

Question for the Record from Rep. Issa for Ms. Aistars  
“Artificial Intelligence and Intellectual Property: Part III – IP Protection for AI-Assisted  
Inventions and Creative Works”  
April 10, 2024

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1. What impact does the denial of a copyright registration for a work, such as for insufficient human authorship, have on the work and its creator, including from a legal and monetary standpoint? What, if any, provisions of U.S. copyright law statutes require human authorship?

## Response of Prof. Sandra Aistars to Questions for the Record from Chairman Issa

### Following the April 10, 2024, Hearing on Artificial Intelligence and Intellectual Property: Part III – IP Protection for AI-Assisted Inventions and Creative Works

*What impact does the denial of a copyright registration for a work, such as for insufficient human authorship, have on the work and its creator, including from a legal and monetary standpoint? What, if any, provisions of U.S. copyright law statutes require human authorship?*

Thank you for the opportunity to provide further thoughts for the Subcommittee’s consideration.

In answering the questions, it is important to distinguish between appropriate denials of registration (including for lack of human authorship), and unwarranted denials. It is helpful to begin with an understanding of how the originality of copyrighted works is assessed because that is where the requirement for human authorship resides.

In short, the Copyright Office and the courts should deny copyright registration to works that lack sufficient human authorship. However, if a work is the product of a human author’s intellectual conception and expresses a modicum of human creativity, the work should be registered regardless of the technological tools used to create it.

#### Statutory Authority on Human Authorship

The Constitution is the primary authority requiring human authorship for a work to be copyrightable. The Constitution grants Congress the right to protect the “writings” of “authors.”<sup>1</sup> Courts—particularly the Supreme Court—have interpreted these terms in case law. Congress has incorporated common law standards for originality (i.e., the requirements that works of authorship must meet to be deemed protectable) into the Copyright Act without change.<sup>2</sup>

Although there is no separate provision in the Copyright Act specifically addressing the requirement for human authorship, the requirement is implied throughout the Act using language like “widow,” “orphan,” “children” and “heir” in various provisions. As the Court of Appeal for the Ninth Circuit illustrated in *Naruto v. Slater* when ruling against PETA on standing to bring a claim on behalf of a monkey under the Copyright Act: “[f]or example, the “children” of an “author,” “whether legitimate or not,” can inherit certain rights under the Copyright Act. See 17 U.S.C. §§ 101, 201, 203, 304. Also, an author’s “widow or widower owns the author’s entire termination interest unless there are any surviving children or grandchildren of the author, in which case the widow or widower owns one-half of the author’s interest.” *Id.* § 203(a)(2)(A). The terms “children,” “grandchildren,” “legitimate,” “widow,” and “widower” all imply

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<sup>1</sup> U.S. CONST. art. I, § 8, cl. 8.

<sup>2</sup> H.R. REP NO. 94-1476, at 51 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5664 (“This standard does not include requirements of novelty, ingenuity, or aesthetic merit and there is no intention to enlarge the standard of copyright protection to require them”).

humanity and necessarily exclude animals that do not marry and do not have heirs entitled to property by law.”<sup>3</sup>

Another indication that the Copyright Act requires human authorship is that originality doctrine focuses on the author’s imprint on the work and connects originality with an author’s mental processes which likewise implies human rather than machine learning.<sup>4</sup> In the *Trade-Mark Cases*, the Supreme Court explained that to be copyrightable as a writing of an author under the Constitution, a work must be “original, and . . . founded in the creative powers of the mind. The writings which are to be protected are the fruits of intellectual labor.”<sup>5</sup>

The Supreme Court further defined the author’s imprint on a work when opining on photography—the revolutionary image-making technological innovation of the 19<sup>th</sup> century—in *Burrow-Giles v. Sarony*.<sup>6</sup> The photographer, Sarony, alleged that a lithographic company infringed his rights in a photograph of Oscar Wilde.<sup>7</sup> The case established that, when an author makes sufficient authorial expression in a photograph, the photograph can be protectable under copyright.<sup>8</sup> The defendant argued that extending copyright protections to photographs was unconstitutional because photographs are neither “writings” nor the productions of “authors,” but are mere mechanical reproductions of the physical features of an object that involve no originality of thought.<sup>9</sup> The Supreme Court disagreed, finding that “the Constitution is broad enough to cover an act authorizing copyright of photographs, so far as they are representatives of original intellectual conceptions of the author.”<sup>10</sup> It noted, however, that “ordinary” photographs might not enjoy copyright protection.<sup>11</sup> The case is often cited to illustrate the numerous elements of original intellectual conception that a photographer contributes to an image by selecting and arranging props, background, lighting, costume, poses and other features of an image, despite the mechanical means by which an image is produced.<sup>12</sup> *Burrow-Giles v. Sarony* is therefore crucial in understanding how to apply originality doctrine in the Generative Artificial Intelligence (GAI) context as well. If a work is the original intellectual conception of a human author, it should not matter what technology—photography or GAI—is used to convey the result.<sup>13</sup>

It is important to keep these core copyright principles firmly in mind when considering the impact a denial of copyright registration—such as for insufficient human authorship—has on a

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<sup>3</sup> *Naruto v. Slater*, 888 F.3d 418, 426 (9th Cir. 2018).

<sup>4</sup> *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 346 (1991) (citing *Trade-Mark Cases*, 100 U.S. 82 (1879)); *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884).

<sup>5</sup> *In re Trade-Mark Cases*, 100 U.S. 82, 93-94 (1879).

<sup>6</sup> *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 57-58 (1884).

<sup>7</sup> *Id.* at 54–55.

<sup>8</sup> *See Id.* at 54–55, 58.

<sup>9</sup> *Id.* at 54, 59.

<sup>10</sup> *Id.* at 58.

<sup>11</sup> *Id.* at 59.

<sup>12</sup> *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 57-58 (1884).

<sup>13</sup> Understanding that GAI technology can do more than merely capture a human’s intellectual conception, if it is used in a manner that interfaces with the human in a two-way exchange where the GAI may also exert influence on the outcome of the output, the guiding question should be whether the use of GAI is undermining a claim to human authorship or whether the GAI is being used to extend the human author’s own authentic vision for the creative work.

creator. The Copyright Office and the courts are well within their rights to deny registration to putative authors who fail to meet these basic requirements of copyrightability as there is no need to incentivize the creation of works by non-human authors to achieve the purposes of the Intellectual Property clause. As the U.S. District Court for the District of Columbia recently explained in *Thaler v. Perlmutter*, “The act of human creation—and how to best encourage human individuals to engage in that creation, and thereby promote science and the useful arts—was [] central to American copyright from its very inception. Non-human actors need no incentivization with the promise of exclusive rights under United States law, and copyright was therefore not designed to reach them.”<sup>14</sup>

The Copyright Office may also receive claims to register works allegedly created by human authors with the assistance of GAI tools where the work cannot be said to be the product of the human author’s own intellectual conception because it has some, but not enough, human authorship to clear the bar of originality. Those works too, may correctly be refused registration. It is important, however, to recognize that the Supreme Court has set the bar for originality low in *Feist*. Only a modicum of creativity is required.<sup>15</sup>

Moreover, The Copyright Office should not deviate from established registration procedures and interpretations of case law in making these determinations. The Compendium of U.S. Copyright Office Practices<sup>16</sup> is a comprehensive resource for applicants and practitioners on Copyright Office practices pertaining to registration and related legal interpretation. Should the Copyright Office wish to adopt new regulations or procedures applicable to GAI technology, it may do so after appropriate notice and comment rulemaking.

### Impact of Denial of Registration

Because registration of copyright is optional in the United States but confers numerous benefits intended to incentivize authors to register works for the good of the copyright ecosystem, unwarranted denial of registration can harm not only the creator of the work but the copyright system in various ways. Registration creates a public record that includes key facts about a work of authorship including title and other identifying information, claim of ownership, year of creation, and date of publication (if the work is published) and identifies the class of work.<sup>17</sup> This facilitates identification of authors and their works and allows interested parties to communicate with them or their designated agents to obtain permission to use works. Improperly denying registration creates an inaccurate public record. This can cause confusion and hinder marketplace transactions the copyright registration system is intended to facilitate.

Registration is also a necessary first step for a creator to adjudicate rights in federal court. An owner of a U.S. work must obtain a registration (or a refusal to register a work) before filing a lawsuit in federal court.<sup>18</sup> Copyright owners can proceed to litigate claims even with a refusal to

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<sup>14</sup> *Thaler v. Perlmutter*, No. 22-1564, 2023 U.S. Dist. LEXIS 145823, at \*13 (D.C. Cir. 2023).

<sup>15</sup> *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 345 (1991).

<sup>16</sup> U.S. COPYRIGHT OFFICE, COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES (3D.ed. 2021).

<sup>17</sup> *Id.* § 202

<sup>18</sup> *Fourth Estate Pub. Benefit Corp. v. Wall-Street.com*, 139 S. Ct. 881 (2019) (A registration has been made with the meaning of 17 U.S.C. § 411(a)... when the Register has registered a copyright after examining a properly filed application.” [R]egistration is akin to an administrative exhaustion requirement that the owner must satisfy before

register—the validity of the copyright claim will be determined by the court. However, owners who succeed in registering their works and are issued a registration certificate have a benefit when adjudicating claims in court. A registration certificate is prima facie evidence (creates a rebuttable presumption) of the facts stated in the certificate.<sup>19</sup> Courts accept registration certificates as evidence not only that the certificate is valid, but also that it is based on “proper subjects for copyright protection, that the statutory formalities of registration have been satisfied, and that the plaintiff is the owner of the copyright.”<sup>20</sup>

Various other incentives are offered to those who seek to register their works in a timely fashion. Statutory damages and attorney’s fees are available only to those who register their work before the infringement began or within three months after the first publication of the work.<sup>21</sup> Since direct infringement damages can be challenging to prove and statutory damages for willful infringement can be awarded in amounts ranging up to \$150,000 per infringement, the incentives are valuable.<sup>22</sup> Registration and recordation of the registration certificate with the U.S. Customs and Border Protection Service is also necessary to enable the U.S. Customs and Border Protection Service to seize foreign pirated goods at the border.<sup>23</sup>

It is standard practice for the Copyright Office to register a claim where the work contains copyrightable subject matter, and the application is acceptable on its face and does not contain contradictory factual material.<sup>24</sup> The Copyright Office does not ordinarily conduct investigations or searches to confirm facts stated in applications.<sup>25</sup> Instead, it accepts the facts as presented by applicants unless they are contradicted elsewhere in the registration materials or the Office’s records.<sup>26</sup> The Office does not search its records to determine if works have been previously registered or compare works submitted for registration to deposit copies to decide issues like substantial similarity.<sup>27</sup>

The Compendium of Copyright Office Practices explains the proper process for filing registration claims, and how copyright specialists examine applications. The current Copyright Office guidance requiring authors to disclose and disclaim more than *de minimis* use of GAI technology in their work appears to diverge from these established practices in certain respects that may disadvantage authors who use GAI in creating their works (including by potentially resulting in

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suings to enforce ownership rights,” because “it is the Register’s action that that triggers a copyright owner’s entitlement to sue,” *Id.* at 887, 890. “Once the Register grants or refuses registration, the copyright owner may also seek an injunction barring the infringer from continued violation of her exclusive rights and an order requiring the infringer to destroy infringing materials.” *Id.* (foreign owners are exempt from this requirement)

<sup>19</sup> 17 U.S.C. § 410(c) states “In any judicial proceedings the certificate of a registration made before or within five years after first publication of the work shall constitute prima facie evidence of the validity of the copyright and of the facts stated in the certificate. The evidentiary weight to be accorded the certificate of a registration made thereafter shall be within the discretion of the court.”

<sup>20</sup> *Midway Mfg. Co. v. Dirkschneider*, 571 F. Supp. 282, 284 (D. Neb. 1983).

<sup>21</sup> See 17 U.S.C. § 412(c), 504,505. See also, U.S. COPYRIGHT OFFICE COPYRIGHT BASICS 5, <https://www.copyright.gov/circs/circ01.pdf>

<sup>22</sup> *Id.*

<sup>23</sup> 19 C.F.R. § 133.31

<sup>24</sup> COMPENDIUM (THIRD), § 602.4(B) Scope of the Examination.

<sup>25</sup> *Id.* § 602.4 (C) Factual Determinations and Administrative Notice. But see, *Zarya of the Dawn* (VAu001480196) at 2 (U.S. Copyright Office Feb. 21, 2023), <https://www.copyright.gov/docs/zarya-of-the-dawn.pdf>

<sup>26</sup> COMPENDIUM (THIRD), § 602.4(D) No Searches or Comparisons of Works.

<sup>27</sup> *Id.*

unwarranted refusals to register works), or otherwise cause confusion and/or disincentivize registration of works.

First, the Copyright Office’s GAI guidance document is technology specific. It applies different rules to authors who use GAI technology to create works than to authors who use other technologies to create works of authorship. The Compendium does not subject authors to greater scrutiny when submitting registration applications purely based on the tools they use. Such technology-based application of the law that applies the law differently depending on the type of tool used to aid in the creative process could disincentivize creators from using certain tools and hinder artists in their creative work.

It is understandable that the Copyright Office might wish to observe how trends in registrations develop before articulating a firm test to apply to measure the presence of sufficient human creative contributions for a GAI-assisted work to qualify for registration. Rather than penalize authors by refusing to register their works, where the Office has doubts about whether the material submitted constitutes copyrightable subject matter or whether other formalities have been followed, the Copyright Office sometimes issues registrations under a practice known as the “rule of doubt.” The Office generally uses this process where a registration specialist does not have access to the material needed to assess copyrightability (e.g. where redacted material containing trade secrets is submitted by permission of a court, or where an applicant submits lengthy deposit copies of computer software object code and source code.)<sup>28</sup> However, the Office can also use this procedure “where it has not taken a position on a legal issue that is directly relevant to whether the work constitutes copyrightable subject matter or whether the other legal and formal requirements of the statute have been met.”<sup>29</sup> If the Office issues a registration under the rule of doubt, it annotates the certificate and the public record stating the reasons for doing so.<sup>30</sup> This process affords authors the benefits of registration but limits the Office’s imprimatur of validity on the certificate to some degree. The Office is conducting a major GAI-related rulemaking proceeding which generated an unprecedented volume of public interest and plans to issue a series of reports directly relevant to the issue of GAI use in creative works over the next year. In this context, the “rule of doubt” registration process may be worth considering for GAI-assisted works at least as an interim measure.

The Copyright Office registration guidance on use of AI technology requires creators to disclose and disclaim the use of GAI technology that is more than *de minimis*.<sup>31</sup> In my earlier testimony I explained that it is typically inconsistent with artistic practices to parse and limit claims when an original work is being newly created. Moreover, when creating works using GAI a human creator’s expressive contributions may not be readily separable from the output of the GAI—particularly when the final work is the product of a series of revisions, as is commonplace to works of authorship generally.<sup>32</sup> Thus, quantification of the uses of the technology may be an impossible task.

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<sup>28</sup> See 37 C.F.R. § 202.20(c)(2)(vii)(A)(2),(B).

<sup>29</sup> COMPENDIUM (THIRD), § 607 Registration Made Under the Rule of Doubt.

<sup>30</sup> *Id.*

<sup>31</sup> *Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence*, 88 FR 16190 at 93 (Mar. 16, 2023) (to be codified at 37 C.F.R. § 202). A copy of the guidance is available at [https://copyright.gov/ai/ai\\_policy\\_guidance.pdf](https://copyright.gov/ai/ai_policy_guidance.pdf).

<sup>32</sup> See hypothetical example on pg 7-8 *infra*.

The Copyright Office currently asks applicants to limit claims in registration applications mainly where an author is creating a derivative work or compilation.<sup>33</sup> These are easier creative scenarios because they involve building on or selecting and arranging preexisting materials that the author can identify prior to beginning their own creative work. Notably, in these easier scenarios the Office uses a different—clearer—standard. The Office requires applicants to disclose the use of “an appreciable amount” of preexisting material and explains the necessity for the process, viewing it from the perspective of the author submitting the registration.<sup>34</sup> The Compendium articulates the process of defining materials properly to identify that author’s new original contributions in the registration application.<sup>35</sup> The new material is separately called out in a section of the application titled “Material Added to the Work.”<sup>36</sup> This is logical because the purpose of a registration application in a derivative works context is to register new authorship, not to extend the existing copyright of an underlying work. It is also comparatively easy to identify new authorship separately from preexisting authorship if the author is creating a work based on known preexisting material the author has voluntarily chosen to work with.

The Copyright Office does not agree to register all claims for copyright it receives. If an applicant disagrees with the Office’s refusal to register a work, the applicant may appeal the decision—first for a “First Reconsideration” within the Office, then for a “Second Reconsideration” to a three-person review board consisting of the Register of Copyrights, the General Counsel of the U.S. Copyright Office (or their designees) and a third person designated by the Register.<sup>37</sup> After exhausting these administrative channels, if the applicant is still not satisfied the decision may be appealed in federal district court by instituting an action under the Administrative Procedure Act (APA) against the Register of Copyrights.<sup>38</sup>

Consequently, registration denials that creators perceive to be unwarranted could lead to judicial challenges. Of course, such appeals come with their own costs—monetarily, and in terms of time and judicial resources expended by all involved. Many creators will not have the wherewithal to pursue appeals. On the other hand, if creators perceive that the Office disfavors registering works created employing GAI (or other technologies), creators may opt not to register works created using such technologies to the detriment of both the copyright system and individual authors of works.

A confusing or inaccurate record about the copyright status of works being created using GAI benefits no one. Such a record may cause confusion and chaos in the licensing market for copyrighted works. Confusion can be disruptive not only for creators but for users and developers of GAI technology as all parties involved attempt to understand how copyright applies to works created using GAI.

### The Proper Application of the Intellectual Conception Test/Modicum of Creativity Test to GAI

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<sup>33</sup> COMPENDIUM (THIRD), § 621 Limitation of Claim

<sup>34</sup> COMPENDIUM (THIRD) § 621.8 (A) Identifying the Material That the Author Created

<sup>35</sup> *Id.* § 621.1 What is Unclaimable Material?

<sup>36</sup> *Id.*

<sup>37</sup> 37 C.F.R. § 202.5

<sup>38</sup> *See* 5 U.S.C. § 500 *et seq.*

Works created by authors using GAI assistance can contain a significant intermingling of human and GAI expression. Rather than denoting a lack of human creativity, such intermingling may—at least in some scenarios—be a signifier of significant, and legally sufficient, human expressive contribution to a work.

Imagine the following hypothetical: A commercial photographer creates a fantastical background image by repetitive and interactive prompting of a GAI but makes no other modifications to the output produced by the GAI. The photographer then uses the fantastical image as a background to shoot an advertisement for a client and incorporates real bottles (the subject of the advertisement), barware and other objects into the image which he produces in a live studio setting. Although the photographer does not alter the background image output by the GAI, as he incorporates it into the real-life photography session with the glassware and bottles featured in the advertisement, he uses the background to cue lighting and positioning of the physical objects to ensure that the entire image is seamlessly integrated so that the final image appears unified and realistic despite incorporating fantasy background elements generated by GAI.

The resulting scene is a blend of fantasy and reality that could not be created in the real world. The image is a creation of the author's intellectual conception, artistic talent, and ingenuity in lighting design and other technical skills. The background element is not merely a separable element that should be disclaimed, but a seamless part of the author's intellectual conception of the work which ultimately informs the design, composition and placement of other elements of the image as well as being affected by their cast shadows and other real-world artifacts.

Much as Sarony's selection of background, props and posing was part of his intellectual conception for the image of Oscar Wilde, so too is the hypothetical commercial photographer's creation and use of the fantasy background element undeniably part of his intellectual conception for the photo shoot. Sarony did not handcraft the chair and draperies and book he posed Wilde with, nor design and stitch Oscar Wilde's clothing. Yet Sarony's image is celebrated as copyrightable precisely because of his arrangement and depiction of these elements to present the graceful outlines in the Wilde image.

The hypothetical image created by the commercial photographer using GAI tools should be considered the same way. Even accepting that in this case, unlike others, the background image likely contains more than *de minimis* GAI generated expression, the expression is no less subsumed into the author's intellectual conception of the image as a whole. Its use to inform and cue realistic lighting and placement of other elements in the final image should strengthen rather than undermine that claim as it indicates the human author's full integration of the background element with the barware items. Parsing and limiting claims thus becomes impossible. The image is protectable corner to corner and edge to edge as the intellectual conception of the human author. It should not matter that a portion of the creative expression was created using GAI.

## Conclusion

In my testimony to the subcommittee, I urged that the proper test to assess originality in the context of GAI-assisted works is the same test as for any other work:



Is the work the product of a human author's own intellectual conception? If so, it should enjoy copyright protection.

To determine where to “draw the line” to evaluate human contributions to a work, the Copyright Office and courts should look to the acts of the human (not to the output of the GAI) and ask if the human has exhibited a modicum of creative expression (as in *Feist*). The Copyright Office and courts should not dissect works into component parts and ask creators to disclaim portions where they have used GAI technology. In some, perhaps many, instances—for example works of visual art—the human and GAI contributions will blend and merge as a work develops over the course of the human's interaction with the GAI.

The guiding question the Copyright Office/courts should ask is whether the use of GAI is undermining a claim to human authorship or whether the GAI is being used to extend the human author's own authentic vision for the creative work. Applying this approach, some creative works authored by humans with the assistance of GAI will be protectable.