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The Latest Chapter in Copyrightability of AI-Generated Works

From artificial intelligence (AI) tools that can generate highly sophisticated art, music, and conversation to technology capable of recreating Elvis on the big screen, a recent explosion and maturing of generative AI technologies is disrupting all forms of content. But while AI tools are becoming ubiquitous and creating new and innovative ways to create and monetize content, unanswered legal questions leave the legal landscape uncertain.

This Update is the first in a three-part series on legal issues surrounding generative technologies. This first installment will discuss recent developments regarding the copyrightability of AI-generated works. Part 2 will cover infringement risks associated with the creation and use of generative AI tools and recent lawsuits that have been filed against generative AI technologies. Part 3 will provide an overview of non-intellectual property (IP) issues that arise in connection with generative technologies, such as deepfake laws, privacy, child pornography laws, and algorithmic bias.

Uncertainty continues regarding whether AI-generated works can be protected by copyright under U.S. law. In September 2022, the U.S. Copyright Office raised the hopes of artists who use generative AI by registering a copyright in a graphic novel titled *Zarya of the Dawn* (cover pictured on the left), whose author used the AI tool Midjourney to generate its images. However, the Copyright Office quickly reversed course and notified the applicant, Kristina Kashtanova, that it may cancel the registration.

The Copyright Office stated that the registration was made in error because it missed the fact that the images were computer-generated. It asked the artist to provide details of her creative process to show "substantial human involvement" in the process of creating the graphic novel. This statement tracks the requirement in the *Compendium of U.S. Copyright Office Practices* (the Compendium),[1] which provides that the Copyright Office will not register "works produced by a machine or mere mechanical process that operates randomly or automatically *without any creative input or intervention* from a human author." The decision is also consistent with cases outside of AI, such as the famous "monkey selfie" case, which have consistently required human authorship.

What Is Sufficient Human Authorship for Registration?

Courts have not yet weighed in on the nature and extent of the human input or intervention required to protect AI-generated content. As noted in an earlier blog post, "AI Can Create a Painting but It Can't Register a Copyright in the Painting," the Copyright Office Review Board last year confirmed a refusal by the Copyright Office to register an AI-generated painting. However, that ruling did not provide meaningful guidance as to the human authorship requirement since the applicant, Dr. Stephen Thaler, did not claim any human input or intervention. Rather, he listed the author as "Creativity Machine" and argued that the human authorship requirement is unconstitutional and unsupported by statute or case law. In June, Dr. Thaler filed a lawsuit against the Copyright Office requesting an order that would require the Copyright Office to reinstate the application to register the work. Earlier this week, he filed a motion for summary judgment in that case.

There is little meaningful guidance in the Compendium regarding the human authorship requirement, although it did add the following language in 2019:

"The crucial question is 'whether the 'work' is basically one of human authorship, with the computer [or other device] merely being an assisting instrument, or whether the traditional elements of authorship in the work (literary, artistic, or musical expression or elements of selection, arrangement, etc.) were actually conceived and executed not by man but by a machine.'"[2]

Some may interpret the language to mean that human authorship must predominate, as they view the algorithm's role in creating generated content as not only that of an "assisting instrument" but as providing the bulk of the elements of authorship, which could make it more difficult to meet the hurdle of human authorship. The Copyright Office recently mentioned in a letter to Congress that it is "working to ensure that [any] AI-Led elements are properly identified and disclaimed" in copyright applications, which provides some support for this view. Yet, that interpretation seems inconsistent with how copyright law typically looks at the originality requirement, which typically has a very low bar and only requires "at least a modicum" of creativity, so that even a slight amount will suffice.[3] Human efforts in refining and shaping generated images, including designing text prompts, manipulating and combining images, and perhaps even configuring AI models, arguably could be sufficient to meet the human authorship requirement. The human contribution likely needs to rise to the level of authorship and be more than just a mere idea. However, text prompts that are sufficiently detailed (or combined with other creative input from the artist) could provide a good argument that such input goes beyond mere ideas and creates expressive content that was reflected in the generated images.

The Author's Response

Ms. Kashtanova may not actually need to show human authorship in the images themselves to protect her graphic novel as a whole, as she may be able to claim copyright in the combination of the images with the text of the novel (which was written without generative AI tools). Nonetheless, the response filed to the Copyright Office's request to show substantial human involvement does argue for the protection of each individual image based on her input in its creation. It compares AI generative tools to using a camera or Adobe Photoshop and calls Midjourney an "assisting instrument" that the artist described as "working with the computer to get closer and closer to what I wanted to express."

The response details the artist's involvement in the manipulation of generated images and argues that she engaged in a creative, iterative process that included multiple rounds of composition, selection, arrangement, cropping, and editing for each image and details the artist's conscious and creative choices. It points to elements such as the visual structure of each image, the selection of the poses and points of view, and the juxtaposition of the various visual elements within each picture and equates this involvement to a photographer's selection of a subject, a time of day, and the angle and framing of an image (which have been found copyrightable). It should

be noted that the final images used included multiple elements from different iterations of generated images, and the response did not claim copyright protection based on any of the initially generated images. However, the response does argue that the artist's text prompts (many of which were extremely detailed[4]) and other inputs can by themselves constitute sufficient human creativity, calling these inputs "the tools by which an author … guides the Midjourney service's generation of images consistent with the author's creative vision." Such detailed prompts may provide a good basis to argue for sufficient human authorship.

If AI-Created Works Are Copyrightable, Who Is the Author?

If copyright ownership of AI-generated content is possible, the next question, of course, would be, "Who is the author and owner of such rights?" Is it the platform providing the tool? Or is it whoever trained the models used in the tool? Or is it the user who directed the generation of the content using the tool? The answer likely depends on who provided the human input or intervention (if any) that is determined sufficient to qualify for authorship. The answer could vary depending on the facts of a particular situation.

How Do Other Countries Treat AI-Generated Works?

A number of countries take the same approach as the United States and require human authorship, including Australia, Germany, Brazil, Colombia, Mexico, and Spain. However, there are a number of jurisdictions, including the UK, Ireland, Hong Kong, India, New Zealand, and South Africa, that specifically recognize (by statute) copyright protection for computer-generated works. The author is typically "the person by whom the arrangements necessary for the creation of the work are undertaken." In some cases, the term of copyright protection may differ for computer-generated work and "moral rights" (the right to be identified as the author and to object to derogatory treatment of work) do not apply.

Although the United States does not currently take this approach, there have been some calls to reconsider this position. In October, Senators Thom Tillis and Chris Coons wrote a letter to the Copyright Office and the U.S. Patent and Trademark Office (USPTO) requesting them to jointly establish a national commission on AI, to consider "what changes to existing law, if any, should be made in order to continue encouraging the robust development of AI and AI-generated inventions and creations." In its response to this request, the Copyright Office notes that it is planning to issue a "public notice of inquiry" on questions involving copyright and AI later in 2023. This is similar to what the USPTO did in 2020, resulting in its *Public Views on Artificial Intelligence and Intellectual Property Policy* report.

Takeaway

Artists who wish to maximize their arguments for human authorship should ensure that the inputs they use reflect more than mere ideas and make detailed creative choices that may support a claim of human authorship. In addition, artists who engage creatively in the content generation process, make artistic choices that further alter the generated content, and do not merely utilize initially generated images will have better arguments that their overall end product is protectable.

Endnotes

[1] The Compendium does not have the force of law. It merely guides the actions of the Copyright Office, although courts often do give it deference.

[2] Compendium (Third) § 313.2.

[3] *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 362 (1991).

[4] One prompt was as follows: "sci-fi scene future empty New York, Zendaya leaving gates of Central Park and walking towards an empty city, no people, tall trees, New York Skyline forest punk, crepuscular rays, epic scene, hyper realistic, photo realistic, overgrowth, cinematic atmosphere, ethereal lighting."

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