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DABUS CASE: ANALYSING THE IMPACT OF GRANTING A PATENT TO AN AI INVENTION

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ABSTRACT

Different industries worldwide have been implementing the advantages arising from the use of Artificial Intelligence. In parallel to the former, the field of Intellectual Property has witnessed a major boost due to the evolving laws in various nations. This evolution is enabling creators to hold exclusive rights for their creations and subsequently exploit the same. The point of deliberation here is whether the fields of Artificial Intelligence and Intellectual Property Rights be merged. The following paper first introduces the growing influence of AI in the field of Intellectual Property Rights, focusing on the impact of the same on Patents. While elaborating on the aforementioned, the focus is also being laid on how different nations based on their existing laws are navigating through the rising applications for patents seeking AI as an inventor. The DABUS case is considered a significant breakthrough while dealing with the question of granting a Patent to an AI invention. Courts in different nations have taken varied approaches while dealing with this matter, which this paper aims to discuss and how the decision granted would have an impact on the economic and legal aspects of the nation as well as in the field of Intellectual Property Rights.

KEYWORDS - Patents, DABUS, Intellectual Property Rights, Artificial Intelligence

INTRODUCTION

The field of Intellectual Property Rights was first given importance during the Paris Convention for the Protection of Intellectual Property in 1883 and the Berne Convention for the Protection of Literary and Artistic Works in 1886. Following this, there have been major changes undertaken and various nations have been implementing different legislations to give legal recognition to the intellectual creations of humans. According to the World Intellectual Property Organisation[1], Intellectual Property is referred to as the creations of the mind such as the literary and artistic

[1] WIPO, https://www.wipo.int/about-ip/en/, (last visited 03rd December, 2023)

works, inventions, symbols and designs and the names and images used in commerce. So any creation that arises out of the human mind being intangible, if adheres to the necessary conditions and showcases a valuable usage for the people or the nation becomes eligible to be granted the right as the Intellectual Property of that particular creator. The World Intellectual Property Organisation is one of the specialised agencies of the United Nations which sets up a global forum for the protection of Intellectual Property and resolving disputes along with the provision for the necessary technical infrastructure to connect the Intellectual Property systems from across the nations[2]. Different Intellectual Properties include Trademarks, Copyrights, Patents and Trade Secrets and each has been established with its uniqueness.

Artificial Intelligence, on the other hand, has passed through its stages of evolution since it was first coined by Alan Turing during the 1950s.[3] Artificial Intelligence can be understood as the capacity of a machine or specifically computers to stimulate information similar to the human mind. While undergoing developments and upgradation over the years, AI has now been known to make its way into numerous fields such as the Healthcare sector, Transportation and even E-commerce. In the past few years, AI has been known to be involved in Intellectual Property Rights. Due to the algorithms and the ability of Machines to keep creating unique articles, the question of whether AI can be termed as an inventor or owner of any Intellectual Property is now an emerging question.

With the changing times, there has been a drastic increase in the number of inventions or processes being patented and this in turn is being witnessed to boost the economies of different nations. For an invention to be patented, it is essential that such invention, process, or manufacturing structure be novel, non-obvious and possess an inventive step. In most nations, a patent is granted for 20 years in addition to which the patentee is required to pay the necessary fee for the same in particular durations. Different nations have different legislations governing aspects related to patents such as the Indian Patent Act of 1970 enacted in India, the Patents Act in the United States of America, European Patent Law which also includes the national legislations, the Strasbourg Convention of 1963 and the European Patent Convention 1973 and finally the Patent Act of 1990 in Australia.

The amalgamation of Artificial Intelligence and Intellectual Property Rights, specifically Patents, was majorly witnessed in the case of DABUS (Device for the Autonomous Bootstrapping of Unified Sentinence)[4] where an application for a Patent had been submitted as the creation was a result of Artificial Intelligence. The Patent application for this invention had been presented before various Patent Offices such as the USPTO (United States Patents & Trademarks Office), EPO (European Patent Office), IPO (Indian Patent Office), the Intellectual Property Office (United Kingdom), the IP Australia and lastly the South African Patent Office, CIPC (Companies and Intellectual Property Commission). The significant development in the process was achieved when the South African Courts became the first to accept DABUS as the inventor in the Patent application.

[2] Byjus, https://byjus.com/free-ias-prep/wipo/, (last visited 03rd December, 2023)

[3] Tableau, https://www.tableau.com/data-insights/ai/history#:~:text=1952%3A%20A%20computer%20scientist%20named,it%20came%20into%20popular%20usage., (last visited on 3rd December, 2023)

[4] Rahul Matthan, The Awkward Grant of Patents to Artificial Intelligence, Livemint, https://www.livemint.com/opinion/columns/the-awkward-grant-of-patents-to-artificial-intelligence-11635267216589.html

THE DABUS CASE

The case revolves around the AI system known as DABUS (Device for the Autonomous Bootstrapping of Unified Sentience) which was developed by Dr. Stephen Thaler. DABUS is an Artificial Intelligence that can develop new ideas on its own and produce creative results.

The case came to light when Dr. Thaler filed patent applications for ideas created by DABUS in several countries (the US, Europe, and the UK), identifying the AI system as the only creator.[5] The new AI paradigm, according to Stephen Thaler, can produce potentially inventive ideas by integrating basic notions into more sophisticated ones, which then trigger a chain of memories that convey the expected outcomes of those ideas. Among these innovations were a warning light for use in an emergency and a food container with interlocking edges. Because patent regulations often require a human inventor to be identified on a patent application, the patent offices found themselves in a difficult situation. The issue arose as to whether current patent laws might recognize an AI system as an inventor.

THE APPROACH TAKEN BY THE US PATENTS & TRADEMARKS OFFICE

The formal basis for the belief that inventors must be human is provided by the US Patent Act. "Whoever invents or discovers any new and useful process, machine, manufacture, composition of matter, or any new and useful improvement thereof, may obtain a patent therefor," reads Section 101 of the Patent Act.[6] The phrase "person shall be entitled" is added in Section 102. Following this interpretation, the US Patents & Trademarks Office rejected the application in the examination stage citing 3 grounds. The first ground emphasised the requirement for the inventor to be human as mentioned under the laws. The AI in that context had failed to adhere to the same. The second ground mentioned the ability to possess mental conception which was present with humans and the AI machines were incapable of processing the same. The last ground mentioned for the rights and liabilities granted to the inventor upon the patent being granted; for the same, an AI was not legally capable of holding the same.

THE APPROACH TAKEN BY THE EUROPEAN PATENT OFFICE

Dr. Thaler filed 2 Patent Applications with the European Patent Office concerning DABUS on the 17th of October and the 7th of November in 2018. The applications were rejected citing noncompliance with Article 90(5) of the European Patent Convention.[7] The European Patent Office further stated that the role indicating the machine as an inventor was violative of Articles 81 and 19(1) of the European Patent Convention because to be an inventor, the person had to be a natural person. Secondly, a statement in the application indicated that the applicant had acquired the right to apply as the employer of DABUS. This statement contradicted the requirements given under Articles

[5] Global Patent Filing, https://www.globalpatentfiling.com/blog/brief-overview-dabus-patent-case, (last visited 03rd December 2023)
[6] Sader Law, https://www.saderlaw.com/news.php?reader=242, (last visited 03rd December 2023)
[7] IP Stars, https://www.ipstars.com/NewsAndAnalysis/The-latest-news-on-the-DABUS-patent-case/Index/7366#:~:text=The%20EPO%20rejected%20the%20two,Thaler%20appealed., (last visited 03rd December 2023)

60(1) and 81 of the European Patent Convention as the machine has no capacity for title succession as it is not a legal person. Hence a machine could neither be an employee nor could transfer such rights.

THE APPROACH TAKEN BY THE UNITED KINGDOM PATENT OFFICE.

Section 7 of the Patents Act 1977 provides a comprehensive code for the determination of patentability. The right to a patent belongs primarily to the inventor (s7(2)(a)). According to section 13 (2) of the Act, the patent applicant must submit a notice identifying the person or persons he considers to be the inventor, and also explain the suitability of applying for a patent, i.e. because they are inventors, they have the right to apply based on the principles of the contract or the rule of law, or because they are followers of justice. The Court of Appeal unanimously stated that according to the law, the inventor must be a human being.[8] The Act defines an inventor as "the actual developer of the invention" (s7(3)) and the judges noted that the grant of a patent gives its owner rights that the machine cannot have or use. Although DABUS was found to have created the invention, this did not mean that the machine was an inventor within the meaning of the Act. The majority of the judges said that there is no legal rule that the possession of a tangible object automatically transfers ownership of the intangible property created by the object, so it cannot authorize it to apply for patents. The Court of Appeal concluded by stating that the Controller was appropriate in finding that the application was deemed to be withdrawn under s13(2) because Dr Thaler did not identify the inventor, as DABUS did not observe and recognize his right to apply for patents, because his ownership of the DABUS-machine was insufficient to give the invention a right.

THE APPROACH TAKEN BY THE INDIAN PATENT OFFICE

Since DABUS is not recognized as a person under Sections 2 and 6 of the Patents Act, 1970, the Chief Patent Officer of India, during the examination report of the Indian patent application, objections were raised and the application was declared inadmissible. Furthermore, the application could not pass the formal and technical inspection. This was supported by many legal precedents. For example, in *V.B.Mohammed Ibrahim v. Alfred Schafranek (AIR 1960 Mys 173)*, the court ruled that a financier or a corporation cannot be the sole claimant of an inventor, and held, among other things, that only a natural person who contributes his skill or knowledge to the advancement of innovation. may require invention under the law. The legislative intent behind the Indian Patent Act as found in the Ayyangar Committee Report of 1959 [2] indicates that inventors are rightly named in a patent application. Whether or not the actual designer owns the innovation, he has a moral right to be credited as the inventor. This builds a reputation and increases the financial value of the inventor. An inventor may waive his ownership of a particular patent by legal agreement/agreement, but he retains his moral right.[9] An examination of the legislative intent and the existing public

[8] UK Courts dismisses DABUS - An AI Machine Cannot be an Inventor; Penningtons, Manches, Cooper, https://www.penningtonslaw.com/news-publications/latest-news/2021/uk-court-dismisses-dabus-an-ai-machine-cannot-be-an-inventor

[9] Avilash Kumbhar, Vibhuti Kaushik; Demystifying the Inventorship Rights of an AI System in India, Fox Mandal, https://www.foxmandal.in/demystifying-the-inventorship-rights-of-an-ai-system-in-india/

policy reveals the desire to protect the rights of the author/natural person who creates intellectual property and can exercise his moral rights. As a result of the above-mentioned factors, it was not possible to grant an AI the status of an inventor according to Indian Patent Law.

THE APPROACH TAKEN BY THE SOUTH AFRICAN PATENT OFFICE (CIPC)

Unlike US Patent Law, which explicitly defines "inventor" as "the individual or, in the case of a joint invention, the individuals who invented or discovered the subject of the invention", South African patent law does not have a literal definition of the "inventor". Section 27(1) of the Patents Act, which specifies who can apply for a patent, instead mentions "the inventor or any other person authorized to apply by him" or both the inventor and any other person authorized to apply for a patent. in South Africa. The South African Patent Act also mentions that any person other than the inventor making or joining in the application for the patent shall provide proof of his authority or title to apply for a patent. Following this wider interpretation, the South African Patent Office marked history by accepting the Patent application filed by Dr. Thaler and listed DABUS as a Patent invention.[10]

CONCLUSION

The question of whether AI inventions should receive patents is complex and evolving. Currently, different jurisdictions have different approaches and criteria for patenting AI-generated inventions. However, the main debate revolves around ownership and creativity. The decision to grant patents for artificial intelligence inventions requires consideration of ethical, legal and practical implications. This requires that the promotion of innovation must be balanced with the need to ensure the fair distribution and availability of inventions intended for the benefit of society. As the technology evolves, discussions between policymakers, legal experts and innovators are likely to shape new frameworks and guidelines for patenting AI-generated inventions. Resolving this question will have profound implications for future innovation, intellectual property rights, and the evolving relationship between human creativity and artificial intelligence.

[10] Chijioke Okorie, Artificial Intelligence Systems as an Inventor in South African Patent Applicaiton, The IPKat, https://ipkitten.blogspot.com/2021/08/artificial-intelligence-system-as.html