

AI AND INTELLECTUAL PROPERTY LAWS IN INDIA

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Introduction

Stephen Hawking during one of his lectures at University of Cambridge stated that Artificial Intelligence (“AI”) will be “either the best, or the worst thing, ever to happen to humanity”¹. This statement by Stephen Hawking’s depicts his concern towards an uncertain future which will not be controlled by humans.

Like most of the laws, intellectual property laws were introduced when AI was not even a foresight. It is evident that technology evolves at a much faster pace than laws as laws are more influenced by socio-economic conditions than advancement in technology which brings about a challenging issue of position of intellectual property laws with respect to AI.

Some of the most fundamental issues when it comes to AI and intellectual property includes, who will be the owner of the works created by AI, who will be held liable when the AI goes wrong, and how and what rights will be awarded to the individual who created the AI. The rise of AI has substantiated the need to deal with these issues. In this article we will see how these issues have evolved and will also see how the Indian law is dealing with these issues.

AI as an Inventor

At present, the law sees AI as a tool to supplement inventions but not as an inventor itself. However, that is not entirely true, as rightly said by Jeremy Smith, chartered patent attorney and partner at IP law firm Mathys & Squire, *“from my perspective, at present AI is little more than a tool that can be wielded by the creator of a creative work or inventor of a new technical innovation in the same way a paintbrush is wielded by an artist or a CAD [computer-aided design] tool by an inventor.”*²

There are certain obligation, responsibilities, and opportunities that comes with patent ownership, for example, with the awarded right, the patent owner gets the right to ensure

¹ <https://www.sciencealert.com/stephen-hawking-says-most-of-our-history-is-the-history-of-stupidity>

² <https://www.raconteur.net/legal/intellectual-property/ai-ip-rights/>

exclusivity and the right to sue for infringement which raises other concerns whether an AI could then be liable for infringement of other patent owners’.

However, granting rights to an AI is not that alien of a concept as it might seem, Sophia, a robot from Saudi Arabia is the first robot to get a citizenship right which opens the question for other rights as well.³ The ecosystem is still navigating through all these questions and will continue to do so. An idea of joint ownership still seems more practical than granting an individual right.

Electronic Personality

Paragraph 59 (f) of European Parliament Resolution on Civil Law Rules of Robotics, and its recommendation to the European Commission talks about:

“creating a specific legal status for robots in the long run, so that at least the most sophisticated autonomous robots could be established as having the status of electronic persons responsible for making good any damage they may cause, and possibly applying electronic personality to cases where robots make autonomous decisions or otherwise interact with third parties independently”⁴

However, after receiving a strongly worded letter from more than 150 experts in AI, robotics, IP and ethics. European Union abandoned plans to consider the creation of a third type of entity, an “electronic personality”. As of today, intellectual property rights are restricted to natural and legal persons and it appears to stay this way at least for the time being.

There is no single reason to dictate when a system is supposed to recognize an entity as a legal person or when the status of a legal person should be denied. Looking at the situation of granting AI the status of a person or creating a separate type of person from this

³ <https://qz.com/1205017/saudi-arabias-robot-citizen-is-eroding-human-rights/>

⁴ https://www.europarl.europa.eu/doceo/document/A-8-2017-0005_EN.html?redirect

perspective there is no reason why such status should not be awarded. As a general rule, there has to be enough positive reasons to grant the status than to reject. The possible reasons might be based on moral entitlement, social reality and legal convenience⁵.

The DABUS Case

The European Patent Office (“EPO”) in January 2020 refused two patent applications (EP 18275163 and EP 18275174) which listed AI as the inventor instead of a human. The main ground on which the applications were rejected is because the inventor was named as “AI DABUS” and not a human inventor. DABUS stands for “Device Autonomously Bootstrapping Uniform Sensibility”. These applications were also filed under the PCT in seven other countries including the UK. The owner of the AI is Stephen Thaler from USA who is working on AI for decades. The applications were also rejected by US and UK Patent Offices.

The application stated that the machine should be recognized as an inventor, and Mr. Thaler as the applicant and as the owner of the machine, was an assignee of any intellectual property rights created by the DABUS.

Mr. Thaler in his submissions also pointed out that Rule 19 of the European Patent Convention⁶ only talks about properly identifying the inventor and it nowhere mentions that an inventor must be human. Further, as to providing details of first and last name, even people with just one name would be harmed with this criterion. Mr. Thaler also stated that Article 52 to 57 talks about the requirements for patentability and it nowhere mentions that the inventor must be a human, so to deny an application on procedural grounds is not right. The European Patent Office also rejected this contention by stating that names given to things must not be equated with names of natural persons. Names given which are given to natural persons enable them to exercise their rights and be part of their personality. Citing numerous national rules on rights relating to the personal name, such as DE § 12 of the German Civil Code (in ger: BGB), FR Article 57(2) of the French Civil Code and IT Article 6(1) of the Italian Civil Code, European Patent Office stated that things have no rights, especially personal rights.

⁵ [Tom Allen, Robin Widdison, ‘Can computers make contracts?’ \(1996\) 9\(1\) Harvard Journal of Law & Technology.](#)

⁶ <https://www.epo.org/law-practice/legal-texts/html/epc/2016/e/r19.html>

Presently, appeal has been filed for these patent applications and they are still pending decision. This is important to acknowledge as this could be a revolution in the way the intellectual property laws are interpreted, as sooner or later, there are going to be rapid inventions by AI which will have to be dealt differently than the current intellectual property regime. One of the most fundamental issue to think with regards to this could be of self driving cars.

Indian Intellectual Property Regime Overview

India has complied with its obligations under the agreement on Trade Related Intellectual Property Rights (“**TRIPS**”) by enacting the necessary statutes and amending the existing statutes. Broadly, the following acts deal with the protection of intellectual property at present in India.

1. Trade Marks Act, 1999
2. The Patents Act, 1970
3. The Copyright Act, 1957
4. The Designs Act, 2000
5. The Geographical Indications of Goods (Registration and Protection) Act, 1999
6. The Semiconductor Integrated Circuits Layout Design Act, 2000
7. The Protection of Plant Varieties and Farmers’ Right Act, 2001
8. The Information Technology Act, 2000

Indian Patent Law

Current standing of the patent law identifies only a human inventor and grant rights only to such individuals. As it stands today, only a natural person can be rewarded for AI innovation. This concept is outdated as we are already living in the era of drug synthesis, self-driving cars,

autonomous weapons, disease identifications, as well as countless other automated processes, mostly working through AI systems.

Another problematic issue is the “non-obvious” rule connected to patentability of an idea. Patent law requires that an inventive concept be non-obvious to a person skilled in the art of that concept. In the world of AI and its capacity to process higher levels of intelligence and predictability, there is the likelihood that all inventive concepts could be considered obvious to an AI and if so, will that eliminate the stipulation for patent protection entirely.⁷

In India, the law governing patents is The Patents Act, 1970. In India’s continued efforts to comply with its obligations under the TRIPS, the Patents Act has been amended several times. The term of every patent in India is 20 years from the date of filing the patent application.

With the issue granting ownership rights of a patent to an AI, the issue is on the same tangent as it is with the copyright authorship to an AI, that at present, the law does not recognize AI as a person due to various significant reasons, one of them being the liability. As to when it comes to AI and patents, the stakes are higher than one with the copyright. As with patent ownership come certain obligation, responsibilities, and opportunities as well, for example, with the awarded right, the patent owner gets the right to ensure exclusivity and can sue for infringement which raises other concerns whether an AI could then be liable for infringement of other IP owners’ patents.

Section 6 of the Patents Act, 1970 talks about the persons entitled to apply for patents which clearly narrows down the scope of the invention to a natural person. Indian patent law does not consider the possibility of nonhuman inventors. Precedents in the copyright laws of other jurisdictions have also conventionally not considered non-humans as creators.

As with the issue of availing ownership rights for an AI application, the present standing of the Indian law is slightly complex. **Section 3(k) of the Indian Patents Act, 1970** clearly excludes a “*mathematical or business method or a computer programme per se or algorithms*” from being eligible for a patent protection.⁸

⁷ <https://www.mondaq.com/india/patent/892134/artificial-intelligence-in-the-world-of-ip>

⁸ http://www.ipindia.nic.in/writereaddata/Portal/IPOAct/1_31_1_patent-act-1970-11march2015.pdf

The intent of the lawmakers behind putting the word *per se* can be corroborated from the Joint Committee Report for The Patents (Second Amendment) Bill, 1999 where it is mentioned that:

*"In the new proposed clause (k) the words "per se" have been inserted. This change has been proposed because sometimes the computer programme may include certain other things, ancillary thereto or developed thereon. The intention here is not to reject them for grant of patent if they are inventions. However, the computer programmes as such are not intended to be granted patent. This amendment has been proposed to clarify the purpose."*⁹

However, for more lucidity on this section, Indian Patent Office has issued several guidelines, in 2017, the office issued Guidelines for Examination of Computer Related Inventions (CRIs) ("2017 **Guidelines**") which clarifies that "It is well-established that, in patentability cases, the focus should be on the underlying substance of the invention, not the particular form in which it is claimed. The Patents Act, 1970 clearly excludes computer programmes per se and the exclusion should not be allowed to be avoided merely by camouflaging the substance of the claim by its wording"¹⁰ which makes it even more clear that in order to get a patent for a computer programme or an algorithm, the onus for the grant of patent will be on the substance of the invention as a whole. The 2017 Guidelines has done away with the novel hardware requirement earlier laid out by the 2016 guidelines, focusing on the substance of the invention as a whole.

To claim AI based software inventions in India, the application must focus on description of hardware, i.e computer system, server, sensor etc. along with AI algorithm in the claims. Claiming a method or a process of a device that uses AI is another approach followed by the applicants.

Trademark

⁹ <http://www.ipindia.nic.in/writereaddata/Portal/Images/Patents-Act-REPORT-OF-THE-JOINT-COMMITTEE-19-Dec-2001.pdf>

¹⁰ http://www.ipindia.nic.in/writereaddata/Portal/IPOGuidelinesManuals/1_86_1_Revised_Guidelines_for_Examination_of_Computer-related_Inventions_CRI_.pdf

In India, trademarks are protected both by statutory law and common law. The Trade Marks Act, 1999 is the governing statute for trademarks in India. It is in compliance with the TRIPS and its obligations as per the TRIPS include protection to distinguishing marks, indefinite periodic review of registration, recognition of service marks, abolition of compulsory licensing of trademarks, etc.

Term: The registration of trademarks in India is valid for ten years and is renewable for a subsequent period of ten years.

The Trade Marks Act was amended in 2010, which contains the special provisions relating to protection of trademarks through international registration under the Madrid Protocol which allows entities to register their trademarks in 97 countries by filing a single application.

Any mark that is capable of being 'graphically represented' and indicative of a trade connection with the proprietor is entitled to get registered as a trademark under The Trade Marks Act, 1999. Trademark Rules define "graphical representation" as representation of a trademark for goods or services in paper form.

The Trade Mark Registry of India has also begun to recognize "unconventional trademarks" and has extended trademark protection to a sound mark. On August 18, 2008, India's first "sound mark" was granted to Yahoo Inc.'s three note Yahoo yodel by the Delhi branch of the Trademark Registry.

Indian courts have also been proactive in recognizing domain names under the ambit of trade mark law. In the case of Yahoo India vs. Akash Arora¹¹, it was held that "the domain name serves the same function as a trade mark, and is not a mere address or like finding number on the internet, and therefore, it is entitled to equal protection as a trademark".

Intersection with AI: All the discussions around AI an intellectual property is usually centred around the intersection of AI with the patent law, completely overlooking its impact on the trademark law. As trademark law is all about how humans interacts with brands and the whole purchasing process, there is no doubt that with the advent of AI powered machines making purchases for us taking us from shopping-then-shipping" to "shipping-then-shopping" model, such as Amazon Alexa, bots and with all the influence of AI on product suggestions

¹¹ Yahoo India v. Akash Arora (1999) PTC 201 (Del).

with its predictive tools on e-commerce platforms, it is going to have a significant impact on trademark law as well. The challenges and issues that are to come with the new AI revolution of its intersection with trademark law are still to be unfolded which would compel the legislator to contemplate the trademark law in a different way.

Copyright

The Copyright Act, 1957 supported by the Copyright Rules, 1958 is the governing law for the copyright protection in India. India is a member of the Berne Convention and Universal Copyright Convention. The Government of India has passed the International Copyright Order, 1958, according to which any work first published in any country which is a member of any of the above conventions is granted the same treatment as if it was first published in India.

Term: The term of copyright in India is the lifetime of the author plus 60 years thereafter.

A copyright in a work is created when the work is created and given a material form, subject to its originality. The Indian law does not require registration as a prerequisite for copyright protection, nor does it confer any special rights or privileges with respect to the registered copyrighted work like in US. The Copyright Act, 1957 provides for a copyright registration procedure which after being registered are admissible as evidence in all courts without further proof of originality.

Intersection with AI: Traditionally, the ownership of copyright in computer-generated works was not in question because the program was simply a tool that supported the creative process of a human author, very much like a pen and paper. Creative works qualify for copyright protection if they are original and expressed in a tangible form, with most definitions of originality requiring a human author. But with the latest types of artificial intelligence, the computer program is no longer a tool; it actually makes many of the decisions involved in the creative process without human intervention.

For copyright to subsist in dramatic, musical, artistic, and literary works, Section 13¹² of The Copyright Act, 1957 specifies that it must be original. Although, The Copyright Act, 1947 itself does not define the term 'original', the Supreme Court in the case of *Eastern Book Co v D B Modak*¹³ adopted the '*modicum of creativity*' as benchmark to define whether a work will be awarded copyright protection or not. As per this standard, the work must meet the minimum requirement of creativity and must not be a mere outcome of skill and labour. As the works created by an AI can pass this test, the crucial question is with regards to the author of that work. Section 2(d)¹⁴ of The Copyright Act, 1957 specifies that "the person who causes the work to be created" will be the author of the computer generated works. Moreover, the Practice and Procedure Manual (2018)¹⁵, issued by the Copyright Office states that in the application for the registration, only "*the details of the person(s), who has actually created the work i.e. only natural person (human being), should be provided*" which again corroborates that the author must be a human being. So it is clear for now that even if the AI software passes the test of originality, the authorship to the AI software cannot be granted to the AI as per the present standing of the Indian law. However, granting rights to an AI is not that alien of a concept as it might seem, Sophia, a robot from Saudi Arabia is the first robot to get a citizenship right which opens the question for other rights as well.¹⁶

There have been numerous debates and academic publications reflecting the AI's effects on the authorship. For instance, in the wake of a court decision involving a selfie-taking monkey, the United States Copyright Office updated its interpretation of "authorship" in 2016 to clarify that it will not register works produced by a machine or a mere mechanical process that operates randomly or automatically. It stressed that copyright law only protects "the fruits of intellectual labour" that are "founded in the creative powers of the mind".

A ruling from the San Francisco Court denying copyright request for a selfie-taking macaque monkey represents the stand towards AI also. Various copyright offices across the world have already mentioned that they won't register machine produced work.

¹² <https://indiankanoon.org/doc/4010217/>

¹³ <https://indiankanoon.org/doc/1062099/>

¹⁴ <https://indiankanoon.org/doc/1655540/>

¹⁵ <https://copyright.gov.in/Documents/Public Notice inviting reviews and comments of stakeholders on draft guidelines/Literary Work.pdf>

¹⁶ <https://qz.com/1205017/saudi-arabias-robot-citizen-is-eroding-human-rights/>

As per the Indian law, the ambiguity still persists with regards to who will be author as per the present law which has to be natural person, is it the person who programmed the software, or the entity who owns the software, or the end user who used the software to create the work. The Indian law still has to address all these questions, whereas, in China, AI generated works were granted protection and the rights were contributed to the person who created the AI software¹⁷, which seems to be the most practical thing to do in most scenarios.

Challenges

Basically, the reluctance to award similar status to machines as human creators arises due to the various reasons, some of them being:

- How the ownership rights, distribution rights, and rights to use are to be given?
- How will the economic profits from distribution, licensing, etc. be realized in context of said AI-created works?
- In cases of infringement, plagiarism or unauthorized reproduction of the work, how will the liability of the machine-creator be defined?
- Furthermore, what will be the procedure to award damages and to whom such damages will be given?

Current scenario in majority of countries with proactive IPR regimes gives the credit to human creators of AI for their creative works, and this to an extent holds them liable in criminal or civil liability-involving cases as well. However, such liability essentially in criminal cases could spark a debate on the absence of mens rea and actus reus on the part of the human creator inspite of incurring liability due to the AI's activities.

Conclusion

At present, India lacks behind in terms of recognition to the innovation which is being driven by AI, which is why most of the fundamental questions as to its interaction with the Indian

¹⁷ <https://content.techgig.com/ai-produced-work-is-also-entitled-to-copyright-rules-a-chinese-court/articleshow/73267270.cms>

law are still to be addressed. In a broader sense, the most significant concern is with regards to criminal liability problems and the balance needs to be there between holding the creator liable because of negligence or probably just destruction of the AI-system which would require a legislative reform in this respect.

Another concern would be with regards to how the financial benefits accruing from the distribution, licensing and authorship of the AI-generated work will be attributed. Furthermore, the status quo of law pertaining to AI is problematic where recognition of work generated by AIs is under ambiguity. So there is a requirement of clear, structured legislative standards guidelines to address this issue.

With the large-scale usage and development of AI techniques in the day to day life, it presents us with an urgent need of implementing the proper legal infrastructure to address these paramount concerns.