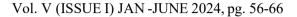


E- Journal of Academic Innovation and Research in Intellectual Property Assets (E-JAIRIPA)





EXPLORING THE STRUCTURE OF MODIFIED JOINT AUTHORSHIP MODEL FOR AI-GENERATED CONTENT

Adil Ameen¹

Abstract

Intellectual Property Law aims to recognize and incentivize the efforts of all the stakeholders involved in the creative process. Under copyright law, the creator of copyrighted work is recognized as the author. Meanwhile, the doctrine of joint authorship recognizes multiple authors for a single creation when their contribution is significant to the creative process.

Authorship attribution is required to confer copyright protection, as it identifies the grantee of rights who would exercise them under such protection. The advent and advancement of AI have raised various legal complexities in conjunction with human contributions. One such concern is the attribution of authorship for AI-generated creative work when granting copyright protection. In this context, AI-generated content refers to creative works produced by humans with the assistance of generative AI. Among the various views on authorship attribution for AI-generated work, some argue that joint authorship should be conferred, granting equal rights to both AI and humans. However, this view has several inherent problems as AI is unable to fit into the existing legal framework. Moreover, granting equal rights to humans and AI is disproportionate, as human intelligence is fundamental to creativity, while AI merely enhances efficiency. Additionally, it undermines the role of human intelligence, which is central to copyright protection.

The use of AI is an integral part of modern society and restricting it could lead to economic and legal consequences. In light of the above discussion, this paper will first examine the challenges of granting joint authorship to AI-generated work, emphasizing the need for an alternative model. It then proposes and explores a modified joint authorship model to provide copyright protection for AI-generated content, ensuring balanced recognition of both AI and human contributions.

¹ 4th Year, B.A.LL.,B (Hons.) Student, Chanakya National Law University, Patna

Keywords: AI-Generated Content, Joint Authorship Model, Modified Authorship Structure, Artificial Intelligence Creativity, Intellectual Property Rights, Collaborative Content Creation

Introduction

"AI Spring" has arrived and is here to stay".2

Artificial intelligence applications are enabling the construction of companion robots to assist overworked caretakers,³ analyze photos to identify potentially malignant cells,⁴ and assist in the prediction of the location and timing of the next major earthquake.⁵ Additionally, AI systems can independently produce literary and artistic works, as well as new content or data that resembles content produced by humans, such as literature, music, or photographs.⁶ AI has been compared with the role played by electricity a century ago.⁷

One type of AI is "Generative Artificial Intelligence." It has been declared "a technological marvel that has ushered in a new era of creativity and innovation".⁸ It refers to the utilization of algorithms and models that empower machines to generate content with limited human intervention independently.⁹ "Generative AI is a constellation of technologies that enable machines to act with higher levels of intelligence and emulate the human capabilities of sense, comprehend, and act".¹⁰ The capacity to learn from experience and upgrade itself accordingly enhances its utility and equates it with human capabilities. Advancement of AI has been taken hand in hand by the businesses to complement their work. The recent case of Jason M. Allen's "Théâtre D'opéra Spatial" winning first place in the digital division of the

² National strategy for artificial intelligence - NITI aayog., pg-13 Available at: https://www.niti.gov.in/sites/default/files/2023-03/National-Strategy-for-Artificial-Intelligence.pdf (last visited on Dec 29, 2023)

³ K Purvis, "Meet Pepper the robot – Southend's newest social care recruit" (The Guardian, 16 October 2017) https://www.theguardian.com/social-care-network/2017/oct/16/pepper-robot-southend-social-care-recruit (last visited on Dec 29, 2023) .

⁴Al-shamasneh, ARM and Obaidellah, UHB, "Artificial intelligence techniques for cancer detection and classification: review study" (2017) 13 Eur Sci J 342 Google Scholar .

⁵ T Fuller and C Metz, "A.I. Is Helping Scientists Predict When and Where the Next Big Earthquake Will Be" (New York Times, 26 October 2018) https://www.nytimes.com/2018/10/26/technology/earthquake-predictions-artificial-intelligence.html (last visited on Dec 29, 2023).

⁶ Irina Buzu, Hacking Creativity – Authorship in the Digital Age, (2021), https://www.internetjustsociety.org/hackingcreativity-authorship-in-the-digital-age (last visited on Dec 29, 2023) 7 Supra note 2 at page 12.

⁸ Mike, 'How Ai Is Revolutionising Product Design?' (Nebulem Product Design,) https://nebulem.com/how-ai-is-revolutionising-product-design/ (last visited on Dec 29, 2023)

⁹ Benjamin, A. India's IP laws need to adapt to ai creativity, Bar and Bench - Indian Legal news. (last visited on Dec 29, 2023) Available at: https://www.barandbench.com/law-firms/view-point/indias-ip-laws-need-to-adapt-to-ai-creativity#:~:text=Generative%20Artificial%20Intelligence%20(AI)%20is,content%20with%20limited%20human%20interve ntion. ((last visited on Dec 29, 2023)

¹⁰ Supra note 2 at page 12.

Colorado State Fair's annual art, competition¹¹ underscores the capability of these AI. It is peculiar for the reason that Jason Allen didn't use a brush or a lump of clay to produce his entry; instead, he used an AI program called Midjourney to transform text lines into incredibly lifelike visuals.¹² Consequently, It is nearly impossible to distinguish AI-generated content from human-generated stuff due to their enhanced quality.

After OpenAI released its ChatGPT system in November 2022, the use of AI-generated language increased significantly, and a novel wave of AI-written content farms is emerging.¹³ Content generated with the help of Artificial intelligence is widespread on social media as well as in news articles.¹⁴ Research indicates that 11.21% of all college projects and papers include information produced by artificial intelligence.¹⁵ As No sphere of life is untouched by the intrusion of AI its regulation becomes pertinent.

AI is increasingly finding its way into different sectors, which avails numerous legal questions relative to ownership, legal responsibility, and regulation of IPR rules. IPR laws are aimed at protection of works of Intellectual property, stimulating the creation of new inventions, giving creators financial and time aid in creating objects. Thus, the interaction between AI and IPR laws is a complex issue with no simple solutions and calls for the reconsideration of the existing legal mechanisms. One of the key challenges in the intersection of AI and IPR laws is determining the ownership of AI-generated works. Traditional copyright laws grant protection to human creators, but when AI systems generate creative works, such as art, music, or literature, with human assistance it becomes unclear who should be considered the author or owner. Currently, in a few instances joint authorship is assigned for AI-generated work with human authors which means AI and humans have equal rights over the work. However, there is not yet a worldwide agreement on who gets to keep the rights to AI-created works' intellectual property. Some argue that the individual or organization that developed and deployed the AI should be the owner, while others suggest that the AI itself should be recognized as the creator. Certain specialists contend that

¹¹ Roose, K. (2022). An A.I.-Generated Picture Won an Art Prize. Artists Aren't Happy. The New York Times. https://www.nytimes.com/2022/09/02/technology/ai-artificial-intelligence-artists.html

¹² Wang, H. (2023) Authorship of artificial intelligence-generated works and possible system improvement in China, SCIRP. Available at: https://www.scirp.org/journal/paperinformation?paperid=125721#ref16 (last visited on Dec 29, 2023)

¹³ Quach, K. (2023) 'new generation' of AI-written content farms on the rise, The Register® - Biting the hand that feeds IT. Available at: https://www.theregister.com/2023/05/02/ai written content farms/ (last visited on Dec 29, 2023).

¹⁴ The impact of AI-generated content on content consumption, AICONTENTFY (2023), https://aicontentfy.com/en/blog/impact-of-ai-generated-content-on-content-consumption (last visited on Dec 29, 2023).

¹⁵ Prevalence of AI-Generated Content in Education, COPYLEAKS, https://copyleaks.com/blog/prevalence-of-aigenerated-content-in-education (last visited on Dec 29, 2023)

¹⁶ Sukanya Sarkar, 'India Recognises Al as Co-author of Copyrighted Artwork' https://www.managingip.com/article/2a5czmpwixyj23wyqct1c/exclusive-india-recognises-ai-as-co-author-of-copyrighted-artwork%3e (last visited 7 December 2023).

acknowledging autonomous AI as a proprietor could foster creativity while guaranteeing human accountability is maintained. But it can pave the way for legal disputes.

The RAGHAV Artificial Intelligence Painting App is one example of an artificial intelligence tool that the copyright office has acknowledged as a co-author of a copyright-protected artistic work, in certain cases for the first time. There exists suspicion about how can they be equated with human co-authors and have the same rights as another human co-author.

The Intellectual Property Policy Think Tank, NASSCOM, has proposed that AI be recognized as a patent inventor but the same cannot be recognized for patent protection since the legislation requires inventors to be real beings. According to India's Draft National Policy on AI 2019, AI-generated intellectual property has to have a human author or owner. 17 While some nations have laws that give copyright to those who assist in the creation of AI-generated works, these laws may not be sufficient to handle circumstances in which there are numerous parties and complex AI systems. ¹⁸ AI system operators and designers are not incentivized to treat AI-generated works as public property. 19 Also, the pertinence of suing an AI for infringement holds significance in ascertaining authorship. Notable cases like 'Rupendra Kashyap v. Jiwan Publishing House'²⁰ have brought attention to the need for authorship attribution of AI-generated literature to be made clear. It has been asserted that "re-measuring the limits of the doctrinal elasticity of authorship and shedding new light on the possible entry points where AI may be accommodated into this revisited dehumanized authorial regime". ²¹ In its 161st report, the Parliamentary Standing Committee on Commerce recognizes the necessity of allowing AI authorship and ownership, hoping for "revisiting of IPR legislations and implementing a strong IPR framework."22 It has been acknowledging that authorship attribution in AI-driven creative works is a difficult but important undertaking.²³ Restricting AI in any way will restrict progress while it lacks theoretical or legal grounds²⁴ therefore there is a need for its regulation.

Lack of legal recognition, suspicion about originality and creativity, and concern in case of infringement have made the attribution process of authorship or inventorship to AI-generated work stagnant. The

¹⁷ National strategy for artificial intelligence - NITI aayog. Available at: https://www.niti.gov.in/sites/default/files/2023-03/National-Strategy-for-Artificial-Intelligence.pdf (last visited on Dec 29, 2023)

¹⁸ YuriiBurylo, AI GENERATED WORKS AND COPYRIGHT PROTECTION, ENTREPRENEURSHIP, ECONOMY AND LAW 7 (2022).

¹⁹ *Id*.

^{20 &#}x27;Rupendra Kashyap v. Jiwan Publishing House' 1996 (38) DRJ 81.

²¹ Yang Xiao, Decoding Authorship: Is There Really no Place for an Algorithmic Author Under Copyright Law?, 54 IIC 5 (2023).

²² Department Related Parliamentary Standing Committee On Commerce, Review of the Intellectual Property Rights Regime in India (RS 2021-2022,104 para 8.2.

²³ Gandla Bhargava Sai, Anindya Sircar, AUTHORSHIP ATTRIBUTION IN AI-DRIVEN CREATIVE WORKS: A CHALLENGING BUT NECESSARY TASK 3 (1) DSNLU J. SCI. TECH. L. 1, 29 (2023). 24 *Id*.

advancement of AI cannot be limited and there is a need to recognize this very existing fact and make provision in this regard. "We are both created and created. Why cannot our creations also be created?²⁵ This was a note from Justice Beach of the Australian Federal Court while granting inventorship to AI. Hence need to explore collaborative ownership models that acknowledge AI and human contributions.

We can conclude that to adjust to the IPR framework courts have molded the traditional IP law in such a scenario why not explore an alternative model with modification so that a rational and effective distribution of IP rights can be made? With this objective, this research is limited to exploring the structure of a modified joint authorship model where joint authorship is granted for creative work carried out with the help of AI. In this work, we will explore the possible structure of the model of joint authorship to be granted to the AI-generated work as they do not qualify under existing IPR laws as creators. Alternate models suggested for AI-generated content are the modified joint authorship.

Intellectual Property Rights in AI-Generated Work: International Perspective

The intersection of AI and IP laws is a global phenomenon, and different jurisdictions have approached it differently based on their conception of IP laws and AI.

• United States of America

US IRR regime does not confer authorship to AI. USCO Practises Compendium explained in this regard that "The copyright law aims to protect "the fruits of intellectual labor" that "are founded in the creative powers of the mind Because copyright law is limited to "original intellectual conceptions of the author," the Office will refuse to register a claim if it determines that a human being did not create the work." Computer-generated work without human intervention is not granted copyright protection. While discussing the eligibility of comic books authored with the help of AI the US Copyright Office noted "The term "original" in this context consists of two components: independent creation and sufficient creativity. First, the work must have been independently created by the author. Second, the work must process sufficient creativity. 27"

• United Kingdom

English courts and authorities have shown a liberal approach toward AI-generated works and granted copyright protection to computer-generated work including AI to those who" arrange the creation of

²⁵ Drexl J, Hilty R, Kim D & Slowinski, Peter R, Artificial Intelligence Systems as Inventors? A Position Statement of 7 September 2021 in View of the Evolving Case-Law Worldwide (7 September 2021), Max Planck Institute for Innovation & Competition Research Paper No. 21-20, file:///C:/Users/Dell/Downloads/SSRN-id3919588.pdf.

²⁶US Copyright Offices Practices Compendium (3rd edn, 2021)https://www.copyright.gov/docs/zarya-of-the-dawn.pdf (last visited 7 December 2023) (https://www.copyright.gov/docs/zarya-of-the-dawn.pdf%3e).

work" and copyright protection for 50 years is conferred²⁸ under the Copyright Design and Patents Act (CDPA), 1988.

• India

On the line of English law Indian Copyright Act 1957 also "recognize the author of a computer-generated literary, dramatic, musical or artistic work to be the person who causes the work to be Create" ²⁹ but it requires the author to be a person, which AI-generated work lacks. For artwork titled "Suryast" AI RAGHAV was rejected copyright protection, but when its creator was made coauthor, copyright was granted. ³⁰ Therefore there is a deviation in opinion toward granting coauthorship to AI-generated work.

Why Not Joint Authorship?

The author of a work is considered one who brings that content into existence. It is better defined in the words- "An author is a person who creates, comes up or gives existence to something. If the work was made for hire, the employer or commissioning party is considered the author of the work."³¹

Authorship is the process of determining ownership of creative work for granting rights and fixing liability. The joint authorship work under Indian copyright law is defines as "a work produced by the collaboration of two or more authors in which the contribution of one author is not distinct from the contribution of the other author or authors." Therefore, there can only be true joint ownership in certain situations, such as when two or more parties have contributed in a way that prevents the existence of any identifiable contributions. The term "joint authorship" has not yet been properly defined by Indian courts in the case of Angath Arts Private Limited v. Century Communications Ltd. and Anr³³ noted that the "joint owner of a copyright could not, without the consent of the other joint owner, grant a license or interest in the copyright to a third party. "In the scientific community, people who are directly involved in the planning, execution, or writing of the experiments or the papers that arise from them are usually recognized as authors of journal articles. Nonetheless, several copyright laws stipulate that a joint owner cannot use his right to prevent the commercialization of the work without a valid reason.

The attribution of authorship to works generated by AI is dependent upon the understanding of the term "person" which AI does not qualify as it is not a legal person. But Amendment of the copyright act,

²⁸ Section 12, Copyright, Design, and Patent Act 1988, (United Kingdom).

²⁹ Section 2(d)(vi). The Copyright Act, 1957 (Act No. 14 of 1957).

³⁰ Supra note 16.

³¹ Legal Information Institute. Available at: https://www.law.cornell.edu/wex/author (Accessed:07 December2023).

³² Section 2(z), The Copyright Act, 1957 (Act No. 14 of 1957),

 $^{33\} Angath\ Arts\ Private\ Limited\ v.\ Century\ Communications\ Ltd.\ and\ Anr\ 2008 (3) ARBLR 197 (Bom).$

emphasizes that, in cases involving "computer-generated works," "the author is understood to be the one who makes the arrangements required for their creation."³⁴ This clause makes it very clear that the creator of any AI system's work must be given credit for their creation. It seems that the intellectual property rights to the work generated by an AI system are the person who designed or developed it. The authors of such works as "the person who causes the work to be created."³⁵ Therefore the developer of AI will be enjoying all the benefits as a co-author of AI-generated work.

In the existing notion of joint authorship, all authors have the same rights and share equal benefits unless agreed otherwise. Generated AI operates from the data upon which it has been trained. The process of machine learning trains it by supplying huge data. The contention in favor of granting copyright protection to AI-generated content is based on the transformative nature of these works similar to an artist who takes inspiration from work of multiple works and creates his own. Though this content is not completely original has a transformative nature also the requirement of Originality under copyright differs from that of novelty under patent law. it simply requires that work should be created independently rather than copied from any existing source.³⁶

In R.G. Anand's³⁷ case, SC held that "substantial similarity between two works should be avoided, to the extent that a reasonable spectator, upon viewing both works simultaneously, would not conclude one as a mere copy of the other." In East Book Company & Ors ³⁸ the apex court noted for copyright protection of any work "it must be demonstrated that it is more than just a copy of the original and must contain the author's independent work."

Distributing benefits of creative works under joint authorship relies on an "all-or-nothing model" which requires authors to make similar contributions to creative work.³⁹ Dominant contributor is favored at the expense of secondary authors where the contribution is not equal in creative work.⁴⁰ This is based on the perception that joint work must lead to equal distribution of such work.⁴¹ Later on, the transition has been seen to that of a "proportional contribution model" where ownership is distributed proportionally to their contribution to creative work.⁴³ The "all-or-nothing" collaboration paradigm, which bases shared authorship eligibility on authors contributing similarly to a work, is the main tenet of the joint authorship

³⁴ Section 2(d)(vi). The Copyright Act, 1957 (Act No. 14 of 1957).

³⁵ Section 2(d)(vi). THE COPYRIGHT ACT, 1957 (Act No. 14 of 1957),

³⁶ L. Batlin Son, Inc. v. Snyder, 536 F.2d 486 (2d Cir. 1976)

³⁷ R.G. Anand v.M/S. Delux Films & Ors(1978)SC 1613.

³⁸ East Book Company & Ors v. D.B. Modak & Anr (2004) SC 6472.

³⁹ Benjamin E. Jaffe, Rebutting the Equality Principle: Adapting the Co-Tenancy Law Model to Enhance the Remedies Available to Joint Copyright Owners, 32 CARDOZO L. REV. 1549, 1550 (2011)

⁴⁰ Childress v. Taylor, 945 F.2d 500, 508-09 (2d Cir. 1991); Thomson v. Larson, 147 F.3d 195, 200 (2d Cir. 1998).

⁴¹ Abraham Bell & Gideon Parchomovsky, Copyright Trust, 100 CORNELL L. REV. 1015, 1016(2014)

⁴² Martin v. Kogan [2019] EWCA (Civ) 1645, [53] (Eng.).

⁴³ *Id*.

doctrine. However, The English legal system started to acknowledge the unequal contributions of coauthors at the start of the twenty-first century, and in response, it awarded them according to the proportional contributions of each author to the work. However, "both models ignore other types of contributions, such as those of ideas, participation in mass collaborative models, and the contribution of experts' technical knowledge and the contribution of experts' technical knowledge."⁴⁴ Disregarding these types of contributions may "reduce the incentive of creators to collaborate—one of the central challenges of the joint authorship doctrine."⁴⁵

In the context of AI-generated work, the existing notion of joint authorship is based on an "all-or-nothing model" that grants equal rights to both AI and Human authors. This poses a very logical question as Generated AI cannot act without human intervention likewise humans might not have achieved that quality of work without the use of AI. Therefore, humans must not be credited for the contribution of AI and vice versa. However, it is worth noticing that AI cannot be considered a tool only as it plays a greater role than that. But still, humans play a significant role as it converts ideas into expression and AI merely helps to bring ideas into creativity. Then why equal rights to both entities?

Because AI lacks human attribution and there is suspicion about its creativity and innovation which forms the basis of IP rights giving them equal rights as human co-authors defeats logic. Also, in such conditions where AI is co-author then who can exercise all IP rights, If the developer of AI is given this right, they will enjoy without any effort for the work of another person which defeats the purpose of intellectual protection. The length of protection for the combined work is another distinctive feature of the joint authorship doctrine. Because work protection lasts for a specific amount of time after the author's death, the validity of jointly created works may last longer than that of a solo creation. Granting Joint authorship to AI-generated content also raises questions related to the duration of Protection

Model of Modified Joint Authorship

This model is based on the "proportional contribution model" of distributing the benefits of creative work among joint authors. The author identified three groups of joint authorship in an alternate model of modified joint authorship for the proper distribution rights under joint authorship in the case of AI-generated work. They are Primary, Secondary, and De-minimus authors.⁴⁶

⁴⁴ Tehila Rozencwaig-Feldman, The Author and the Other: Reexamining the Doctrine of Joint Authorship in Copyright Law, 32 Fordham Intell. Prop. Media & Ent. L.J. 172, 173(2021). Available at: https://ir.lawnet.fordham.edu/iplj/vol32/iss1/3 (last visited on Dec 29, 2023).

⁴⁵ Id.

⁴⁶ Supra note 42 at page 178.

The primary joint author, sometimes referred to as the "typical author," is the first person in the hierarchy and is granted ownership and authority over the joint work. He will enjoy relatively greater benefits than other categories of authors as they are the main contributors to creative work. The "idea" which is a requirement of copyright protection belongs to the primary author. The creative work would not have come into existence except for the contribution of the Primary author his contribution forms the basis of the work. Secondary joint authors are those who, although having a lower contribution than other authors, still make a significant and copyrightable contribution to a joint work. The secondary author is entitled to rights under the proposed model in proportion to the extent of their contribution. The de minimis contributions are not protected by copyright. This could involve offering feedback, organizing and editing information incorporated into production, or giving technological and scientific understanding. They will appear at the bottom of the hierarchy. "If courts deny rights to authors for uncopyrightable contributions, then according to the proposed model, such contributions will still grant credit or, in rare cases, minor rights to the de minimis contributor." ⁴⁷

The notion of a "secondary author" might be invoked in discussions related to collaborative inventions involving both humans and artificial intelligence where AI should be considered secondary author and humans as primary. One is considered a secondary author due to their significant contribution to the creative process. The modified joint authorship model acknowledges that while AI contributes significantly to the creative process, it lacks the essential attributes of human experience, intuition, and intentionality that have historically defined authorship. Consequently, the legal recognition of AI as a secondary author with limited rights reflects a pragmatic approach to accommodate technological advancements without undermining the foundations of intellectual property law. In this modified model, AI assumes the role of a secondary author, a designation that underscores its substantial contributions to the creative process. Unlike primary authors, which are typically human creators, secondary authorship recognizes the instrumental role of AI in shaping the final output. The limited rights granted to AI as a secondary author may encompass restrictions on ownership, transferability, and certain exclusive rights traditionally associated with primary authors. This deliberate circumscription ensures that ultimate control and responsibility remain firmly anchored in the human domain. It also addresses potential legal, ethical, and societal implications arising from unfettered AI authorship.

Alternatively, in this model, it is proposed to assign AI-only status of de minimis contributors Where it has been used only for organizing and editing the creative work. This means that where the contribution of AI is of only assisting nature such contribution can be effectively recognized by granting dee minimus

contributor in which its contribution is only acknowledged rather than granting IP rights to it. It is "fair and just" to recognize such contributions that are not copyrightable as "fostering creativity is best served by rewarding all parties who work together to unite the idea with form, and that copyright protection should extend both to the contributor of ideas and the contributor who fixed the idea into the joint work" Additionally, the protection time can be suitably shortened because AI-generated works have a significantly lower protection value than traditional works created by normal individuals.⁴⁸

Impact of Modification

This collaborative model while capable of answering questions due to the accommodation of AI in the IPR regime. By granting dominant right over the creative work to Humans and recognizing AI as merely secondary author it properly reflects the contribution of authors in proportion to their contribution as the "idea" which is of prime importance belongs to Humans while AI merely helps to bring the idea into expression. This modification can be crucial for determining ownership of creative work and attributing contributions appropriately to humans and AI. As this model gains traction, ongoing discussions within legal, technological, and ethical spheres become imperative. Collaborative efforts are needed to refine and adapt legal frameworks, ensuring they remain responsive to the evolving landscape of AI-generated creativity. Striking the right balance between fostering innovation and safeguarding human values will be central to the continued development of a coherent and equitable intellectual property regime in the age of artificial intelligence. By offering AI developers rewards and legal protection, granting limited intellectual property rights (IPR) to AI-generated works might encourage innovation. "The policy positions adopted about the attribution of copyright to AI-generated works will go to the heart of the social purpose for which the copyright system exists". 49 It can facilitate standards for AI-generated works by fostering accountability and quality control. "More individuals will be willing to use AI software when their rights and interests are completely safeguarded, increasing revenue for the software developing team and drawing in more funding, creating a positive loop."50

⁴⁸ Supra note 6.

⁴⁹ Legal issues with AI-generated content: Copyright and chatgpt (no date) Legal Developments. Available at: https://www.legal500.com/developments/thought-leadership/legal-issues-with-ai-generated-content-copyright-and-chatgpt/ (last visited on Dec 29, 2023).

⁵⁰ Supra note 11.

Conclusion & Suggestion

Starting from the regulation of humans, law in today's world regulates creations of humans too i.e. corporations, and next in queue is Artificial intelligence. The impact of Artificial Intelligence on human life seems to be similar to that of the Discovery of controlled fire by humans which forms the basis for a further revolution in human life. The role of AI in every sphere of human life is growing significantly in every sphere of life from health to infrastructure and the legal system is no exception. While the issues raised by present technology may be addressed and resolved by the current patent law system, the widespread growth of AI technologies that followed may call for the use of novel strategies.

The evolution of AI presents both challenges and opportunities in defining ownership, authorship, and inventiveness within the context of intellectual property law. To ascertain who is the copyright holder and who has the authority to assert IP rights over the work, authorship attribution is required. All this makes authorship attribution in AI-driven creative works essential, especially in the context of Copyright. The modified joint authorship model discussed acknowledges the collaborative nature of AI creation, recognizing the input of both human actors and autonomous algorithms. The concept of a secondary inventor may be used to acknowledge the role of AI systems in contributing to the inventive and authorship process "When applying this idea to works made by AI, it is important to think about the creative choices that were made and the skill and judgment that were used." 51

Modified models of joint authorship are therefore investigated, with a view to distinguishing appropriately between the automata and their operators while maintaining clarity in legal doctrine and human accountability. In the coming-of-age era that AI has opened by redefining creativity and innovation, it is certain how Law fraternity finds itself compelled to change. We need a actually complex approach that will combine traditional product management principles with AI-specific considerations. Thus, the discussion of various aspects of intellectual property rights connected with AI-generated content exposes the need to build the progressive and flexible legal environment. By adopting the approach of a variation of joint authorship and inventorship, it is possible to create a positive framework for the coexistence of human and artificial intelligence so that the outcomes of their collaborative work can be produced as efficiently as possible while all the involved parties stay protected and fairly rewarded to the maximum extent possible.
