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Editor In chief – Assistant Professor Dr. Taru Mishra

Publisher & Founder – Vaibhav Sangam Mishra

Frequency – Quarterly (4 Issue Per year)

ISSN : 2583-6323 (Online)

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CHALLENGES TO IPR: ARTIFICIAL INTELLIGENCE CHATBOT - CHATGPT

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ABSTRACT :

This Article Deals With the Dimension Of Intellectual Property Rights Of Legal Concerns that Have Arisen Due To The New Developments In Artificial Intelligence. The Companies Developing Artificial Intelligence Are Big Players Who Are Capable of Influence Legal Rights (IPR) Given To Individuals For Protecting And Appreciating Their Innovation And Creativity. That Is a Big Challenge in This New Era of Artificial Intelligence (AI) How to Ensure the Implementation and Protection of Those Rights. Then Always There Is a Need to Regulate the Innovation to Ensure That Benefits are Distribute Evenly in Society and Positively Contribute in The Society Instead of Creating Mismanagement in The Administration of The Society. At Same Time Innovation Need Amendment in The Law So That the Innovation Can Also Find a Place in Society and Facilitate Further Development of Society. So, In This Article, the Initial Paragraphs give an Introduction to The Topic. Then Further Paragraphs Explain Why and How the New Developments in AI Arising the Challenges For IPR. Then Articles Address the Challenges and Issues Raised in IPR Arena. The Paragraphs Draw the Attention to What Points Must Be Kept in Mind While Searching for and Resolving the Solution.

INTRODUCTION :

Artificial Intelligence is a common term in the science field now. It comprises two words Artificial and Intelligence. Let's first try to revise the meaning of the two terms separately. The simple meaning of the first word "Artificial" is something that does not occur naturally in nature or is described more rightly than something which is man-made. Then the second word, "Intelligence" is the mental ability or skill of a human being. This intelligence is recognized and appreciated through intellectual property right. When this human intelligence is gained by machine or software is artificial intelligence. ChatGPT, Midjourney, and Stable Diffusion are the most recent example of this. There is no need to mention why ChatGPT is given as an example. ChatGPT will be used in this article to understand how the new development in AI challenges IPR. Again, come back to the point of intelligence. The second main character of this article is intellectual property rights which gives protection to the Creativity of human

intelligence. This article attracts the readers' attention to the challenges to the IPR and issues that should be addressed within time while developing such artificial intelligence. Before this, there is a need to understand why these concerns have arisen and that will be understood by taking the ChatGPT as an example of new AI technology, how it is built, and the mechanism behind its working.

Artificial Intelligence And How It Touch IPR Arena:

ChatGPT is artificial intelligence conversational chatbot that is built on a large language model. It is created by OpenAI Inc., a non-profitable parent company of its profitable subsidiary OpenAI company. The user can ask a question, solutions to debug code, and create a poem, or story on the chatbot which is a big development in the artificial intelligence arena. The big development is because on command or asking, a chatbot is not giving a determined answer instead on the basis of the data bank it is creating a response (which could be plagiarised). It works on conversational dialogue.¹

Then, where is the issue? That could tap into knowing the way it is built and the mechanism behind its working. For that let's start with the name ChatGPT. The ChatGPT name stands for Chat Generative Pre-trained Transformer. The word "Pre-trained" signifies that for creating or generating a response ChatGPT is first trained. How it's trained? From the available data in form of textbooks, informative articles, research articles, journals, and all other different ways of expressions of knowledge available on the internet.² Reinforcement Learning Human Feedback is a second way to train the Chatgpt³. That means the Feedback that Chatgpt gets from the user after the response will also train it and use it as data when it performs next time. Transformers use a specialized algorithm for finding long-range patterns from a sequence of data⁴.

So, for generating or creating the response ChatGPT uses the training and further added data. The first point where legal concern starts arising? It is data used to train ChatGPT. These legal

1 Roger Montii, What is ChatGPT And How Can You Use It?, Search Engine Journal, (December 26, 2022)

<https://www.searchenginejournal.com/what-is-ChatGPT/473664/#close>

2 Aparna Iyer, Behind ChatGPT's Wisdom: 300 Bn Words, 570 GB Data, aim, (December 15, 2022)

<https://analyticsindiamag.com/behind-ChatGPTs-wisdom-300-bn-words-570-gb-data/>

3 Roger Montii, What is ChatGPT And How Can You Use It?, Search Engine Journal, (December 26, 2022)

<https://www.searchenginejournal.com/what-is-ChatGPT/473664/#close>

4 Amol Mavuduru, What are transformers and how can you use them?, Medium, (December 02, 2020)

<https://towardsdatascience.com/what-are-transformers-and-how-can-you-use-them-f7ccd546071a>

concerns have different dimensions and this article deals with intellectual property rights-related dimensions.

Concerns Related to IPR:

These new development create challenges that how to ensure the implementation and protection of IPR. This will be understood by taking the example of ChatGPT. Because the chatbot does not cite the source of knowledge for generation (creating when the input is creative otherwise just a normal instruction just generates content) of its response or content and ultimately it is artificial intelligence so, this intelligence is accessing knowledge from somewhere. Then concern was raised at the very first point that the data used to train the Chatgpt was only freely available data on the internet or some data involving work that was protected by intellectual property right as⁵the source code of the chatbot is not released⁶. So, that is the legal concern raised by the analyst. There is a number of artists, researchers, and academicians' work and other ways of expressing knowledge like images, and mathematics tricks which are protected by intellectual property right specifically under copyright does processes by chatbot for responding to the user? And chatbot is not citing its source. This questions the efficacy of the generated content. Just because it is an innovative legal right can be placed aside? So, for that, there is a need to make Artificial intelligence more credible and authentic.

If GPT generates the same response which is already protected under copyright and the input user used that work then who will be held liable for the infringement of copyright and plagiarism, the chatbot or the user on whose input the response was generated⁷?

Now the challenge in front of the policymaker of the state is to develop a policy for IPR in a new era of technology to ensure the implementation and protection of IPR in society. So,

⁵ Bern Elliot, Why is ChatGPT Making Waves in the AI Market, Gartner, (December 8, 2022) <https://www.gartner.com/en/newsroom/press-releases/2022-12-08-why-is-ChatGPT-making-waves-in-the-ai-market>

Joe McKendrick, Who Ultimately Owns Content Generated by ChatGPT And Other AI Platforms?, Forbes, (December 21, 2022, 12:59 EST) <https://www.forbes.com/sites/joemckendrick/2022/12/21/who-ultimately-owns-content-generated-by-ChatGPT-and-other-ai-platforms/?sh=4e7b9b225423>

⁶ Tiernan Ray, ChatGPT lies about scientific results, needs open-source alternatives, say researchers, ZDNET, (Feb. 15, 2023) <https://www.zdnet.com/article/ChatGPT-lies-about-scientific-results-needs-open-source-alternatives-say-researchers/>

⁷ European Commission, (March 07, 2023) https://intellectual-property-helpdesk.ec.europa.eu/news-events/news/intellectual-property-ChatGPT-2023-02-20_en

Kerry Jackson, ChatGPT and IP: Exploring the Potential Issues, BRANDIT, (January 26, 2023) <https://brandit.com/ChatGPT-and-ip-exploring-the-potential-issues/>

society would have the vision to adapt the development and the developer also have a direction for further development or addition in the new development so that it could also be governed by the law in society. The path which would be enlightened by the objective, behind why the IPR was recognized, will be expected to be followed.

There is a term called “social function” which is the hidden element in any legal rule. This makes to observe the rights that any individual gets from the legal rule in contrast to the rights comparatively have equal importance and to the collective right of society. In the same way, Intellectual property rights should be observed and implemented in the legal framework of society.⁸ There is a social contract between the inventor and society behind intellectual property right.⁹ The primary objective behind recognizing the IPR was to protect the human intellect and creativity, which is the individual’s right. This individual right is always seen in a comparison of public interest. What are these public interests? Public interests are the invention that does not exploit society by creating a monopoly and there should opportunity for competition.

Now, what is the point behind this discussion? The new development in AI raised the question of who will own the write on the work generated by Artificial intelligence: the owner of the Artificial Intelligence, the user on whose input the content is generated, or the Artificial Intelligence itself. This question is situated in the center of this development. The first option is the owner of Artificial intelligence. The owner can hold the right to Artificial intelligence but not work generated by Artificial intelligence. This is so because doing so the whole objective behind the Intellectual property right will defeat. The owner neither gives any creative input to generate the work nor the database used by the Artificial intelligence to generate the work is belongs to the owner. The third option is Artificial intelligence itself. This will also defeat the objective behind Intellectual property Rights. Another perspective, even if the ownership right is given to the Artificial intelligence de facto it will own by the owner of the Artificial intelligence. So, the last option is the user on whose input the work generated and

⁸ Christophe Geiger, The Social Function of Intellectual Property Rights, or How Ethics can Influence the Shape and Use of IP Law, ResearchGate, (March 2013)

<https://www.researchgate.net/publication/254965496> The Social Function of Intellectual Property Rights or How Ethics can Influence the Shape and Use of IP Law

⁹ Christophe Geiger, The Social Function of Intellectual Property Rights, or How Ethics can Influence the Shape and Use of IP Law, ResearchGate, (March 2013)

<https://www.researchgate.net/publication/254965496> The Social Function of Intellectual Property Rights or How Ethics can Influence the Shape and Use of IP Law

if the input is really creative with proper instructions, then will say the work is created and should get the ownership right on the work.

Now here the question arises to what extent the input is really creative that the work generated is not just the random collection and sequence of data but the user's input made that effort for assembling the data in such a manner that work is not generated but created with the help of Artificial Intelligence.

States Stands on IPR Issues:

In the USA

Now, what is the stance of the states on this question, in the USA the stance is clear that ownership of creativity and invention will be granted to human beings? AI-generated work without any human intervention will not be recognized.¹⁰

The United States Ninth Circuit Court of Appeals in *Naruto v. Slater* case ratio decidendi is "U.S Copyright office will refuse to register a claim if it determines that a human being did not create work"¹¹ and "office further added that it will exclude works produced by the machining process that operates randomly or automatically without any creative input or intervention from a human author". Therefore, products created by Artificial Intelligence are not subject to copyright registration.¹²

In DABUS case, the U.S Patent and Trademark Office rejected the DABUS application on the grounds that federal law consistently refers to inventors as natural persons.¹³ Although creation made with the help of AI in the U.S. is recognized and can be protected under IPR question renders to what extent the assistance of AI will make the creation non-human creation.¹⁴

In European Union :

In European Union also, the European Patent Office rejected the patent application of DABUS on similar grounds that "an inventor designated in the application has to be a human being and not the machine."¹⁵

¹⁰ Ryan E. Long, AI CREATIONS: LEGALLY PROTECTED?, The Center for Internet and Society (CIS), (April 20, 2021 at 2:48 pm) <https://cyberlaw.stanford.edu/blog/2021/04/ai-creations-legally-protected>

¹¹ *Id.* at 5.

¹² Ryan E. Long, AI CREATIONS: LEGALLY PROTECTED?, The Center for Internet and Society (CIS), (April 20, 2021 at 2:48 pm) <https://cyberlaw.stanford.edu/blog/2021/04/ai-creations-legally-protected>

¹³ Ryan E. Long, *supra* note 10, at 5.

¹⁴ Ryan E. Long, AI CREATIONS: LEGALLY PROTECTED?, The Center for Internet and Society (CIS), (April 20, 2021 at 2:48 pm) <https://cyberlaw.stanford.edu/blog/2021/04/ai-creations-legally-protected>

¹⁵ Ryan E. Long, AI CREATIONS: LEGALLY PROTECTED?, The Center for Internet and Society (CIS), (April 20, 2021 at 2:48 pm) <https://cyberlaw.stanford.edu/blog/2021/04/ai-creations-legally-protected>

Then the European Parliament passed a resolution based on the report on intellectual property rights for the development of artificial intelligence technologies which conclude that only a natural person can be listed as the inventor of a copyright or patent in the EU.¹⁶

In India :

In India the stand is similar. In 2019 the Delhi HC in Navigators Logistics Ltd. V. Kashif Qureshi & Ors rejected the copyright claim. Court gave observations that “no copyright can subsist in the absence of usage of any skill, judgment, and labor in a compilation” and further added that the “author of literary work must be a natural person and not an artificial person. The owner of a copyright can be an artificial person, but is incapable of being an author of any literary work in which a copyright may subsist.”¹⁷

Even in the case of Artificial Intelligence RAGHAV, the Indian Copyright Office rejected the application of sole authorship to RAGHAV of the painting titled “Suryast”. Then the second application was accepted in addition to the name of the owner, Sahni, and AI as co-author. Mr. Ankit Sahni owns this App.¹⁸

Thus, a Clear opinion on this grey area needs to be developed yet.

Future perspective:

This new development needs the direction and vision of the legal system so, that it can be molded according to the need of society and without encroaching and infringing the legal rights. The development should not create chaos or uncertainty in the working of society from either economic or social perspective. This should be ensured by the Government of states. The government of States, legal experts, and other stakeholders need to come together and address the challenges “timely”. Timely because technology will develop at its pace and for enjoying that development there is a need for a legal framework. The legal system exists in society so,

¹⁶ Ryan E. Long, AI CREATIONS: LEGALLY PROTECTED?, The Center for Internet and Society (CIS), (April 20, 2021 at 2:48 pm) <https://cyberlaw.stanford.edu/blog/2021/04/ai-creations-legally-protected>

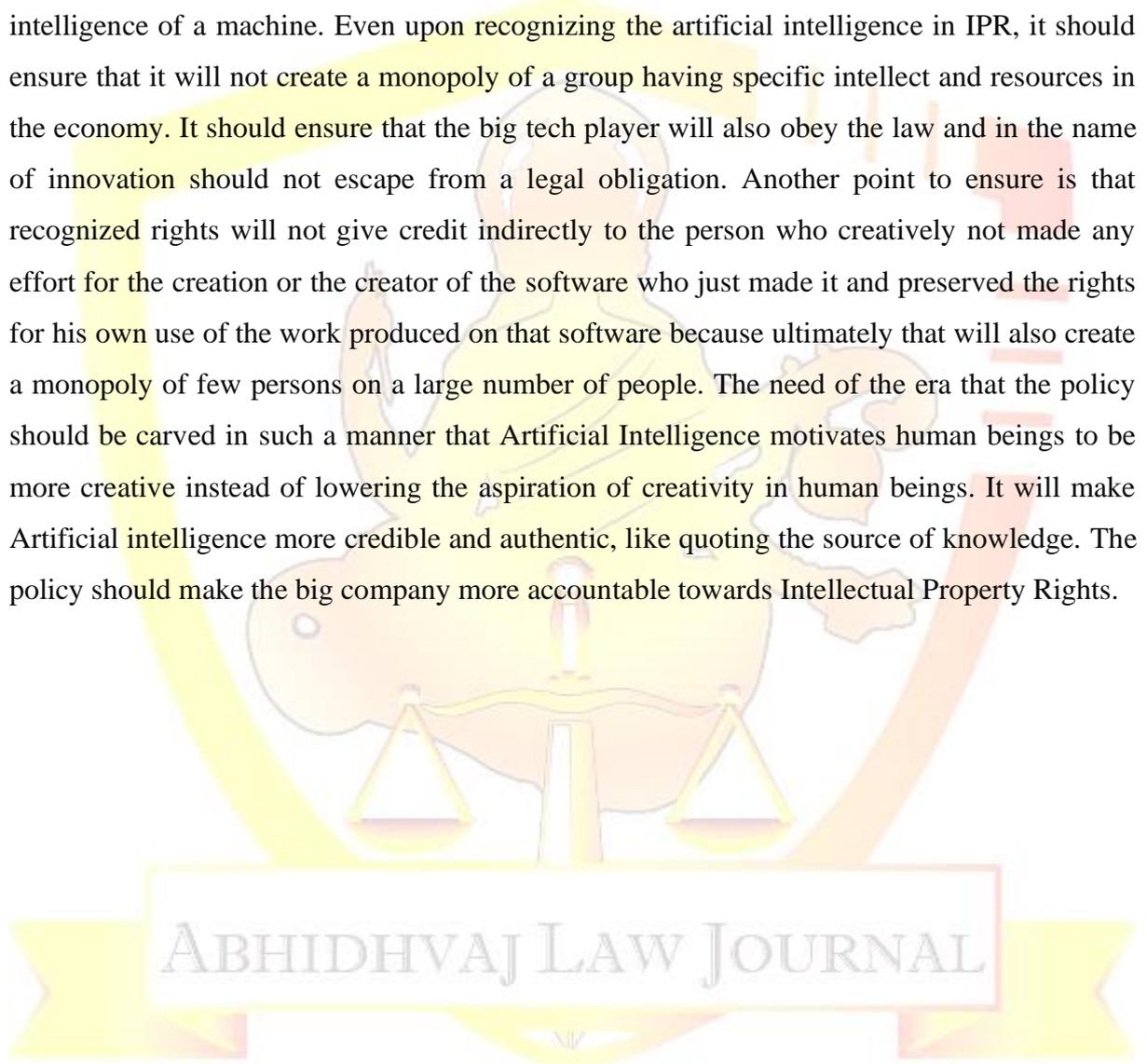
¹⁷ Anushka Verma, Rajalakshmi R, Copyright authorship to artificial intelligence: Who owns it?, Lakshmikumaran & Sridharan attorneys, (May 17, 2022) <https://www.lakshmisri.com/insights/articles/copyright-authorship-to-artificial-intelligence-who-owns-it/> GameChanger Law Advisor, <https://gamechangerlaw.com/cases-that-shaped-copyright-law-in-2018-case-1-navigators-logistics-ltd-v-kashif-qureshi-ors/> (March 07, 2023)

¹⁸ Sukanya Sarkar, Exclusive: India recognises AI as co-author of copyrighted artwork, Managing IP, (August 05, 2021) <https://www.managingip.com/article/2a5czmpwixyj23wyqct1c/exclusive-india-recognises-ai-as-co-author-of-copyrighted-artwork>

Team Lexcampus, India recognises AI as author of a copyright work, Lex campus, (August 11, 2021) <https://www.lexcampus.in/india-recognises-ai-as-author-of-a-copyrighted-work/>

so there will be regulation and administration to ensure that the society runs smoothly, adopt new things systematically and every individual grows at the same pace with the development of society. This AI development would become part of the Future in every aspect of the life of human beings.

So, while resolving the issue it is also expected that the objective of IPR should be alive. The intellect of human beings should always be appreciated in society in comparison to the intelligence of a machine. Even upon recognizing the artificial intelligence in IPR, it should ensure that it will not create a monopoly of a group having specific intellect and resources in the economy. It should ensure that the big tech player will also obey the law and in the name of innovation should not escape from a legal obligation. Another point to ensure is that recognized rights will not give credit indirectly to the person who creatively not made any effort for the creation or the creator of the software who just made it and preserved the rights for his own use of the work produced on that software because ultimately that will also create a monopoly of few persons on a large number of people. The need of the era that the policy should be carved in such a manner that Artificial Intelligence motivates human beings to be more creative instead of lowering the aspiration of creativity in human beings. It will make Artificial intelligence more credible and authentic, like quoting the source of knowledge. The policy should make the big company more accountable towards Intellectual Property Rights.



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