

## **ARTIFICIAL INTELLIGENCE & INTELLECTUAL PROPERTY RIGHTS**

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In this paper the researcher will be discussing the issues and challenges that have come up with respect to the protection of AI in IP laws. Before dealing with this segment the researcher would like to throw some lights on the conceptual framework, and widespread application of the emerging technology AI. The paper shall be concluded with some possible suggestive gestures.

### **Concept of AI**

AI, artificial intelligence is a technology wherein the technology is used to feed data to an artificially created machine. Here the scope and ambit of the 'intelligence' is quite a controversial topic that needs a separate discussion altogether. Over the past few years, science and technology have grown to the next level. It achieves things beyond imagination of the mankind. It can be said that this specific field of science deals with the information systems inspired by biological systems and encompasses multiple technologies including machine learning, deep learning, computer vision, natural language processing ('NLP'), machine reasoning, and strong AI. While developing, AI has been passing through the 'Turing Test' to check the ability to play 'imitation game', the game where the machine learns and thinks and acts like a human. Alan Turing in his paper 'Computing Machinery and Intelligence' argued that if a machine could pass the 'Turing test' then we would have grounds to say that the computer was intelligent. Defining AI is a heavy task because it will differ according to the developer's standard of intelligence.

However, with this much controversy, AI has spread almost in all industries. It is replacing the human activity with its proficiency. Although it has both beneficial and harmful consequences.

With the rapid growth, it has already enmeshed upon the various sector, like, health by solving complex problems, education and research institutions by providing best monitoring and learning platform, agricultural, transportation where the autonomous or the semi-autonomous is not fiction anymore but a reality, business (HANA) and in the virtual world, robotics, so on and so forth. From its application it is very clear that AI is serving different purposes like automatic natural language processing, knowledge representation, automated reasoning, machine learning, computer vision, and robotics to name a few. In this last case, AI systems are not only working on the software level, but they are also acting in a virtual world integrated into hardware. Such as Alexa.

## AI & Intellectual Property Rights

Eventually, for the huge creation and inventions which is accelerating the economy in a way by the technology, calls for the intellectual property in various means. One of the reasons is fixing the ownership which helps to impose the liability in according cases. For better understanding it can be figured in the following means; *AI helping in the management of technology of intellectual property rights and Intellectual property as a regime for the protection of AI.* These two means are overlapping as AI and IP could influence each other. The researcher in this paper would be limited herself in discussing the protection of AI in the IP regime

According to the activities done to date by the said technology the IP that most attract in these segments are Patent and Copyright and to an extent industrial design. Also WIPO was encouraged by its member states to collate the significant government instruments of relevance to AI to standards. Let's focus on the respective IP that how much the present IP regime is efficient to provide protection.

### Personhood of AI

For the issues under the IP laws for the protection of AI, the nature of its legal personality needs to be appreciated.

AI as a natural person: The possibility AI of being a natural person is barred because it has no - a soul, intentionality, consciousness, feelings, interests, and most importantly free will. Nonetheless, the famous humanoid robot Sophia has been granted the citizenship of Saudi Arabia.

AI as an artificial person: Legal personalities are attributed to an entity that can hold some rights especially right to hold property and right to sue and be sued and there is a clear possibility of imposing liability. Like Company. But here also AI has got some issues with the holding of responsibility and liability.

However, there is an emerging need to decide the personality of the AI as to recognize the ownership and accordingly impose the liability. The recent accident caused by the Uber autonomous car has accelerated this need a little higher.

So who is AI: Migle Laukyte, in his paper 'Artificial and Autonomous: A Person?' suggests the possibility of granting AI a hybrid personhood, a quasi-legal person that would be recognized as having a bundle of rights and duties as selected from those currently ascribed to natural and legal persons.

### Scope of Intellectual Property Rights Protections

Standing in this position, let's appreciate how much the prevailing IP laws are giving protection to the AI.

Patent: As earlier stated regarding the development of AI, particularly deep machine learning or self-evolving and coding AI and the capacity of generating new inventions itself raises issues. Recently, both Google and Facebook have seen their respective AI systems develop new languages to

perform the assigned tasks, eschewing known human languages in favor of a more efficient means of communication.

**Inventorship in Patent:** So the question arises in case of AI invention who will be the inventor or owner of the patent. And it is necessary to determine the ownership for subsequent activities starting from the licensing to imposing liability.

The current Indian Patent Law generally speaks for the natural person as an inventor. Section 6 of the Patent Act 1970, proclaims that any person can file the patent application-who is either true and first inventor, or is the assignee of the true and first inventor or the legal representative of the so-called true and first inventor.

And the scope of interpretation of 'true and first inventor' given in the Act does-not clearly mentioned the nature of the person.

Therefore, as both the provisions do-not deal with the nature of a person, it cannot be said that the Patent regime bar the legal or semi entity to be an inventor and a possibility remains there to interpret the term broadly and incorporate the legal and semi-legal entities. However, in the long practice there is no such case where the legislature has to bear in mind this kind of complexity. Although even if it subscribes to the broader meaning of the personality, it will contradict the existing ancillary related provision which was crafted according to the natural person's parlance.

However, in case AI is not granted the ownership as the inventor and it is the human who will be considered as an inventor they may be the developer of the software and the hardware; or the data provider to the AI, or the person who reviewed the AI results and recognized that an invention had been made. But this is not the end of complexion, problems arise when the programmer has developed an AI with a particular aim and subsequently the result is not at per then is it sufficient for inventor-ship that the person recognized the significance of the result and recognized it as novel and patentable.

**Person Ordinarily Skilled:** Another problem arises with respect to 'person ordinarily skilled'. According to the construction of the Patent law, this ordinarily skilled person is a hypothetical person who possessed a level of knowledge as to a particular field of the invention but the knowledge is not as per with the inventor. And from this aspect the theory of non-obviousness novelty of an invention is judged.

In the case of AI, the first concern is that who has the ordinary knowledge on this field, although with the rapid development the knowledge is spreading, hence this is becoming a fact from the fiction. But AI can store the data much faster from the human being. Therefore, if AI while possesses the information may become a skilled person in the art, possessing actual knowledge of all known publications, patents, and prior art, transforming the hypothetical construct into reality. Nonetheless, the question arises that whether this will be suit for the expression of 'ordinary

skilled person' because first of all it is not the knowledge but the information that the AI is posing and the quantity of the information shall have no limitation.

Again on another side, if the AI alone is not determined to be the person of ordinary skill in the art, it may also be determined that the hypothetical skilled person should be elevated to a person equipped with an AI system. therefore here also it is not the natural process but elevation has been done which calls upon the problem. Because depending upon the quantity and quality of elevation the novelty, non-obviousness of an invention will be determined. So the consideration of unreasonableness will be there to dilute the doctrines of the patent.

Besides, this question as to the person of ordinary skill in the art implicates the requirement that a patent claim is enabled. To satisfy enablement, a patent's specification must disclose the invention in sufficient detail to enable a person of ordinary skill in the art to make it without undue experimentation. If the AI can predict a result without experimentation using less information than it would take a human being, then significantly less information may be required in a disclosure to enable the claims, compared to today's standard.

Liability issues: Finally, a self-learning machine that develops a precise and quick process could be accused of patent infringement for using protected technology without knowing that it was already patented. The question that arises from all of these situations is, who is liable?

Copyright: As the creation of AI attacks the patent regime, similarly on the over the years it has created autonomous copyrightable works. For instance, the Iamus software program creates musical works that have been performed by the London Symphony Orchestra. Similarly, in 2011, Zackary Scholl created poetry-writing software that produced a poem that was accepted for publication in a literary journal and the editors did not realise that it had been written by a computer program. All of these production has blurred the lines between original works, which are products of a human intellect capable of copyright protection, and mere computer-generated works. As such, the AI landscape is challenging conventional copyright laws in India and internationally and raising several legal implications and ambiguities regarding ownership, authorship, and accountability in AI-generated works.

Authorship & Creativity: According to section 13 of the Copyright Act 1957, the copyright is attributable to the original literary dramatic musical and artistic works and sound recording and cinematographic work.

For the term 'originality' the court has taken approaches to determine the originality, namely, The doctrine of Merger, The sweat of the Brow Doctrine, The modicum of Creativity Doctrine,

And maintaining this line of originality it might be difficult for AI to have a work that attracts copyright protection. And section 17 of the Act

provides that the author of any work is the first owner of the copyright subject to certain circumstances.

The term 'author' means according to section 2(d) of the Act, in case of a literary or dramatic work, the author of the work; a musical work, the composer; an artistic work other than a photograph, the artist; a photograph, the person taking the photograph; a cinematograph film or sound recording, the producer; and any literary, dramatic, musical or artistic work which is computer-generated, the person who causes the work to be created; Section 14 provides certain rights to the owner of the copyright for economic exploitation.

The scope and ambit of the 'author' is determined in the case of *Rupendra Kashyap Vs. Jwan Publishing House Pvt. Ltd.* held that a non-natural person cannot claim the copyright. Similarly, in other judgments the courts have observed that a juristic person is incapable of being the author of any work in which copyright may exist. This is also settled with the Practice and Procedure Manual (2018) issued by Copyright Office, which clearly states that for Copyright, only natural person details must be provided as Author of the work.

Standing at this juncture, it's very doubtful with respect to the position of AI along with its creativity as an author of any work. Because as stated that AI is not the natural person and if the authorship is given to any human then the list again will be the person who programmed or created the AI system, the owners of the AI system or companies and financial investors in the AI sector or the end-user who uses the AI system to generate a certain output?

The lack of clarity and the complexities involved in determining the author of an AI-generated work, in turn, make it difficult and consequently the complexity moves to the subsequent ownership and exploitation of economic rights and assignment and license.

**Infringement:** The wording of section 52 of the Copyright Act mentions it as a person and again the dilemma started as to the scope of the person.

**Moral rights:** The copyright has given the author and the performer apart from the economic rights the right to paternity and integrity as a moral right. But when it comes to AI, it is a question of fact that AI is not a human and it lacks the soul and thus reputation so what will be the consequences if someone violates these moral rights.

### **Conclusion-**

It is the law of nature that law always lags behind the technology. Because the law is the key to shape society, so until something affects the society at large the law remains silent. But when the technology overlaps with society law must maintain a balance while looking for greater benefits to the human. In near future AI will be more up gradated and familiar. Presently, the existing IP regime in India is not sufficient to protect the AI. So there is a need to create separate provision under the existing legislation, separate

legislation will welcome other complex issues. Before creating such a position there has to be a clear position of AI. While the argument on the recognition of AI creations is not yet settled, the topic has continually raised other consequential issues. For example, the ownership of the exclusive rights, whether the developer has the liability or not, even if it has liability then how much it would attract. Apart from the developer will not be the one person behind the creation of AI, the person who is feeding the data, how much he will be liable or how much he will have the rights.

Apart from that there is a risk of committing wrongful acts by the AI itself despite the human hands. Again the question of liability arises. All these questions lead to the only thing that is the personality of the AI and the liability holder of the AI.

There is a need of hour to think about it, to talk more about it, debate about it through the entire world for the sake of public interest. The more it will be debated and highlighted, the efficient will be the way forward.

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