

---

## INTELLECTUAL PROPERTY PROTECTION FOR ARTIFICIAL INTELLIGENCE

---

**AUTHOR** – SIDDHI GOVIND LIKHMANI, LAW STUDENT AT ILS LAW COLLEGE, PUNE

**BEST CITATION** – SIDDHI GOVIND LIKHMANI, INTELLECTUAL PROPERTY PROTECTION FOR ARTIFICIAL INTELLIGENCE, *ILE INTELLECTUAL PROPERTY AND CORPORATE LAW REVIEW*, 4 (1) OF 2025, PG. 41-45, APIS – 3920 – 0008 | ISSN – 2583–6153.

---

### INTRODUCTION

---

In the arena of IP law, one of the main areas of development is the relationship between artificial intelligence (AI) and IPRs. It appears that after much, if selective, debate, it is becoming more and more relevant in practice due to the burgeoning AI market, a growing body of case law, and legislative and international organizations (like WIPO and EPO) pursuing policy changes<sup>49</sup>.

Symbols, names, images, designs, and other works of art that are produced by the mind and are legally protected are all considered forms of intellectual property. But using AI to create and use IP also brings up a host of moral and legal issues, including data protection, ownership, patentability, and copyright infringement. In particular, in domains like facial recognition and predictive policing, there are worries regarding the possibility of prejudice and discrimination in AI systems. In many industries, artificial intelligence (AI) is a game-changer that is redefining how humans work, communicate, and use technology.

---

<sup>49</sup> Peter Georg Picht and Thouvenin, F. (2023). AI and IP: Theory to Policy and Back Again – Policy and Research Recommendations at the Intersection of Artificial Intelligence and Intellectual Property. *International Review of Intellectual Property and Competition Law*, 54. doi:<https://doi.org/10.1007/s40319-023-01344-5>.

### AI AND IP – OWNERSHIP ISSUES

The developments of AI technology is taking place very fast and resulting into challenges, especially in the field of IPRs<sup>50</sup>. Similar worries raise questions about how intellectual property rights (IPRs) should be applied to govern the advancement and usage of AI systems and ensure that these processes are carried out in an impartial and equal manner. When AI advances and becomes more integrated into our daily lives, it is imperative to assess how existing intellectual property rights (IPR) laws apply to it and to develop new legal frameworks tailored to address the unique issues these technologies pose.

Sustaining the idea of a "freedom to operate," or FTO, without interventions or infringement of the intellectual property rights of third parties and safeguarding investments in AI R&D – are the two main business goals that give rise to AI IP issues. Companies that use artificial intelligence in their product or service offerings should find out how expansive the IP landscape is in order to avoid being exposed to unfavorable claims from third parties that might put them in danger. Furthermore, companies' concerns about safeguarding their investments in the creation of AI IP are growing<sup>51</sup>.

The large field of computer science known as artificial intelligence (AI) includes the development of intelligent machines that are well versed to perform tasks that usually call for human intellect. Many facets of our lives, related to the creation, administration, and use of IP, could be completely transformed by AI. Symbols, names, images, designs, and other works of art that are produced by the mind and are legally protected are referred to as intellectual property<sup>52</sup>.

The creation, management and protection of IPs are being revolutionized by AI. Ownership is one of the major problems that arises when AI is used to create IP. Usually, human creators or inventors are granted ownership under traditional intellectual property regimes. The ownership issue is becoming more complicated, though, as AI is used more and more. Novel and nonobvious inventions can be produced with the support of AI, but issue of ownership arises that who should be facilitated with credit<sup>53</sup>.

Artificial Intelligence creations are not brought under the ambit of current legal frameworks, which leaves open questions about whether AI should be regarded as a creator and should ownership go to the entity controlling or owning the AI system. A human being must be an inventor; an artificial intelligence (AI) system cannot hold this position, according to the European Patent Office (EPO). While acknowledging that investor should be human only, the USPTO has not taken the cognisance of the matter of inventions produced by artificial intelligence (AI)<sup>54</sup>.

According to some legal experts that we need to adopt new legal frameworks are necessary because the existing ones are ill-suited to manage complexity of inventions produced by AI. The context of copyright law raises similar questions. It is possible to create literary, musical, and artistic works of authorship using AI. In terms of Copyright law, a work must have to be created by human being so it will be eligible for copyright protection<sup>55</sup>. The concerned related to AI created IPRs, ownership is a complex matter that comes up with

<sup>50</sup> Istrate, D. (2024). *Artificial intelligence and intellectual property* | IP STARS. [online] Ipstars.com. Available at: <https://www.ipstars.com/NewsAndAnalysis/Artificial-intelligence-and-intellectual-property/Index/9795> [Accessed 21 Aug. 2024].

<sup>51</sup> De cOsta III, F. (2017). *Intellectual Property Protection for Artificial Intelligence*. [online] Finnegan | Leading Intellectual Property Law Firm. Available at: <https://www.finnegan.com/en/insights/articles/intellectual-property-protection-for-artificial-intelligence.html> [Accessed 21 Aug. 2024].

<sup>52</sup> Giriya, Aish, 'What is AI (Artificial Intelligence)?' (GeeksforGeeks. 4 March 2023) accessed 4 May 2023.

<sup>53</sup> Appel, G., Neelbauer, J. and Schweidel, D.A. (2023). *Generative AI Has an Intellectual Property Problem*. [online] Harvard Business Review. Available at: <https://hbr.org/2023/04/generative-ai-has-an-intellectual-property-problem> [Accessed 21 Aug. 2024].

<sup>54</sup> Frackiewicz, M, 'The ethics of ai-generated content: Navigating the world of Deepfakes' (TS2 SPACE, 3 April 2023) accessed 16th August 2024.

<sup>55</sup> Caldwell, K. (2024). Council Post: AI And Intellectual Property: Who Owns It, And What Does This Mean For The Future? *Forbes*. [online] 12 Aug. Available at: <https://www.forbes.com/councils/forbesbusinesscouncil/2023/10/31/ai-and-intellectual-property-who-owns-it-and-what-does-this-mean-for-the-future/> [Accessed 21 Aug. 2024].

significant legal and policy issues. On the question who should be regarded as inventor or creator, the existing legal framework fails to deal with the same and ill – prepared to handle complexity of the AI-generated IP. To solve these problems, guarantee that AI's benefits are realized, and safeguard IP owners' rights, new legal frameworks are required<sup>56</sup>.

#### CHALLENGES WITH RECOGNISING AI AS CREATOR AND GRANTING THEM IP RIGHTS

Innovation in the artificial intelligence space is encouraged by intellectual property rights. And how should society value human creativity and creation now that AI is in the race? Because AI is developing, what changes to the existing intellectual property laws are required? First, the answer will depend on how much autonomy AI entities have and how well they can mimic the economic behavior of actual humans. Still, the issue is very complex from an economic perspective.

When an AI participates in the creative process, secondly, who should be given credit for originating a specific invention or work of art? That is to say, is it possible for an AI to sketch a picture or create a completely new product right off the bat? To have rights and responsibilities, one must possess legal personality<sup>57</sup>.

It usually has intellectual property rights if AI is the inventor and cannot claim ownership or credit for it. Assigning credit for a specific invention or creative work may not always be simple.

In the end, human creativity and artificial intelligence function in distinct ways. Now, the rules are the same for everyone, no matter who or what made them, which might work against humans. AI technology can also be used by government organizations to help issue intellectual property rights and by the holders of those rights to more effectively monitor for

infringements and defend their rights.<sup>58</sup> Picture and pattern recognition software, for example, and automatic translation tools are increasingly being used in the management of applications at intellectual property offices around the world. If an AI system produces a patentable result that the computer scientist did not intend, there is no reason to consider the computer scientist an inventor over the output produced by the AI system. This reasoning has a fundamental flaw in that no such machine learning systems are known to exist today or in the near to medium future. AI systems instead function in the areas that their inventors intended, even though the system's output is unexpected in the context of the patent law regime.<sup>59</sup>

#### THE IDEA PERSISTING TO COPYRIGHT PROTECTION FOR A WORK AND THE INCEPTION OF COPYRIGHT LAW

"In his insightful and thought-provoking essay on copyright, the late Matthew Arnold stated that an author does not naturally own any property that he produces, but he also does not naturally own any property that he may acquire."<sup>60</sup>

Individuals have always had a strong innate desire to possess what they have created, which has been a fundamental aspect of human nature since the beginning of human evolution. A primary psychological explanation for why people are driven to create is the desire to enjoy the fruits of their labor. Insofar as it may be consistent with society's overall interests, one of the main motivations for human integration has been the ability to use the legal system's approval and support to follow our instincts<sup>61</sup>.

As with everyone else, the author wants to be able to turn his creations to accounts and enjoy the financial gain that comes with having them all to himself. An important factor that fuels a person's aspire to create something creative is

<sup>56</sup> Ray, P. P., 'ChatGPT: A comprehensive review on background, applications, key challenges, bias, ethics, limitations and future scope.' (2023) 3 ITCPS 121.

<sup>57</sup> Duncan MacRae, Patent Application Names AI as Inventor, Digit (Aug. 2, 2019), <https://www.digit.fyi/patentapplication-names-ai-as-inventor/>

<sup>58</sup> The Artificial Inventor Project, (June 30, 2019), [https://www.wipo.int/wipo\\_magazine/en/2019/06/article\\_0002.html](https://www.wipo.int/wipo_magazine/en/2019/06/article_0002.html)

<sup>59</sup> Ryan Abbot, The Reasonable Robot: Artificial Intelligence and the L 55 (2020).

<sup>60</sup> Brander Matthews, 'The Evolution of Copyright, Political Science Quarterly' (Vol. 5, No. 4; Dec., 1890), pp. 583-602. accessed on 17th August 2024.

<sup>61</sup> Id.

the realization of their abilities, labor, and judgment as well as the benefits that follow<sup>62</sup>. Even if it is done at his own risk, it provides the writer with immense satisfaction and does not incite enmity by yielding enormous and excessive benefits. This may have been a primary factor in the development of newly created works' copyright protection<sup>63</sup>.

---

#### **COPYRIGHT LAWS ARE INEFFECTIVE IN DETERRING ARTIFICIAL INTELLIGENCE.**

---

In 2015, a cryptocurrency known as bitcoins was given to an AI -based artist known as "Random Darknet Shopper" (RDS) each week. With this money, RDS bought a Hungarian passport to be displayed in a Swiss art gallery, as well as ecstasy. Following a social media tip, the authorities seized the "art" and the artist after learning of the unlawful item exhibition<sup>64</sup>.

The question of whether we can hold a non-living thing accountable for any wrongdoing it may have committed is brought up by this instance of an AI engaging in illegal activity. An analysis of the social contract From an evolutionary perspective, the theory of the social contract elucidated how an appropriate framework evolved to transform society from a primitive to a sophisticated state. That agreement, which defined everyone's rights and obligations, was between the ruled and their rulers and concerned humans<sup>65</sup>.

A)The social contract itself states that non-human entities are not and should never be allowed to coexist with our artificially created society. In order to further prevent any kind of infringement on someone's rights, it has been always for "for the people and by the people" theory that given a shot to bring balance between people's rights and duties.

B) The Rights and balance of Duty: Theory given by Hohfeld on Jural relationship: Rights and Duties always works simultaneously<sup>66</sup>. As long as someone is entitled to something, they also owe it to others to respect those rights and vice versa. That legal correlation, though, is thought to be the fundamental foundation of human society, and it is impossible for an AI to uphold. Even after the granting the copyright protection, AI can't perform the same tasks as a human, even after granting it copyright protection for their result. This implies that even though it's possible, we won't be able to hold an AI accountable for infringing on an author's copyright<sup>67</sup>.

C) In relation to AI as an Author, Hart's Concept of Punishment and Responsibility Five elements are necessary to define punishment, according to H.L.A. Hart. First, there needs to be suffering or other unfavorable outcomes. The violation of legal regulations must be the reason for it. (3) The defendant for the offense must be an actual or suspected offender. (4) Humans other than the perpetrator must knowingly administer it. (5) A legal system that the offense is committed against must establish the authority that will enforce and administer it<sup>68</sup>.

The first element alone makes it obvious that applying this idea to AI would be pointless because AI cannot understand the concept of punishment. Its use as a deterrent for breaking any laws pertaining to intellectual property rights infringement is not possible. According to Peter Asaro, punishment cannot possibly work as a deterrent if moral agents are not able to recognize the similarities in the potential choices and the actions as well and punished the moral agents for their wrong choices and actions<sup>69</sup>.

---

<sup>62</sup> Longan, M. (2023). A System Out of Balance: A Critical Analysis of Philosophical Justifications for Copyright Law Through the Lenz of Users' Rights. *University of Michigan Journal of Law Reform*, (56.3), pp.779–779. doi:<https://doi.org/10.36646/mjlr.56.3.system>.

<sup>63</sup> Palmer, T.G., Are Patents and Copyrights Morally Justified? The Philosophy of Copyrights and Ideal Objects, 13 Harv. J.L. & Pub. Pol'y 817, 823 (1990).

<sup>64</sup> Ryan Abbott, 'The Reasonable Robot: Artificial Intelligence and the Law', (first published 2020, Cambridge University Press) 111-112.

<sup>65</sup> M. Lessnoff, 'Social Contract Theory', (first published 1990, Oxford: Basil Blackwell

---

<sup>66</sup> Arthur L. Corbin, 'Jural Relations and Their Classification' [1921] *The Yale Law Journal*, vol. 30, no. 3, pp. 226–38 accessed on 12th august 2022.

<sup>67</sup> schroff, simone (2021). *Validate User*. [online] academic.oup.com. Available at: <https://academic.oup.com/jiplp/article/16/11/1262/6444323> [Accessed 19 Aug. 2024].

<sup>68</sup> H.L.A. Hart, 'Punishment and Responsibility', (Oxford publication, 4–5, 2nd ed., 2008)

<sup>69</sup> Peter Asaro, 'A Body to Kick, but Still No Soul to Damn: Legal Perspectives on Robotics' in *Robot Ethics: The Ethical and Social Implications Of Robotics*, (2012) CAMBRIDGE, pp. 169–186 <

The role of AI is not engineered as to recognise and response towards criminal law penalty so that it makes them unbreakable. Because Artificial Intelligence does not have emotions of sensible towards any kind restrictions related to criminal law, punishing Artificial Intelligence will not serve as a general deterrent to other AI-based systems. For the same Mark Lemley and Brian Casey have dubbed the "robot death penalty" may or may not be applied to punishments that involve the destruction of artificial intelligence<sup>70</sup>.

That means we can state with certainty that an AI cannot be punished. It lacks the capacity for deliberation and mental states necessary for guilt, agency and the ability to act voluntarily, consciousness and the capacity to be properly punished<sup>71</sup>.

---

#### THE WAY NON-LIVING OBJECTS ARE USED TO CREATE ART IN INDIA

---

As per the sec 2(d) of the Copyright Act, 1957<sup>72</sup>, states that an individual who creates any computer-generated literary, artistic work, music and dramatic work is known as the author. In India the first criteria used to determine a work's copyright is a "modicum of creativity"<sup>73</sup>. It is very uncertain to answer that any work created by AI is copyrightable. Will an AI-generated piece of art be protected by a copyright if it is able to satisfy the "modicum of creativity" requirement? Considering that artificial intelligence is typically thought to lack legal personality, this could be problematic<sup>74</sup>. When a person or legal entity is not the true creator or contributor of a piece of art, the existing legal provision under the Copyright Act, 1957 may not be able to handle or prescribe for

the creation of such works. Indian copyright laws would therefore make it difficult to determine who is the author of works produced by AI<sup>75</sup>.

An AI tool named 'RAGHAV' was firstly recognised in India in 2021 and the office was registered for the first time in India, Artificial Intelligence Painting App<sup>76</sup>. The art visualizers and artificially intelligent graphics that RAGHAV can produce are strong. Though there is uncertainty in the law and its case law, it is expected that the registration will be contested in court<sup>77</sup>.

---

#### CONCLUSION

---

Encouragement innovation and creativity as well as economic growth depend on the conservation of IPRs. A balanced approach towards intellectual property rights (IPR) protection is necessary in the context of artificial intelligence (AI) to rescue from undue restrictions on innovation and knowledge dissemination. Securing the financial benefit of inventions for AI technology creators is one way that strong IPR conservation can promote widespread research on AI. However, without an enforcement mechanism in place might weaken legal safeguards and will be an obstruction for new creation by AI. The existing legal framework is unsuitable for sustaining an inventorship concept that includes AI systems, and none of the relevant jurisdictions currently allow AI systems to be considered inventors under their respective patent law regimes.

---

<http://urn.kb.se/resolve?urn=urn:nbn:se:umu:diva-74383> > accessed on 19th august 2022.

<sup>70</sup> Mark A. Lemley & Bryan Casey, 'Remedies for Robots' (Stanford Law and Economics Olin Working Paper No. 523, 2018) accessed on 17th august 2022.

<sup>71</sup> Supra note 37 at 118.

<sup>72</sup> Section 2(d) of Copyright Act, 1957.

<sup>73</sup> Eastern Book Company vs DB Modak (2008) 1 SCC 1; Feist v. Rural Telephone Service Co., 499 U.S. 34

<sup>74</sup> Lata, S. and Siddharth (2021). Sustainable and eco-friendly approach for controlling industrial wastewater quality imparting succour in water-energy nexus system. *Energy Nexus*, 3, p.100020. doi:<https://doi.org/10.1016/j.nexus.2021.100020>.

<sup>75</sup> National Strategy for AI (2018) Niti Ayog, Discussion Paper

<sup>76</sup> Sukanya Sarkar, 'Exclusive: AI co-author secures copyright registration in Canada', (2022) *ManagingIP* accessed on 19th August 2024.

<sup>77</sup> Ishaan K Paranjape, 'The Raghav Issue: Should AI Be Granted Authorship Rights?', (2022).