

Before the

United States Patent and Trademark Office

In the Matter of
Inventorship Guidance for AI-Assisted Inventions

Docket No. PTO-P-2023-0043

**Comments of
The Computer & Communications Industry Association**

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About the Commenters

CCIA is a not-for-profit membership organization for a wide range of companies in the computer, internet, information technology, and telecommunications industries, represented by their senior executives. Created over five decades ago, CCIA promotes open markets, open systems, open networks, and full, fair, and open competition. CCIA serves as the eyes, ears, and voice of the world’s leading providers of technology products and services in Washington, Brussels, and London. CCIA’s members are pioneering figures in the field of artificial intelligence (“AI”) innovation. Most modern AI technology utilizes hardware manufactured by CCIA member companies, and much of it relies on AI technology released as open-source contributions by CCIA members. Because of this, CCIA members have a significant interest in ensuring the U.S. patent system supports sound AI innovation policies.

Argument

CCIA commented on the PTO’s prior “Request for Comments Regarding Artificial Intelligence and Inventorship,”¹ and appreciates the guidance that the PTO has provided thus far. In particular, we appreciate the Office clarifying that AI can under no circumstances be listed as an inventor. This guidance aligns with the traditional incentive basis for awarding patents to innovators, and our belief that anything lacking a “significant contribution”² from a human must be an obvious reconstruction of prior art. We also thank you for clarifying the requirements for disclosure under 37 C.F.R. § 1.56 and how, under 37 C.F.R. § 1.105, additional disclosure can be requested.

AI is evolving at a rapid, unpredictable rate. It is already being widely adopted by inventors. For example, in the biotechnology and pharmaceutical industries AI is being heralded as the “future” of drug discovery.³ Further guidance will be vital to ensuring a streamlined patent system, while maintaining the system’s foundational incentives to innovate.

We write this follow-up comment to suggest further clarifications and measures that can help ensure a smooth, efficient, and fair patent system as AI continues to evolve. We address concerns that the Patent Office could be flooded with misleading or fraudulent applications that do not disclose material AI involvement⁴ or list human inventors who did not substantially contribute to the claims. We suggest that lessons learned from the PTO’s approach to fraudulent

¹ The Computer & Communications Industry Association & The Public Innovation Project, In the Matter of Request for Comments Regarding Artificial Intelligence and Inventorship, Docket No. PTO–P–2022–0045 (May 15, 2023), <https://www.regulations.gov/comment/PTO-P-2022-0045-0063>.

² Inventorship Guidance for AI-Assisted Inventions, Patent and Trademark Office; Request for Comments, 89 Fed. Reg. 10043, 10047 (Feb. 13, 2024) [hereinafter PTO Guidance] (quoting *Fina Oil & Chem. Co. v. Ewen*, 123 F.3d 1466, 1474 (Fed. Cir. 1997)).

³ *The Future of Biotech: AI-Driven Drug Discovery*, MCKINSEY & CO., <https://www.mckinsey.com/featured-insights/the-next-normal/biotech>.

⁴ “Material” as defined by 37 C.F.R. § 1.56(b); *see also*, PTO Guidance, *supra* note 2.

trademark applications can reduce or mitigate this risk. We also suggest that the PTO should affirmatively request disclosure of material contributions by AI to conception in order to create a more fulsome prosecution record.

We acknowledge that the PTO's guidance must draw a careful line. Clarifying that AI-assisted inventions remain patentable will ensure that inventors are not reluctant to amplify their productivity with AI for fear of losing their patent rights. However, an overly permissive system could flood the Patent Office with redundant, spurious, or fraudulent requests for patents that humans played no meaningful part in inventing.

I. The PTO should create procedures to handle fraudulent patent applications.

In our initial comments, CCIA raised concerns that the use of AI tools in the patent application process could lead to a flood of misleading or even fraudulent applications that list human inventors who did not sufficiently contribute to the listed claims. This could overwhelm the Office and crowd the patent system with meritless patents which would stifle competition and provide little to no societal value. Innovators could be chilled or forced to waste resources on defending or settling meritless litigation. To avoid this problem, we recommend that the PTO clarify measures that might be taken to deter misleading and fraudulent conduct, remove invalid patents, and make it clear that entities who submit fraudulent applications will be subject to penalties.

The PTO has handled surges of questionable applications in the past.⁵ In 2021, the PTO saw a 40+% uptick in trademark applications, the greatest number of applications in its history. Due to the growth of international commerce, foreign government subsidies, and increased business formation, the PTO faced a sharp rise in “fraudulent trademark filings and trademark-related scams,” which prompted the development of new strategies and tactics to protect the “value and legitimacy” of American trademarks.⁶ The PTO can put in place three similar mechanisms for review in this guidance to ensure that American innovation can continue to flourish.

First, conduct random sampling audits. It will be particularly difficult for the Patent Office and for third parties to know when patentees fraudulently list humans as inventors or omit material AI assistance. Novelty is apparent from public prior art and published patent claims. Inventorship is private. As such, it may be challenging for third parties to effectively bring suits and for examiners to know when to request additional information under 37 C.F.R. § 1.105. This would, in part, be addressed through our suggestion regarding affirmative requests for

⁵ *USPTO's Comprehensive Strategy to Fight Trademark Fraud*, U.S. PAT. & TRADEMARK OFFICE (Aug. 18, 2021), <https://www.uspto.gov/blog/director/entry/uspto-s-comprehensive-strategy-to> (“USPTO has experienced a 40+% increase in trademark applications over the past year. . . . [M]any foreign agents are aware of the USPTO rules, yet try to find ways to circumvent them.”).

⁶ *Id.*

disclosure.⁷ But patent fraud can be further prevented by emulating the PTO's approach to trademarks.

The PTO uses random sampling audits through the Post Registration Audit Program⁸ to weed out any fraudulent trademark applications that may pass through the initial application process unnoticed. If combined with enforcement measures, employing a similar audit system for patents may help to detect fraudulent patents and provide additional knowledge to the Office regarding how AI is assisting in inventorship, while simultaneously acting as an additional deterrent from submission. Both would help to mitigate some of the concerns with flooding of the PTO.

Second, establish penalties for attorney and applicant misconduct. Currently, when there is evidence of attorney misconduct in a trademark application, the attorney is referred to the Office of Enrollment and Discipline. Where criminal activity is suspected, the PTO engages with law enforcement authorities. For those suspected of rule violations, the PTO issues show-cause orders requiring them to establish that filings and behaviors are legitimate. Inadequate responses or findings of illegitimate applications are issued final orders for sanctions, including termination of the applications, and blocking of the filer's access to the PTO. The PTO also imposes monetary penalties for filing inaccurate claims-of-use for trademarks.

Due to the Office's heightened reliance on applicants to make good-faith disclosures of AI assistance, the Patent Office could similarly discipline patent attorneys that knowingly submit falsified claims, and bar from future application any individuals or entities that fail to demonstrate that their claims were made in good faith. This is likely to be less critical in the patent context than in the trademark context, given the higher filing fees and the requirement to use an attorney who is registered with the Office in order to file a patent application.

Third, consider an investigatory task force. For trademarks, the PTO created and empowered a special task force of attorneys, analysts, cyber investigators, and IT personnel to investigate submissions that were suspected of violating U.S. rules of practice, representation rules, or the PTO's terms of use. If the PTO detects a concerning pattern, such as through the random audits described above, a similar task force could be created and empowered to investigate patent applications where there is suspicion of false statements as to human or AI contributions to claims. While we believe that a task force is not necessary at this time, it is an available and tested solution should the Office begin to suspect widespread fraud.

⁷ See *infra* Part II.

⁸ See 37 C.F.R. §§ 2.161(b), 7.37(b); see also *Post Registration Audit Program*, U.S. PAT. & TRADEMARK OFFICE, <https://www.uspto.gov/trademarks/maintain/post-registration-audit-program>.

II. *The PTO should explicitly require patentees to disclose material AI assistance.*

In its guidance, the PTO reminds patent applicants that they have “a duty to disclose all known information that is material to patentability,” which includes information that is inconsistent with “a position the applicant takes.”⁹ The PTO suggests that this information would, for example, cover evidence that a named inventor did not sufficiently contribute to an AI-assisted invention. We agree.

However, we believe that relying on 37 C.F.R. § 1.56’s general duty of candor will deny patentees the opportunity to build records in support of good patents and deny third parties effective claims against bad patents. Creating an affirmative request for applicants to disclose material AI involvement will deter bad applications and allow for more effective prosecution and litigation processes. As such, the Office could modify the Application Data Sheet to explicitly require all patent applicants to answer two questions: (1) “Was AI assistance material to the conception of any patented claims?” and (2) “If yes, did at least one human inventor materially contribute to each AI-assisted claims?” This will help examiners understand how AI might have been used in the invention process, and to know whether to ask for further information.

Certainly, there is an implicit requirement for applicants to disclose all material information under § 1.56. This would cover AI assistance when that level of assistance undermines the legitimacy of the inventorship,¹⁰ and we appreciate the PTO’s confirmation of this requirement.

But, requiring affirmative disclosure that AI materially contributed to conception would benefit both patent applicants and third-party competitors. Applicants with truly human-generated inventions, or with inventions where a human materially contributed as well as an AI, could protect themselves from inventorship challenges in the future by explicitly declaring human involvement. If an AI system was used to wholly generate the same invention—and the patent were to face an inventorship challenge on those grounds—a false disclosure on the record that AI tools did not materially contribute to the invention could be the basis for an inequitable conduct claim, helping to deter bad faith conduct.

Conclusion

The PTO’s excellent guidance thus far will greatly aid innovators as they continue to integrate AI into their creative processes. By preparing measures to address fraud, if needed, and by creating affirmative disclosure requirements, the Office can ensure that it has the information and procedures it needs to fully implement its guidance. Through additional clarity, the Office

⁹ PTO Guidance, *supra* note 2, at 10049.

¹⁰ Information is material if there is a “substantial likelihood” that a reasonable examiner would have considered the material important in deciding whether to issue the application as a patent. *See, e.g., Elk Corp. of Dallas v. GAF Bldg. Materials Corp.*, 168 F.3d 28, 31 (Fed. Cir. 1999).

can better deter fraudulent applications, remove ambiguous disclosures, and improve innovation incentives in the United States.