

THE FUTURE OF IP LAW IN THE AGE OF AI: A COMPARATIVE ANALYSIS

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INTRODUCTION

Artificial Intelligence (AI) in today's world represents the pinnacle of development. AI has done everything from accelerating data analysis to revolutionizing research and development. It has transformed various industries to their core, improving them in ways that no one would ever imagine. AI platforms like Sora can generate a fully edited video just from a simple sentence, and IBM's Watson can analyse data with no boundaries. Furthermore, tools like DALL-E and Deep Dream can generate such amazing pieces of art that would take years to make. Recently, the trend of Ghibli art just took the world by storm, wherein ChatGPT was able to mimic the art made by a company from 1985 in just a few minutes. These are just a few examples of what AI has achieved in the modern world, but mind that AI is still in its developing phase and still not yet reached its full potential.

However, a number of difficulties have arisen as a result of this quick expansion, particularly regarding IPR. An AI can generate, analyze and process content, but the question arises, who owns this content? Whether the content generated by an AI is considered to be plagiarized? What if an AI tool unknowingly infringes a patent or uses a copyrighted item? Then, who would bear the consequences thereof? Traditional IP laws do not hold the answer to any of these questions. Thus, this leaves a very delicate grey area when it comes to the dynamics of IPR. As AI continues to evolve, challenges regarding conventional definitions of creativity and ownership need to be reconsidered.

CURRENT PREDICAMENT OF AI

This has been a question of great dilemma for various countries all around the world. There are various challenges brought forward by the rise of AI, such as "Who owns the invention created by an AI?" It could be the human who gave the command to the AI, or the human or company who created the AI or the AI itself, depending on the circumstances of the situation. The next question appears to be who holds the liability of an AI for any infringement? The list of questions goes on and on, and there are no particular answers to them. To answer the

aforementioned question, let us examine the status of prominent countries in regards to AI in the domain of IPR.

- **Status Of the United Kingdom**

The United Kingdom holds a special stance as it is one of the few countries that has accepted the presence of AI in its laws. The Copyright, Designs and Patents Act, 1988 (CDPA) deals with intellectual property rights in the UK. According to Section 9 (3) of the CDPA, 1988 states that:

“In the case of a literary, dramatic, musical or artistic work which is computer-generated, the author shall be taken to be the person by whom the arrangements necessary for the creation of the work are undertaken”

The legislation of the UK primarily focuses on the persons or groups of persons who facilitated in making of such a product. It primarily focuses on “arrangements necessary”, which means that any effort made by a person or group of persons that enables the creation of such work through a computer or digital medium. In the case of *Nova Productions Ltd v Mazooma Games Ltd & Others*¹, it was explained that even though certain part of Mr. Jones’s was computer generated still he was considered to be author of the work because he had made “arrangements necessary” for the development of the game.

Further in *Express Newspapers v Liverpool Daily Post*², that a computer cannot be an original author rather, it is the person who writes the code. Before, the status of originality was taken on a lighter side in the UK, but now it is more strictly interpreted such as in the High Court in the case of *THJ Systems Ltd v Sheridan*³, elucidated that an invention must be an author’s intellectual creation.

Finally, in the landmark DABUS case, *L Thaler v. Comptroller General of Patents*⁴, *Design and Trade Marks*, the Apex Court of the UK held that an invention can only be made by a natural person in accordance with originality under the CDPA, 1988. Furthermore, an AI (herein referring to DABUS) is not considered to be a person.

In the very recent case of *Getty Images v. Stability AI*⁵, the paradigm “arrangements

¹ *Nova Productions Ltd v Mazooma Games Ltd & Others* [2007] EWCA Civ 219

² *Express Newspapers v Liverpool Daily Post* [1985] 3 All ER 680

³ *THJ Systems Ltd v Sheridan* [2023] EWCA Civ 1354

⁴ *L Thaler v. Comptroller General of Patents, Design and Trade Marks* [2020] EWHC 2412 (Pat)

⁵ *Getty Images v. Stability AI* [2025] EWHC 38 (Ch)

necessary” is again tested to determine the role of authorship and infringement. The outcome of this is likely to shape the prospect of content creation, especially regarding whether protection can be granted to an AI’s invention and who (if anyone) is responsible when those outputs infringe existing rights. Getty Images claimed that Stability AI’s Stable Diffusion was trained on various images, which included multiple copyrighted images of Getty Images. The UK High Court has already rejected the early contentions of Stability AI, and the case has gone to trial. This case would be crucial in determining the current prominent issues, like the practice of using protected inventions for AI training and replication by an AI tool.

- **Status Of The United States Of America**

In the United States of America, intellectual property rights are conferred under Titles 35 and 17 of the U.S. Code. The U.S. has more of a limited stance compared to the UK. Unlike the UK, the USA has no explicit provisions for computer-generated work; rather, it has a more limited view in the given aspect. It does not recognise any AI work under intellectual property until and unless a human association is proved. Section 313.2 of the Compendium of U.S. Copyright Office Practices, Third Edition, asserts that to qualify for authorship, every invention must be created by a human.

In the US Copyright realm, it has been a strong rule that an artificial intelligence cannot be given any copyright. The term ‘author’ is taken in its historical sense, which refers to a human being. According to US laws, nothing besides a human can be attributed or given the power to own a copyright⁶. The same was upheld in the notable case of *Stephen Thaler V. Shira Perlmutter*⁷, in which the United States Court of Appeals upheld that a non-human machine or a creative machine cannot be given the rights of the author.

Concerning patents, the same aforementioned rule of not granting to non-humans is being followed. In the *Stephen Thaler case*, the court of appeals directly explained that for a patent to be granted, only a natural person can be granted authorship. In pursuance of the same, the term ‘individual’ given in the Patent Act denotes a human being, and an AI cannot be considered as an inventor. The only inventions that can be patented are those created by humans with AI assistance.

But US courts are being flooded with litigation due to artificial intelligence. In cases like *Ziff*

⁶ *Naruto v. Slater*, No. 16-15469 (9th Cir. 2018)

⁷ *Stephen Thaler V. Shira Perlmutter* No. 23-5233.

*Davis, Inc. et al v. OpenAI, Inc. et al*⁸ and *Advance Local Media LLC et al v. Cohere Inc*⁹, the petitioners are alleging that AI developers have used a vast amount of data, including but not limited to articles, images and headlines, to train their large language models. Also, such AIs are producing content very closely related to such original work, which is violating the rights of the copyright holder. In the case of *Daily News LP et al v. Microsoft Corporation et al*¹⁰, wherein multiple local newspapers alleged that the LLMS have memorized tens of thousands of their articles for its training process without any authorization. In *Alter v. OpenAI Inc.*¹¹, they have also given the same grounds for suing these giants. In *Tremblay v. OpenAI, Inc.*¹², LLMs are accused of using various books titled Sandman Slime and Ararat for training their models. Furthermore, multiple cases have been filed against AI companies for violating the Digital Millennium Copyright Act, such as *Raw Story Media, Inc. v. OpenAI Inc*¹³. Even google is being sued because its AI tool Gemini has transcribed multiple YouTube videos without the prior permission of their creators¹⁴.

This ongoing wave of litigation clearly shows the need for clear legislation in the realm of artificial intelligence. The world is moving in the forward direction with high pace, and AI is going to be a very essential part of the modern world. It is very clear from these ongoing litigations that the intellectual property landscape of the US will undergo drastic changes due to such forthcoming cases.

- **Status Of India**

India also lies in the group of countries that are facing this artificial intelligence turmoil. The following regulations oversee India's intellectual property framework:

- The Patents Act, 1970,
- The Trade Marks Act, 1999,
- The Copyright Act, 1957,
- The Designs Act, 2000

⁸ *Ziff Davis, Inc. et al v. OpenAI, Inc. et al* 1:25-cv-00501

⁹ *Advance Local Media LLC et al v. Cohere Inc* 1:25-cv-01305

¹⁰ *Daily News LP et al v. Microsoft Corporation et al* 1:24-cv-03285

¹¹ *Alter v. OpenAI Inc.* 1:23-cv-10211

¹² *Tremblay v. OpenAI, Inc.* 3:23-cv-03223

¹³ *Raw Story Media, Inc. v. OpenAI Inc* 1:24-cv-01514

¹⁴ *Millette v. Google LLC* 5:24-cv-04708

All of the above Acts play a distinctive role in each of their areas, but are ill-equipped when dealing with the prospects of artificial intelligence. None of the above Acts precisely talks about the implications of an AI, let alone recognising it. The Ministry of Commerce and Industry, in their notification dated 09 February 2024, clearly stated that intellectual property provides exclusive rights to the owners who are legal persons for a set duration. There has been no direct contention of artificial intelligence in any of the mainstream statutes of India.

The Patents Act, 1970 requires an invention to be novel, inventive step and capable of industrial application. The difficult question arises now if an AI model trains on already available content, thus, its output is based on already available material. According to Section 2(ja) of the Patent Act, 1970, explains that an inventive step requires an advancement in comparison to the current status of such knowledge. It requires invention to be non-obvious to the person who is skilled in such art. Moreover, Section 6 requires an inventor to be the true and first inventor. Therefore, any invention created by an artificial intelligence does not come under the ambit of inventive step, which in turn becomes non-patentable in India.

The DABUS patent in India was also opposed on similar grounds of Sections 2 and 6 of the Patents Act, 1970. The reliance was placed on *Mohammed Ibrahim v. Alfred Schafrank*¹⁵ wherein the court stated that only a natural person who has given actual and valuable contribution in the form of skill and knowledge can claim ownership. Correspondingly, in *Som Prakash v. Union of India*¹⁶, the Apex Court of India held that an individual is a person whom the law considers to have personality. This personality can be extended to a legal entity, which can be attributed with rights and duties. But an AI has no power under Indian laws to be considered as an entity.

In the case of the Copyright Act, 1957, section 2(d)(vi) clearly states that, regarding a work created by or generated by a computer, the author would be the person who causes it to be created. Then Section 51 states that a copyright can be infringed by “any person.” Based on earlier analysis, it can be assumed that the person does not include any type of AI. This can be seen in the issue of RAGHAV AI. In 2020, the copyright office of India granted a copyright to co-owners, one of whom was a natural person and the other an AI. However, after a year, the office issued a withdrawal notice and asked the human author to prove the legal status of such AI, but the co-owner failed to demonstrate the human element in this AI, resulting in the

¹⁵ *Mohammed Ibrahim v. Alfred Schafrank AIR 1960 Mysore 173*

¹⁶ *Som Prakash v. Union of India (1981) 1 SCC 449*

application's rejection. A patent application for the RAGHAV AI was filed in the US and was also rejected, citing that there is no human authorship involved.

Similarly, to copyright, both the Trade Marks Act, 1999, and the Designs Act, 2000 do not recognise AI as a viable creator. They explicitly state in their relevant sections that only a “person” [2 (j) of the Designs Act, 2000 and 2(x) of the Trade Marks Act, 1999] can apply under these statutes and the definition of person is taken in reference to the General Clause Act, 1897. Under this definition, a person includes a natural person, corporation or legal entity, but not any type of AI. Again, similar to previous statutes, these are also unable to deal with the development in AI.

India is also facing multiple ongoing suits relating to artificial intelligence. The AI bout in India prominently began in *ANI Media Pvt Ltd v. Open AI Inc & Anr*¹⁷. In which the news agency ANI claimed that OpenAI misused their copyrighted content in training their model. In early January of 2025, more than 20 major digital publishers, such as Hindustan Times, Indian Express, DNPA, etc., came together and filed an intervention application stating that OpenAI used the content available on their websites without any proper procedures and permissions. Further, it is been hinted that the music giants of India, such as T-series, Sony, etc., are also in line to join this lawsuit, citing inappropriate use of their music to train LLMS. The biggest concern in India is the absence of suitable laws that are capable of resolving such situations. It is high time for India to adopt the new regime of IPR, as it has become the need of the hour.

- **Status of Germany**

The primary German laws of intellectual property include the German Act on Utility Models, German Copyright Act (GCA), German Patent Act, German Act on Trademarks and Signs (TMA), and the German Design Act. Germany also has had a similar surge of suits, similar to the USA, such as the case of *GEMA v Suno Inc.* filed on January 21, 2025, GEMA alleges that by just quick prompts, the respondent system makes music which is very similar to GEMA's in terms of melody, rhythm and harmony. Similarly, in *GEMA v. OpenAI*¹⁸, the respondent is being sued for using lyrics of German authors lacking a proper license or permission. Another instance came in *Robert Kneschke v LAION e.V.*,¹⁹ wherein LAION is accused of infringing

¹⁷ *ANI Media Pvt Ltd v. Open AI Inc & Anr CS COMM 1028/2024*

¹⁸ *GEMA v. OpenAI 42 O 14139/24*

¹⁹ *Case No. 310 Of 227/23*

the copyrighted images of the photographer Robert Kneschke for making the LAION 5B dataset, which is available for free of cost over the internet.

PRIMARY ISSUES:

We have seen the current status of the IPR regime in prominent countries. But as we can notice, all of these countries are somewhat facing similar issues in this aspect. Some of these issues are as follows:

1. Rapid Development of Artificial Intelligence:

According to Forbes, the global annual development of artificial intelligence is expected to reach 1811.8 billion dollars by 2030. India is anticipated to reach the market size of 3935.5 billion dollars by 2028. Additionally, it has the possibility of adding 500 billion dollars to the country's GDP by 2025. We have AI tools ChatGPT, ClaudeAI etc. which can create content in a matter of seconds, AI's like Sora can create videos with such simple prompts as well as thousands of other large LLMS working in every sector. Such astonishing development requires supervision and regulations in order to get the best out of such developments.

2. Lack of Proper Ownership:

This has been one of the most pressing issues of the present time. Most countries like the UK and, USA do not even consider AI as an entity, they only consider it to be an assisting tool. But in today's world, AI has evolved way above that and plays a crucial part in a country's economy. India, herein, falls quite behind then other countries as it has no acknowledgment of AI in its statutes but faces similar issues of generative AI and LLMs.

3. Large Learning Models (LLMs):

From 2018, one of the biggest suits of IPR came from the LLMs such as the DABUS or OpenAI related suits. Whether it be the US or India, all are facing major controversies due to LLMs as there is no authority to supervise them. These giants like OpenAI and Meta are using protected inventions without any license or permission because they are not facing any kind of repercussions, as the current laws are unable to answer such questions. Most of these are going on continuously without any direction or are dismissed, citing no proper legislation.

4. Data and Privacy Protection:

These AI models extract data from their users and use such data again for training themselves as well as in their inputs. There is no existing system that monitors their activity or how the user data is being used by these models. This creates a big blind spot in how user data is being collected, stored, or exploited by AI models and clearly shows a lack of transparency.

5. No Appropriate Legislation:

There are various aspects of an AI, such as transfer, liability, buying, selling etc. These facets require a comprehensive structure of laws, in order to solve various issues arising out of them. No currently possess a complete legislation for tackling the rise of AI.

6. International Disparity:

Every country has different mechanisms to maintain their intellectual property, but there are none when it comes to AI. In the DABUS case, South Africa granted it a patent but most of the other countries rejected the same. Each country needs to develop its own laws for AI but it would be better to get a comprehensive treaty like PCT in respect of AI for its better implementation and resolve conflicts in a better manner.

SUGGESTIONS:

1. Legal Personality of AI:

Legal Personality or artificial personality or juristic person refers to the entity which, according to law, has the capacity to hold rights and duties. This is one of the most popularly suggested solutions to the artificial intelligence conundrum. The House of Lords established the notion of legal personality in the seminal case of *Salomon v. Salomon*, holding that a corporation is a distinct legal entity. This doctrine continued to develop with time and was later extended to various entities such as dead persons, unborn children, idols, animals and many more.

Granting legal personality to AI would help in managing various domains, such as the accountability, regulation of various and different kinds of AI, as well as liability. It would help to determine the cause in various scenarios such as when a content is plagiarised by an AI tool, an accident cause by autonomous vehicles, content used for training large LLMs etc.

But the criticism of this theory comes due to the lack of conscience in an AI system. Many jurisdictions are very reluctant due to the same which can be seen in cases like DABUS, wherein most of the countries did not grant a patent. The same case thing happened in India in

the case of RAGHAV, and a similar stance can be seen taken by the US in the case of *Naruto v. Slater*. AI lacks intent or any type of understanding, therefore it cannot be held legally or morally liable like humans.

To solve this dilemma, the solution could be giving an AI a limited personality, i.e. creating such a type of distinct entity where the liability of an AI is co-owned by either its creator or the person using such AI, or both. These artificial constructs possess legal personality but would exist for a narrow and defined purpose and with a degree of human accountability. A similar stance was seen in the concept of “electronic personhood” given by the European Parliament in its report titled “Artificial Intelligence and Civil Liability” in 2017. This method would strike a balance between the traditional intellectual property laws and the requirements of the modern world.

2. Special Legislation for LLMs:

A special legislation in respect to LLMs is the utmost requirement at the present time. A specific provision with legislation for developers to disclose the data used for training, disclose any type of protected content and further allow any inventor or author to opt out of such training module. This legislation may be based on industry-based approach as well as contain a proper structure for penalties and liabilities for each type of infringement.

3. Compulsory Registration:

There should be a system for a web-based registration for any AI based application to launch its application in that specific country. This registration would disclose the various characteristics such as the application, operations, and data required for training. Furthermore, it can contain a risk assessment similar to Environmental Impact Assessment (EIA), in which if an AI has a wide impact, then such would be given more liability and accountability.

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5. Common International Treaty:

There are many international treaties such as the Berne Convention, Paris Convention, TRIPS Agreement etc. which are responsible for the implementation of IPR at the international level. Similarly, a new international treaty can be put forward for AI in IPR because most of the issues faced by various countries are of a similar nature. As there are currently no domestic laws to deal with this matter, an international framework could act as a guiding light for all the countries and simultaneously would create basic norms in this field. Further, an international dispute resolution mechanism can also be created under WIPO for effective and faster resolution of conflicts.

CONCLUSION:

The rapid progression of artificial intelligence presents a precedent setting challenge to the existing intellectual property framework. The traditional notions of authorship are being challenged as AI tools produce inventions that surpass human capabilities. The status of AI in intellectual property remains uncertain, as many countries like the UK have acknowledged the presence of AI, but others like India or the USA are still emphasizing the old notions of human need in an invention.

The current surge of litigation against the top AI giants like OpenAI and Stability AI is another example of how our current laws are insufficient to face these new challenges. Thus, the true promise of AI will only be realized when our legal systems embrace its potential while protecting the essence of human creativity.