Who Owns What Technology Creates? The Human Authorship Requirement of AI Copyright

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Who is the author when technology holds the pen? In the age of AI-generated works, copyright law is grappling with many questions, including one that seems simple at first blush: where does the human end and the algorithm begin? The answer hinges on a distinction that sounds straightforward but is anything but.

As the use of AI to produce original work rapidly increases across industries, the legal question of who or what qualifies as the "author" of such work carries significant implications for copyright ownership and the protection of intellectual property. Yet this area of the law remains murky. What is clear, however, is that simply prompting AI to generate an output does not qualify for protection. There must be creative input from a human, but the extent of that input is evaluated on a case-by-case basis, which may lead to inconsistent protections, or no protection at all, under the law.

In 2023, the U.S. District Court for the District of Columbia became the first court to specifically address the copyrightability of AI-generated outputs.[1] In *Thaler* v. *Perlmiutter* a computer scientist challenged the Copyright Office's refusal to register an image that was described in his application as "autonomously created by a computer algorithm running on a machine."[2] Affirming the Copyright Office's refusal, the district court, citing a long-standing principle, maintained that "copyright law protects only works of human creation."[3]

The D.C. Circuit Court affirmed the decision.[4] Though the Copyright Act does not expressly define the word "author," the D.C. Circuit Court cited several provisions of the Act in support of the human-authorship requirement.[5] For example, the court reasoned that a machine that is incapable of owning property cannot be an author under the statute.[6] The court also cited the Act's durational framework, which limits copyright protection to the author's lifespan, a construct that has no application to machines. The court pointed to the Act's inheritance and property transfer provisions

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[1] *Thaler v. Perlmutter*, 687 F. Supp. 3d 140, 149–50 (D.D.C. 2023).
[2] *Id.* at 142-143.
[3] *Id*. at 146
[4] *Thaler v. Perlmutter*, 130 F.4th 1039, 1041 (D.C. Cir. 2025).
[5] *Id.* at 1045.
[6] *Id.*

as evidence of the human-author requirement.[7] The Act also protects authors of unpublished works regardless of "nationality or domicile," a concept that has no meaning when applied to machines.[8]

Beyond these markers, the court emphasized that authorship under the Act presupposes intentionality. A "joint work" is defined as one prepared by two or more authors "with the intention that their contributions be merged into inseparable or interdependent parts of a unitary whole." The court reasoned that machines lack minds and do not form intentions.[9] Finally, the court observed that every time the Copyright Act references machines, the context treats them as tools wielded by human authors and never as authors themselves.[10] Taken together, the court concluded that reading "author" to encompass AI-generated works would render numerous provisions of the statute incoherent or superfluous, and held that only human beings qualify as authors within the meaning of the Copyright Act.[11]

The D.C. Circuit also recognized that the Copyright Office's longstanding rule requiring a human author reinforced the natural meaning of those statutory terms.[12] Importantly, the court clarified that the human-authorship requirement does not prohibit copyrighting works made by or with the assistance of AI. However, because the question of how much AI may contribute to a human author's work before copyrightability is lost was not before the court, the D.C. Circuit declined to address that issue.[13]

Earlier this year, the U.S. Supreme Court denied certiorari in *Thaler*, leaving intact the D.C. Circuit's ruling that the Copyright Act requires copyrightable works to be authored by a human being.

In 2023, the U.S. Copyright Office ("Office") announced the launch of a broad AI Initiative and issued a statement of policy providing guidance on the registration of works incorporating AI-generated material (the "Guidance").[14]

This Guidance establishes a case-by-case framework for evaluating whether works containing AI-generated material are eligible for copyright registration. The central question the Office asks is whether the work is "basically one of human authorship, with the computer merely being an assisting instrument," or whether the traditional elements of authorship (whether literary, artistic, or musical expression, or elements of selection and arrangement) were conceived and executed by a machine rather than a human.

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[7] Id. at 1045–46
[8] *Id*. at 1046.
[9] *Id*.
[10] *Id.*
[11] *Id.* at 1045–46.
[12] *Id.* at 1047.
[13] *Id.* at 1050.
[14] Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence, 88 Fed. Reg. 51, 16,192-193 (Mar. 16, 2023)

When AI technology receives only prompts from a human and produces an output in response, the Office considers the material to have been drafted by the technology, not the human user. The Office reasons that users do not exercise "ultimate creative control" over how generative AI systems interpret prompts and generate material. Rather, prompts function more like instructions to a commissioned artist: they identify what the user wants depicted, but the machine determines how those instructions get implemented in its output. Notably, even if a prompt itself is sufficiently creative to qualify for copyright protection, material generated from that prompt is not automatically copyrightable.

Nevertheless, a work containing AI-generated material may still be copyrightable when it also reflects a sufficient level of human authorship. For instance, a person may select or arrange AI-generated material in a sufficiently creative way that the resulting work as a whole constitutes an original work of authorship. Alternatively, a person may modify AI-generated material or output to such a degree that the modifications independently meet the standard for copyright protection. In either scenario, copyright will only protect the human-authored aspects of the work and does not extend to the AI-generated material itself.

In essence, what matters is the extent to which the person had creative control over the work's expression and "actually formed" the traditional elements of authorship. The Office requires that applicants disclose the inclusion of AI-generated content in a work submitted for registration and provide a brief explanation of the human author's contributions to the work.

In January 2025, the Copyright Office released the portion of its *Copyright and Artificial Intelligence* report addressing the issue of whether AI-generated works qualify for copyright protection.[15] Building on the Guidance's focus on "creative control," the report determined that, under currently available technology, prompts by themselves do not give users enough human control to make them the authors of an AI system's output based on those prompts. The report reasons that the Copyright Act's distinction between protectable "works" and unprotectable "ideas" prevents copyright from attaching to works produced by AI in response to user prompts. In particular, the report maintains that prompts essentially operate as instructions conveying unprotectable ideas and do not govern how the AI system processes them to generate its output. In short, the Copyright Office confirmed that AI outputs qualify for copyright protection only where humans provide sufficient creative input. Simply writing a text prompt is insufficient because prompts "do not appear to adequately determine the expressive elements produced, or control how the system translates them into an output."

How much human involvement is sufficient to constitute authorship in AI-assisted works remains an evolving and unsettled area of law. Jason M. Allen is an artist who created the award-winning image "Théâtre D'opéra Spatial" using Midjourney, an

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[15] U.S. Copyright Office, Copyright and Artificial Intelligence, Part 2: Copyrightability (Jan. 2025), https://www.copyright.gov/ai/Copyright-and-Artificial-Intelligence-Part-2-Copyrightability-Report.pdf.

AI-based image-generation system, and provided *hundreds* of iterative text prompts to express his intellectual vision. The U.S. Copyright Office denied his application to register the image, concluding that when an AI system produces an output based on a text prompt, the "traditional elements of authorship" are determined and executed by the technology rather than the human user. Allen filed suit in the U.S. District Court for the District of Colorado (Case No. 1:24-cv-02665-WJM) and moved for summary judgment on whether a work generated through human creativity using AI as a tool is copyrightable.

Allen contends the Copyright Office's policy is wrong for several reasons. First, he argues the policy is inconsistent with the text and purpose of the Copyright Act, which has permitted non-human authorship for over a century. Second, he asserts the policy is extra-statutory, and is being applied in an arbitrary and capricious manner. Third, even assuming the Act requires a person to execute the traditional elements of authorship, Allen maintains he meets that standard because federal law requires only a minimal "spark of creativity," and he maintains that his extensive iterative involvement contributed far more than that threshold. He draws an analogy to copyright protection for photography, where courts have found authorship in cases he considers highly similar. Fourth, Allen argues the Copyright Office selectively prevents registration of AI-assisted works while allowing registration of works created with analogous tools such as cameras, cell phones, and other AI applications. Finally, he contends that if his work cannot be copyrighted, no one could copyright a work created using AI, an outcome he characterizes as dramatically at odds with the Act's purpose of encouraging creative works.

Allen moved for summary judgment, and the motion has been fully briefed. As of today, there has been no ruling. We will be keeping an eye on new developments.

Organizations that rely heavily on automation or AI to generate creative work should take several practical steps to protect their interests. First, they should ensure that meaningful human creativity is incorporated in AI-assisted outputs. Second, organizations should thoroughly document the human role in the creative process and maintain records of prompts, iterative revisions, curation decisions, and post-output edits, as these records may serve as critical evidence of human authorship. Third, organizations should monitor which AI tools are used across their operations, the purposes for which they are used, and the training data on which they rely. Fourth, organizations should review their AI vendors' contractual terms, particularly indemnification clauses, which vary widely and often exclude claims arising from the user's own prompts. Fifth, organizations should be mindful of the Copyright Office's disclosure requirements regarding AI involvement in registered works, as proper disclosure helps establish the scope of human contribution. Finally, where copyright protection may be unavailable or is uncertain, organizations should consider alternative protections such as trade secrets or contractual provisions to preserve the commercial value of their AI-assisted work product.

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