

Artificial Intelligence And Intellectual Property Laws In India: Is It Time For Renaissance?

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Abstract:

This paper is titled 'Artificial Intelligence and Intellectual Property Laws in India. Is it time for renaissance?' In this paper I have endeavoured to correlate the aspects of artificial intelligence and IP laws to understand why works of robots/machines/AI systems are not considered to be eligible for protection under different IP laws in India. Specific focus is laid on the Copyright Act, 1957 and Patents Act, 1970 and certain provisions of these acts that act as a road-block in enabling such protection to AI systems. Also the need for amendments to these enactments is analyzed with reference to recent developments in AI systems. The paper concludes by suggesting the need for a reformation or renaissance in the field of IP laws as well as other legislations to accommodate new forms of technological developments.

I. INTRODUCTION

As kids we all have played video games. We all might have encountered a 'computer' playing against us in many games. As a child, I believed that this 'computer' playing against me was a real person. I always wondered how this 'computer' won all the matches against me. I was beguiled by this intellectual presence that could be felt only in the virtual space. As I grew up, I was enthralled to read about "Artificial Intelligence (AI) and understood that this 'computer' was thriving AI. In this paper I have tried to club two of my greatest interests- Artificial Intelligence and Intellectual Property Laws (IP Laws). I have tried to correlate both these fields and have tried to draw out the shortcomings of present IP laws in protecting the works/inventions of state of the art AI.

II. CONCEPT OF ARTIFICIAL INTELLIGENCE

For science fiction enthusiasts Artificial Intelligence is not a new concept. Nowadays, AI has become more science and less fiction. In this era of rapidly developing technologies AI cannot be considered to be a novel concept, but the developments in this field after the incorporation of sophisticated technologies is remarkable and should be protected efficiently.

AI in simple terms can be defined as the ability of a machine to mimic intelligent behavior. Artificial Intelligence is a branch of computer science that aims to create "intelligent machines".¹ These machines are

¹ Artificial Intelligence and Intellectual Property Rights. Available at <http://www.mondaq.com/india/x/617260/new+technology/Artificial+Intelligence+and+Intellectual+Property+Rights>, Last accessed on 21/08/2017.

programmed to "THINK" like humans and mimic how a person acts. Learning, reasoning and perception are considered as goals of Artificial Intelligence.²

According to John McCarthy, the father of AI, "artificial intelligence is the science and engineering of making intelligent machines, especially intelligent computer programs."³

III. IP LAWS AND ARTIFICIAL INTELLIGENCE

The creativity and knowledge exhibited by AI systems is clearly visible to the world and concerns regarding IP protection has definitely sprouted in the minds of people enforcing rights in relation to intellectual property. Thus, we should explore more deliberative ends of copyright and patent laws in connection with AI systems.

Nowadays there are machines that create highly creative works that would definitely be eligible for copyright protection if they were created by humans. This calls for a re-examination of copyright standards for AI systems all over the world.

Recently a San Francisco Court in *Naruto v Slater*⁴ held that, animals by virtue of the fact that they are not humans lack locus standi under Copyright Act to sue for infringement.⁵

The Bench of Carlos T. Bea and N. Randy Smith, Circuit Judges, and Eduardo C. Robreno, District Judge, while deciding upon the issue whether a monkey can sue for damages and injunctive relief for copyright infringement, held that, the monkey in particular and all animals in general, by virtue of the fact that they are not humans, lack the statutory locus standi under the Copyright Act, even though they have a constitutional standing under Art. III of the United States Constitution.⁶ The Court opined that, since the Copyright Act does not expressly authorise animals to file copyright infringement suits, *Naruto*, the monkey cannot sue for copyright infringement.⁷

With copyright for animals out of the picture, a similar situation has arisen for AI systems. Presently, machine produced works are not registered by many of the copyright offices over the world. A similar issue has arisen in the case of patent laws. If the novelty criteria under patent law is fulfilled by machines, issues relating to ownership of such inventions will definitely arise. Also, can ownership of future inventions be given to the robots/ machines? If AI plagiarises a creation or reproduces an invention, how can infringement and damages be determined? These are some of the debatable issues that arise with respect to AI and IP laws.

² Ibid.

³ What is Artificial Intelligence. Available at <http://www.aisb.org.uk/public-engagement/what-is-ai>.

⁴ *Naruto v Slater*, No. 16- 15469, opinion dated 23-4-2018. <https://blog.scconline.com/post/2018/04/26/animals-by-virtue-of-the-fact-that-they-are-not-humans-lack-locus-standi-under-copyright-act-to-sue-for-copyright-infringement/>.

⁵ Available at <https://blog.scconline.com/post/2018/04/26/animals-by-virtue-of-the-fact-that-they-are-not-humans-lack-locus-standi-under-copyright-act-to-sue-for-copyright-infringement/>.

⁶ Ibid.

⁷ Ibid.

IV. INDIAN IP LAWS

Legislations like the Copyright Act, 1957 and Patents Act, 1970 will have implications to AI systems in India. In this paper certain aspects of the above mentioned acts are sorted out and its impact on AI is discussed.

Certain provisions in these acts often act as road blocks in the development of these AI systems and denies IP protection to the works produced by these machines. It is high time that these enactments are amended to accommodate more advanced and sophisticated technologies.

COPYRIGHT ACT, 1957 AND AI

The sine qua non of copyright is originality. Originality is a pre-condition to copyright protection. A work is granted protection only when it is original i.e. it is not copied from any other work. It is not even necessary that the work should involve novel expression of a thought. All that is required for originality of expression is that the expression should not be copied from another work. Thus the work should be composed by the author independently.

There are two doctrines related to the test of originality of a work. They are:

- i) Sweat of the Brow Doctrine.
- ii) Modicum of Creativity.

According to the Sweat of the Brow Doctrine, an author can get a copyright on his work by employing simple diligence. There is no requirement of substantial creativity or originality. He is entitled to a copyright only on account of efforts and expense put in by him in the creation of such a work.

According to Modicum of Creativity, originality subsists in a work where a sufficient amount of intellectual creativity and judgment has gone into the creation of that work. The degree of creativity need not necessarily be high but a minimum level of creativity should be ensured for copyright protection.

The Indian Courts have adopted the modicum of creativity test in the case of *Eastern Book Company v D.B. Modak*.⁸ After a thorough reading of this doctrine emphasized in the aforementioned judgement, it cannot be said that AI systems cannot achieve modicum of creativity. Thus, the works of these machines can pass the test of originality.

A provision under the Copyright Act, 1957 which poses a challenge to copyright protection to works of AI systems is Section 2 (d) of the act. This section defines the term 'author'. For ownership of any copyrighted work, the person should fall under the ambit of an "author". This is a complex situation for AI because they are generally not regarded as a legal person.

⁸ Eastern Book Company v D.B. Modak, 2008 1 SCC 1.

According to Section 2 (d) “author” means,-

(vi) in relation to any literary, dramatic, musical or artistic work which is computer generated, the person who causes the work to be created;”⁹

The problem under this definition is the phrase ‘the person who causes the work to be created’. For a person to cause a work to be created proximity of the person with the work is important and for the purpose of this act person here means a human or a legal person. Thus, the current Copyright Act is not inclusive of AI systems. Thus, when it comes to works that are created by AI, their authorship would be ambivalent under Indian Copyright Laws.¹⁰

PATENTS ACT, 1970 AND AI

Section 2 (p) of the Patents Act, 1970 defines the term “patentee”.

*“Patentee” means a person for the time being entered on the register as the grantee of proprietor of the patent.*¹¹

Section 2 (t) defines “person interested”.

*“Person interested” includes a person engaged in, or in promoting, research in the same field as that to which the invention relates.*¹²

Section 6 prescribes the list of persons who can apply for a patent.

(a) Any person claiming to be the true and first inventor of the invention.¹³

Section 2 (y) of the act defines the term “true and first inventor”.

*It does not include either the first importer of an invention into India, or a person to whom an invention is first communicated from outside India.*¹⁴

Section 2 (y) does not specifically state that the “*true and first inventor*” should be a human and therefore it can be considered to be providing a scope for the inclusion of works by AI systems.

But since the definitions for terms like “patentee”, “person interested” etc. states that it should be a person (a legal person), intention of the legislature for the general purpose of the act can be understood to be favouring humans and other legal persons.

Thus, it is important that these enactments should be amended in order to suit the requirements of the evolving society and scientific systems.

⁹ Copyright Act, 1957, sec. 2, cl. (d), (vi).

¹⁰ ‘Mounting Artificial Intelligence: Where are we on the time line?’ by Vaishali Singh, para.7. Available at <https://blog.sconline.com/post/2018/06/07/mounting-artificial-intelligence-where-are-we-on-the-timeline/>.

¹¹ Patents Act, 1970, sec. 2, cl. 1 (p).

¹² Patents Act, 1970, sec. 2, cl. 1 (t).

¹³ Patents Act, 1970, sec. 6, cl. 1(a).

¹⁴ Patents Act, 1970, sec. 2, cl. 1 (y).

India is a developing country and it will still remain a developing country if such relevant amendments are not made to enactments in a very dynamic field like intellectual property. These are not far-fetched goals for a country like India.

V. CONCLUSION

Presently we depend on some form of AI on a daily basis. Siri, for example, is a weak AI system used by many to help them even in daily chores. It is a weak AI system because the output from this system is fully controlled by the programmer. We also have strong AI systems like “Creativity Machine” used by the U.S military to design weapons, these are systems which possess innovative thinking and high logical reasoning abilities.

Much complex forms of AI systems that make human life much easier is around the corner and we cannot afford to ignore these developments. AI systems are going to take over the world in the near future. This paradigm shift has become inevitable for the human race.

Recently, Sophia, a social humanoid robot, was a trending topic of discussion on all media platforms. Sophia was developed by Hanson Robotics, a Hong Kong based company. Sophia became the first robot to receive citizenship of any country. Sophia became the citizen of Saudi Arabia. This marked the beginning of an era of robot citizens. The society and the legislations governing it should be well equipped to accommodate such revolutionary changes.

In the near future, the works of AI systems cannot be denied IP protection solely on the basis of the argument that they are not humans or legal persons. To deny them the rights enforceable by any citizen of any country will amount to an infringement of their rights.

Inclusive growth in the future will mean the inclusion of every form of scientific advancements. This means that even robots/machines/AI systems should be part of this growth. A world deployed on AI is a destiny chosen by humans and it will be preferable to be appropriately prepared for this age of science where it is not mere fiction. It is time for a new world renaissance.