material through their networks, it provided a number of "safe harbours." "The Internet Service Providers Association is concerned about the proposed limitations on service providers' accountability for copyright infringement," the group adds...

Eligibility for Limitations Generally

If you want the liability limitations in Title II, you have to qualify as a service provider. First, service providers must adopt and properly implement a policy of terminating the accounts of frequent infringers, and second, they must accommodate conventional technical measures without interfering with them.

Limitation for Transitory Communications

According to Section 512(a), service providers are not liable for transporting digital information from one place on a network to another at someone else's request if they function as a data conduit. Information that is transmitted, routed or connected is subject to this restriction, as are intermediate and transitory copies that are made automatically as part of a network's functioning As a result, the following conditions must be met by the service provider's activities::

- 1. Someone other than the supplier must initiate the transmission.
- 2. Transmission, routing, provision of connections, or copying must be carried out by a technical procedure that is automated and does not need the service provider to pick the material to be copied.
- 3. Providers of services are prohibited from determining who will receive materials.
- 4. Anyone other than the intended recipients should not be able to view any intermediate copies, and they should not be kept for any longer than is reasonable.
- 5. The content of the item must not be altered in any way during transmission..

Limitation for System Caching

A provision in Section 512(b) limits the liability of service providers who maintain copies of material made available online by someone other than the provider for a limited period of time. In order to meet further requests for the data, the service provider retains a copy of the material, rather than retrieving the material

from its original location on the network. When it comes to infringing behaviour, the service provider needs to be unaware of it. A financial gain directly due to the infringer's behaviour must not accrue to the service provider if it has the right and ability to regulate the infringement Service providers must remove or limit access to the material as soon as possible.

An infringement, the copyright owner, or the service provider can sue someone who knowingly misrepresents that material is infringing. In either a notice or a counter-notice, there are penalties for knowing substantial misrepresentations..⁹⁹

Limitation for Information Location Tools

According to Section 512(d), referring or linking visitors to a site that contains infringing material by employing such information location tools is not liable for any damages. This means that the provider must not know that the material infringes on intellectual property rights. This means removing or blocking access to the material as soon as the provider has the right and ability to do so..¹⁰⁰

4.4.2. Judicial Approach in the U.S.

In *UMG Recordings, Inc. v. Shelter Capital Partners LLC,¹⁰¹* For direct, vicarious, and contributory copyright infringement, UMG filed a lawsuit against Veoh Networks (Veoh). Because Veoh did not employ filtering technology until after it had horded infringing material for its own gain, UMG said Veoh's efforts to prevent copyright infringement were "too little, too late." argued that Veoh held a type of copyrightable work for which it had no licence from any major music firm, but the court ruled that Veah was covered by the DMCA safe harbours and set a significant legal precedent. VEOH's general knowledge that its services could be used to post infringing material, according to UMG, must have caused Veoh to believe that the content was unauthorised.

As the Supreme Court ruled, Veoh did not have the required power and ability to restrict infringing behaviour, and was therefore entitled to safe harbour protection. As it got aware of specific instances of infringement, Veoh allegedly swiftly removed the infringing material. Further allegations were made against Investor Defendants [those who invested in Veoh]. UMG did not allege adequately that [the Investor Defendants] supplied meaningful assistance in assisting Veoh or its users achieve infringement, according to the Ninth Circuit Court of Appeals..

Arista Records L.L.C. v. Lime Group L.L.C.,¹⁰² Liability for inducement of copyright infringement was found when the defendant was found guilty of peer to peer filesharing of copyrighted musical works, according to the judge. Because Lime Wire profited from the broad use of its software, it continued to do so even while the case was still pending. Lime Wire and its CEO Mark Gorton secured an out-of-court \$105 million deal with the major record companies..¹⁰³

In Viacom Int"l, Inc., Football Ass" n Premier League Ltd. v. YouTube, Inc¹⁰⁴, Viacom International, Inc. (Viacom), The Football Association Premier League Ltd. (Premier League), and various film studios,

⁹⁹ Section 512(f).

¹⁰⁰ See Alice Kao, Note: RIAA v. Verizon: Applying the Subpoena Provision of the DMCA, 19 Berkeley Tech. L.J. 405 (2004). ¹⁰¹ 667 F.3d 1022 (9th Cir. 2011).

¹⁰² 2010 U.S. Dist. LEXIS 115675 (S.D.N.Y. Oct. 26, 2010)

¹⁰³ RIAA News Release May12, 2011. available at: www.riaa.com (Visited on Jan.17, 2013).

¹⁰⁴ F.3d (2nd Cir. April 5, 2012), 10-3270, 10-3342.

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television networks, music publishers, sports leagues (collectively, the plaintiffs) appealed from an August 10, 2010 judgement of the United States District Court for the Southern District of New York (Louis L. St. Clair). Approximately 79,000 audiovisual "clips" occurred on the YouTube website between 2005 and 2008. As well as declaratory and injunctive relief, they sought statutory damages according to 17 U.S.C. 504(c) or, alternatively, real damages resulting from the alleged infringement.

United States Court of Appeals for the Second Circuit upheld some of the District Court's decisions and vacated others, according to the court..

The Court's verdict can be briefly analysed under the following headings:

a) Actual Knowledge

The Supreme Court held that the basic operation of U.S.C. 512(c) requires knowledge or awareness of specific infringing activity. To maintain safe harbour protection, the court ruled that the service provider must know exactly which content to remove. On the other hand, a vague responsibility to take commercially reasonable steps in response to broad awareness of infringement could not be reconciled with the statute's language...

a) Relationship between actual knowledge & Red Flag knowledge

According to the District Court, a service provider's knowledge of particular and identifiable instances of infringement will remove them from the safe harbour. The client's request for a restraining order was denied by the court..

a) Wilful blindness

According to the plaintiffs, the video-sharing website was 'willfully oblivious' to specific infringing activities. "A service provider monitoring its service or affirmatively seeking information suggesting infringing activity, save to the degree consistent with conventional technical measures conforming with subsection I the Second Circuit Court wrote. The Supreme Court ruled that Section 512(m) is explicit in its language: A service provider's affirmative monitoring cannot be a criterion for safe harbour protection. A wide Common Law duty to monitor or otherwise seek out infringing activities is therefore incompatible with 512(m). This means that DMCA violations can be proven by demonstrating knowledge or awareness of specific instances of infringement under the willful blindness theory..

b) Right and Ability to Control

The Court disagreed with the Ninth Circuit holding in UMG Recordings, Inc. v. Shelter Capital Partners LLC,¹⁰⁵ an infringing item cannot be used by service providers to exercise their 'power or authority' However, the Court found that the right and ability to restrict infringement under 512(c)(1) requires more than just the authority to remove or ban anything put on a service provider's website in order to be effective... One was *Perfect 10, Inc. v. Cybernet Ventures, Inc.*,¹⁰⁶ and the other was *Metro-Goldwyn-Mayer*

¹⁰⁵ 667 F.3d 1022,1041 (9th Cir. 2011)

¹⁰⁶ 213 F. Supp. 2d 1146 (C.D. Cal. 2002)

Studios Inc. v. Grokster, Ltd.,¹⁰⁷Service providers in both of these cases had a significant impact on user behaviour without necessarily—or even frequently—being aware of specific infringing action.. To summarize, the Court held that:

- "The District Court correctly held that 17 U.S.C. § 512(c)(1)(A) requires knowledge or awareness of facts or circumstances that indicate specific and identifiable instances of infringement";
- 2) To arrive at this conclusion, the Court relied on internal emails among YouTube employees who appeared to be aware of at least the possibility of occasional infringing content. However, the June 23, 2010 order granting YouTube summary judgement was reversed because a reasonable jury could conclude that YouTube had knowledge or awareness under 512(c)(1)(A) at least with respect to a few specific clips.
- Under 512(c)(1), the doctrine of deliberate blindness can be used to demonstrate knowledge or understanding of specific violations (A);

"The District Court erred by requiring —item-specific knowledge of infringement in its interpretation of the —right and ability to control infringing activity under 17 U.S.C.§ 512(c)(1)(B)",

4) "The District Court correctly held that three of the challenged YouTube software functions—replication, playback, and the related videos feature— occur —by reason of the storage at the direction of a user within the meaning of 17 U.S.C. § 512(c)(1)".

i)5. LIABILITY REGIME OF THE ISPs IN THE EUROPEAN UNION

i)5.1. E.C Directive on Electronic Commerce¹⁰⁸

According to the E-Commerce Directive, Internet Service Providers are free from responsibility if they meet specified standards. According to the phrase "horizontal" approach, culpability is addressed without respect to a claimant's legal standing. Diverse liability regimes can be applied to different areas of law in a vertically structured fashion. The EU Directive uses a horizontal strategy. ISPs do not have to monitor the content of the material produced by their customers, according to the horizontal approach...

Mere Conduit

Simple conduit activities are defined in the E-Commerce Directive in two ways. To begin, information provided by a service recipient is transmitted across a communication network. There is "no liability" for ISPs who meet the standards set forth in Article 12. This is due to the fact that they have no control over the data that flows through their network.:

- 2. "Initiate the transmission";
- 3. "Select the receiver of the transmission";

¹⁰⁷ 545 U.S. 913 (2005).

¹⁰⁸ E.C Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on Certain Legal Aspects of Information Society Services, in particular Electronic Commerce, in the Internal Market .

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1. "Select or modify the information contained in the transmission; not including manipulations of a technical nature which take place in the course of the transmission, since such manipulations do not alter the integrity of the information contained in the transmission".

Caching -Article 13

There is no liability for damages or any other financial remedy or criminal sanction for a service provider who transmits information provided by a service recipient through a communication network.e:

- (a) "the information is the subject of automatic, intermediate and temporary storage where that storage is for the sole purpose of making more efficient onward transmission of the information to other recipients of the service upon their request, and"
- (a) "the service provider"
 - i) "does not modify the information;
 - i) complies with conditions on access to the information;
 - ii) complies with any rules regarding the updating of the information, specified in a manner widely recognised and used by industry;
 - iii) does not interfere with the lawful use of technology, widely recognised and used by industry, to obtain data on the use of the information; and
 - iv) acts expeditiously to remove or to disable access to the information he has stored, upon obtaining actual knowledge of the fact that the information at the initial source of the transmission has been removed from the network, or access to it has been disabled, or that a Court or an administrative authority has ordered such removal or disablement".

Hosting- Article 14

Providers of services in the information society that involve the storage of information submitted by a service receiver are not liable for damages or any other pecuniary or criminal sanctions as a result of that storage.:-

- (a) the service provider:
- (a) does not have any actual knowledge of illegal action or information and, in the case of a claim for damages, is not aware of any facts or circumstances from which it would have been obvious to the service provider that the activity was illegal;
- (b) upon learning or becoming aware of this, removes or disables access to the information as quickly as possible,
- (c) receiver was not acting on behalf of service provider.

Member States are free to impose a general requirement to monitor content that they transmit or store despite the E-commerce Directive's prohibitions. A court or administrative authority of a Member State's MME, however, is not prohibited from imposing an individual monitoring duty in a specific, defined

individual situation. Injunctions and court orders that demand the termination or prevention of any infringement are included in the limits on the responsibility of ISPs...

4.5.2. Judicial Approach in the E.U.

*EMI (Ireland) Ltd and Ors v. Eircom Ltd*¹⁰⁹ Because of frequent violations of copyright laws online, an Internet subscriber could be cut off from Eircom Internet service under a graded, "three strikes" policy, according to the Irish High Court. For the first time in Ireland, a lawsuit was brought against an ISP rather than a single unlawful downloader because it was the conduit through which illicit downloading had been facilitated and the property rights of record companies and artists were breached..

The BGH however included a clause that anti-piracy measures had to be within reasonable limits.⁸⁵

In *Scarlet Extended Sa v. Socie'Te' Belge Des Auteurs, Compositeurs, Et Editeurs Scrl (Sabam)*¹¹⁰an order from the Belgian court forcing Scarlet to prevent copyright infringements perpetrated through its service by prohibiting clients from transmitting or receiving files containing protected works, was obtained by SABAM, the Belgian association of artists, composers, and publishers in 2004. Accordingly, SABAM was awarded a judgement by the Belgian Court in 2007. "Scarlet" filed an appeal alleging that the order breached a number of EU directives and fundamental rights protected by the EU. A preliminary ruling was sought from ECJ on whether Directives 2000/31 [E-commerce Directive], 2001/29 [Harmonization of Copyright Directive], 2004/48 [IP Enforcement Directive], 95/46 [Personal Data Protection Directive] and 2002/58 [Directive on Privacy and Electronic Communication] should be read together and if so, whether they should be interpreted as a single directive.¹¹¹

According to the European Court of Justice, the Belgian Court's interpretation was invalidated by relying on the E-Commerce Directive's restriction on compelling ISPs to conduct general monitoring of the information contained in their network, among other arguments. Observing that the ISP would be required to install that filtering scheme:-

- > To identify peer-to-peer traffic files in all electronic communications of all its consumers;
- ➤ that it identifies the files containing works in which intellectual property holders claim rights;
- \succ thirdly, that it detect which of those files are being illegally shared; and,
- ➤ It should also stop file sharing that it deems illegal..

An injunction against internet service provider Scarlet us filtration system has been granted by the European Court of Justice (ECJ). Such an injunction, according to the European Court of Justice, would oblige the ISP to monitor all client data in order to avoid future infringement of intellectual property rights...

¹⁰⁹ [2010] IEHC 108.

¹¹⁰ 51 ILM 382 (2012)

Case C-70/10, Scarlet Extended SA v. Socie te Belge des Auteurs, Compositeurs et (SABAM), (E.C.J. Nov. 24, 2011), available at: http://curia.europa.eu/ Editeurs SCRL juris/liste.jsf?language=en&num=C-70/10 [hereinafter Scarlet]. (Visited on Dec. 20, 2012)

LIABILITY OF ISPS IN AUSTRALIA

According to section 101 of the Australian Copyright Act of 1968, authorising a copyrighted act constitutes an infringement of the copyright. A number of factors are listed in section 101(1) that must be considered when deciding whether an authorisation has taken place.

These are some of the things that must be considered:

- (a) how much (if any) authority a person has to prevent the conduct in question from happening;
- (b) whether or whether there is any kind of relationship between you and the individual who perpetrated the conduct concerned
- (c) any other reasonable precautions taken to prevent or avoid the crime, including compliance with any relevant industry codes of practise...

In *Universal Music Australia Pvt. Ltd. v. Sharman Networks*,¹¹² According to the Federal Court of Australia, the defendant was liable for authorising copyright infringement because of its facilitation of copyright infringement through advertising and its lack of adequate steps to prevent direct copyright infringement using the Kazaa system.

"The application of Section 101 has also been considered by the Federal Court of Australia on appeal (French, Branson and Kenny JJ) in *Cooper v. Universal Music Australia Pty Ltd*".¹¹³

Cooper He found Mr. Cooper guilty of violating the claimant's copyright by authorising the creation of copies of their sound recordings. Users could easily choose from a wide range of popular sound recordings on the website because it was user-friendly, highly structured, and well-organized, according to the Court. Users may access individual music files by clicking on links, which sent a copy immediately to their computer. The appeals court upheld the decision...

*Roadshow Films Pty Ltd v. iiNet Ltd (No3)*¹¹⁴ An action brought by major film studios in the US and Australia against iiNet was dismissed by the judge. One of Australia's leading Internet service providers (ISP) iiNet was sued for allowing its members to download copyright-protected films without the permission of the owners of the rights. Users can create a complete copy of a film by gathering all of its components from other BitTorrent users..

i)7. LIABILITY OF ISPS UNDER THE INDIAN COPYRIGHT ACT OF 1957

xi.1. Copyright Act 1957 and IT Act 2000: Interwoven or Independent

ISP liability was conspicuously absent from the 1957 Copyright Act until recently. Due to the lack of responsibility requirements for ISPs, Section 79 of the Information Technology Act 2000 filled the gap. Only the IT Act of 2000 and its rules and regulations were exempted from responsibility under section

¹¹² [2005]FCA1242.

¹¹³ [2006] FCA 187.

¹¹⁴ [2010] FCA 24.

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79..¹¹⁵ According to Section 79, a network service provider is not liable for third-party information or data if he proves that the violation or offence was committed without his knowledge or that he took all reasonable steps to prevent it.

There was no legal precedent on the issue of service providers' immunity under other laws, therefore it remained unresolved. There have been substantial changes in the ISP liability scheme as a result of the Information Technology (Amendment) Act, 2008 which came into force on October 27, 2009. "Section 79 (1) as amended, contains a non obstante clause to the effect "*Notwithstanding anything contained in any other law for the time being in force*... "thereby carving out safe harbours for ISPs under all Statutes. Ironically, the same amendment act added a proviso to Section 81 which reads as":

"The provisions of this Act shall have effect notwithstanding anything inconsistent therewith contained in any other law for the time being in force".

"Provided that nothing contained in this Act shall restrict any person from exercising any right conferred under the Copyright Act, 1957 (14 of 1957) or the Patents Act, 1970 (39 of 1970)".

Because of the caveat to Section 81, Section 79 cannot be applied when there has been an infringing of copyright. Accordingly, Section 79 begins with the phrase "Notwithstanding any other law already in force..." So, Section 79 has precedence over all other laws, but not over Section 81, because the phrases employed in Section 79 are any other law." In effect, Section 81 would have primacy over Section 79. Any other interpretation of Section 79 and Section 81 of the IT Act would be tenuous and artificial. This argument is further fortified by the observation of the Delhi High Court in *Super Casssette Industries v. My space & Another*,¹¹⁶ according to which IT Act provisions may supersede other laws now in existence, but they cannot restrict the rights granted to owners under the Copyright Act and the Patent Act. The Court observed:

"Section 79 is, thus, meant for all other internet wrongs wherein intermediaries may be involved including auctioning, networking servicing, news dissemination, uploading of pornographic content but not certainly relating to the copyright infringement or patent infringement which has been specifically excluded by way of proviso to Section 81. This can be only possible harmonious construction between the two Acts [Copyright Act and the IT Act] which makes both the Acts workable".¹¹⁷

Further, the Court held:

No impact is made by Section 79 of the IT Act (as revised in 2009) when it comes to copyright violations involving intermediaries, and Section 81's exclusion for copyright or patent infringement prevents the provision from curtailing copyright rights.¹¹⁸

¹¹⁵ For a contrary view, See Farooq Ahmed, —Liability limits of Service Providers for Copyright Infringement| Journal of Intellectual Property Rights, 181-190 (2003).

¹¹⁶ (2011) (47) PTC 49 (Del).

¹¹⁸ Id. at 103.

¹¹⁷ Id. at 102.

A similar interpretation is further supported by various modifications to the Copyright Act (described below) that particularly address the responsibility of Internet Service Providers.

The foregoing explanation suggests that India has adopted a vertical approach to intermediary responsibility in the same vein as the DMCA did in the United States.

xi.2. Analysis of Liability Regime of ISPs under the Indian Copyright Act

"Before analysing the liability regime of ISPs under the Indian Copyright Act, it would be pertinent to discuss the judgment of the Delhi High Court in *Super Cassettes Industries v. My Space & Another*".¹¹⁹ Myspace.com, a social networking site that offers a variety of entertainment apps, was accused of infringement by the plaintiff, who claimed to be the owner of the copyright for songs, films, and recordings. Court ordered permanent injunction against defendants, their officers, employees, agents, servants and representatives as interim relief from the plaintiff.

In its defence, My Space cited the following defences:

Non-Specificity of Prayer:- *Super Cassette Industries*" "claim in the suit was for a blanket injunction on copyrighted content on the MySpace website. This imposed a clearly untenable, even impossible, burden for intermediaries to comply with".

Knowledge:- MySpace maintained that it could not be held liable in two instances. Aside from the fact that it did not have any direct knowledge of and no participation in selecting the content, no control over the uploading of the content had been exercised or could have been done. No way to identify and separate illegal content from authorised content, or monitor all content that was posted on the site..

Intermediary status and Safe Harbour Protection:- MySpace made a number of arguments in relation to its status as an intermediary. To begin with, it claimed exemption under Section 79 of the IT Act and under the Digital Millennium Copyright Act of the United States (US DMCA). This is perhaps the most fundamental principle of intermediary liability, that merely giving the means for infringement to occur does not constitute an infringement. For example, the sheer fact that the internet facilitates communication is not infringement. A hash filter, a rights management tool and a take-down-stay-down system were cited as evidence of its goal to dissuade or otherwise address cases of infringement when they arose. T-Series maintained that the notice and takedown procedures would not lessen the infringement.

Relationship between MySpace and its Users:- As a result, MySpace claimed that it was nothing more than a licensee of content supplied by its users. That MySpace's provisions for safeguarding against infringing activity plainly showed a reason to assume that infringing activity would occur, was likewise

¹¹⁹ 2011(47)PTC 49(Del).

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denied. Since online space is a location in the terms required by the terms and there were monetary gains in the form of advertising revenue, the court found that section 51 (a) (ii) had been violated. According to Amitai Etzioni, the Delhi High Court's judgement in the matter of MySpace vs. As a result of the ruling, he claims, Facebook is required to monitor any information shared by its users and examine it for possible copyright violations. Individuals, such as ISPs, should not be able to determine whether or not content is infringing on intellectual property., Etzionei argues..¹²⁰

i.1. Liability of ISPs after the Amendment Act of 2012

Lawyer Many of the provisions of the Copyright Act that affect the liability of ISPs are deficient. We believe that the'reasonable grounds for believing' standard is not sufficiently clear.. "He says it would violate the right to privacy of such customers under Article 21 of the Constitution. A dutyon the ISP to monitor its customers would also be in direct contradiction with both the DMCA¹²¹ and the EC directives".

4.7.3.1. Notice and Takedown (NTD) Regime

The NTD regime in India has the potential to stifle freedom of speech and expression in the country. As envisioned by the NTD, an ISP would act as a judge, deciding whether or not a copyright infringement accusation is valid or not. You could end up with ISPs removing or blocking access to content without bothering to examine the reality of the claim, resulting in indiscriminate censorship Unexpected takedowns, ex ante removal of content, and ignorance of counter notice procedures have been noted, according to the authors of a research on India's copyright law. Among them were fair use defences, claims over public domain material, and ambiguous notices. The likelihood of ISPs being issued with frivolous and ill-founded notifications has increased enormously...

The Supreme Court in Life Insurance Corporation of India v. Prof. Manubhai

$D. Shah^{122}$ held that

"Speech is God's gift to mankind. Through speech a human being conveys his thoughts, sentiments and feelings to others. Freedom of speech and expression is thus a natural right which a human being acquires on birth. It is, therefore, a basic human right. Everyone has the right to freedom of opinion and expression; the right includes freedom to hold opinions without interference and to seek and receive and impart information and ideas through any media and regardless of frontiers".

In Secretary, Ministry of Information and Broadcasting, Government of India and Others v. Cricket Association of Bengal and others,¹²³ the SC observed:

"Freedom of speech and expression is necessary for self- expression which is an important means of free conscience and self-fulfilment, argues the writer. The right to communicate is not absolute but subject to

¹²⁰ 2011 (47) PTC 49(Del) at 105

¹²¹ 17 USC § 512(m)

¹²² AIR 1993 SC 171. Paragraph Nos 5, 21, 22&23.

¹²³ AIR 1995 SC 1236. para-11.

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reasonable restrictions, he says. He calls for a separate provision in the Copyright Act which would penalise ISPs based on unfounded and frivolous copyright infringement claims. Section 51(ii)(c) states that if the person responsible for storage of content does not receive the Court order within 21 days from the date of receipt of written complaint, he may restore access to the notified content. The chances of an ISP restoring access to content in respect of which a complaint is received are dismal".

An ISP's approach would be overly cautious in order to protect its own interests. In this case, the sole casualty would be the common citizen's right to free speech and expression..

CONCLUSION

Jameel Ahmed writes that the music industry has redesigned its economic model in order to adapt to the digital environment. It is estimated that worldwide digital income to record firms increased by 4.3% last year, totaling \$9 billion, he says. Ahmad Because of the digital revolution, it is necessary to find practical solutions and rethink some of the 19th century notions utilised in copyright law enforcement. According to a new report by the Copyright Office, copyright ownership in the digital era should be re-examined in a new way. As a result, the author and the assignee of copyright would have equal rights. The meaning of equal rights and how royalties are paid when ownership of the work is owned by several people are, however, unclear...

Digital Rights Management (DRM)

When it comes to protecting intellectual property in digital form, Digital Rights Management (DRM) has been lauded as a game-changing technology. Before purchasing DRM-protected content, buyers may not be entirely aware of the exact applications that the DRM system permits and prohibits. The content providers should be required by law to properly disclose the scope and characteristics of the DRM protection they use for their content, as well as how they secure it. Consumers would be able to choose whether or not to purchase the protected content. Rajesh Agrawal notes that firms have tried to avoid anti-circumvention legislation in situations when they were plainly not intended.

A technological mechanism must have been put in place in order to protect the rights bestowed by India's Copyright Act, he believes. According to him, such a clause would once again help prevent the misuse of DRM provisions for purposes other than those for which they were originally designed...

Graduated Response

"Right to Know" in India is a vital adjunct to freedom of expression. Article 19 of the Indian Constitution prohibits attempts to block access to the Internet on the flimsy grounds that the IP address has been used for copyright infringement. This might have a major impact on cybercafes, universities, and other institutions that provide Internet service..

Right to Freedom of Speech and Expression v. Right to Property

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Right to Know is a vital adjunct to right to freedom of speech and expression in India. Attempts to terminate access to the Internet on the dubious pretext that the IP address has been used for copyright infringement would fall foul of Article 19 of the Indian Constitution. Cyber-cafes, universities and other entities providing Internet connection could be significantly jeopardised if their connectivity is stopped.

Right to Privacy v. Right to Property

Three strikes and you are out (Graduated Response) and the slightly earlier strategy of suing randomly selected individuals were both based on a single lever: surveillance, which was used by the music business to implement its new techniques. Because of the surveillance of pirates, the link between privacy and property is now reversed, according to Amitai Gupta. Gupta In the absence of traditional substantive and procedural due process restraints, piracy monitoring tactics have a detrimental tendency to suppress free expression in cyberspace..

Mobile Entertainment Ecosystem

In contrast to global conventions, where content producers have a substantial stake, music companies earn a meagre share of the money (TSPs take roughly 70 percent). Indian copyright legislation in its present form is found to be lacking. Application Services need to be regulated urgently. Is it "reasonable grounds" for an intermediary to monitor its users for copyright infringement if it is aware that its services could be used to infringe copyright? An Internet Service Provider would be obligated to actively monitor its customers for copyright infringement if such an interpretation were to be adopted According to Article 21 of the Constitution, the right to privacy is a fundamental right..

Notice and Takedown (NTD) Regime

Article 19(1)(a) of the Indian Constitution guarantees the right to freedom of speech and expression. Notice and takedown (NTD) is contemplated in the Proviso to Section 51(ii)(c), which has become prevalent in copyright laws around the world. Since even well-founded charges of copyright violations are mired in legal intricacies and ISPs are beginners at such jobs, NTD might result in arbitrary restriction. The misuse of the NTD regime is well documented throughout the world. Section 60 of the Copyright Act provides for a general remedy if an accusation of copyright infringement turns out to be untrue.

Essentially, if the person in charge of content storage does not receive an order from the court within 21 days of receiving the written complaint, he or she may restore access to the content that was alerted. To prove that the ISP was aware of the infringing activity, a complainant may rely on the original complaint he made to the ISP. Do ISPs fall within the main body's repercussions or the proviso's? Do you think the ISP can claim the complainant did not acquire an injunction and hence restore access without jeopardising its right to fall under the safe harbour established in this section? ISPs have a slim likelihood of restoring access to content for which a complaint has been made. Dr. John O'Donovan writes that the sole casualty would be the freedom of speech and expression of the average person..

Injunctions

When it comes to enjoining third-party infringers, Ravi Agrawal thinks that injunctions should be possible. To him, blocking entire websites instead of specific webpages is a failure to strike a compromise between property rights and free speech. If the right holder chooses, the Indian Copyright Act has done well to avoid adopting statutory damages, he says. There is no exception for non-commercial infringing acts, according to the report. But this caveat threatens exactly the activities that copy right legislation is intended to promote: progress in learning and culture for the general good, which is what copy right law intends to do.

Overzealousness, it is argued, has the potential to have a negative impact on the diffusion of information, which is vital for advancement. In an effort to keep the Copyright Law current with technological advances, the government has made some progress, but there remains a long way to go. Music business demands must be balanced with copyright owners' interests, and that is where lawmakers come in. Anti-piracy measures include legalising noncommercial file sharing. Although the Bombay High Court has already ruled that Section 31D does not apply to online broadcasting services, it will be fascinating to see if this holds up in court...

SUGGESTIONS

These efforts must be made to reestablish a healthy balance between the rights of copyright owners and those of users..

- 1. In DRM contracts, all the procedural safeguards provided in a regular contract should be enhanced.
- 9. Delete the proviso to Section 65(A).
- 10. Indian law should not be extended to the Graduated Response to Copyright Infringement (GRI) currently in vogue in several countries around the world.
- 11. Application services require a regulatory framework.
- 12. We need a change to a "off-deck model" in mobile music.
- Protections such "counter notice" measures should be included in the notice and takedown mechanism adopted into the Copyright Act
- 14. Separate provisions in the Copyright Act should penalise ISPs who serve copy right notice on them based upon unsubstantiated and frivolous accusations.
- 15. If a complaint is received, an ISP must be given a deadline within which to remove the content.
- 16. When it comes to censoring certain webpages rather than entire websites, courts must follow the proportionality principle.
- 17. A copyright suit in India should not be subject to unreasonable or astronomical damages (as it would be in the United States).
- 18. An innocuous conduct can become criminalised by the proviso in Section 63, hence it should be removed.
- 19. Copyright violation under Section 63 should be declared a bailable offence..

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Unauthorized downloads are widespread, according to the study, which argues that copyright laws should be rethought. As an alternative to the Indian Performing Right Society, a consortium of all content providers, including music composers, lyricists and singers is proposed. There would be no limits on downloading digital music files from the internet, but each file would be labelled and tracked. Hackers might keep track of how many times a certain piece of music is downloaded..

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