



---

# MUSIC WITHOUT BORDERS:

Hot Legal Topics in the Music Business After the  
First Quarter of the 21st Century

---



AI–Human Authorship  
Requirement: Emerging  
Developments at the U.S.  
Copyright Office and in  
Other Countries

Marcelo Goyanes and  
Leticia Carneiro



**murta  
goyanes**  
advogados

# AI-Human Authorship Requirement:

## Emerging Developments at the U.S. Copyright Office and in Other Countries



**Authors: Marcelo Goyanes and Leticia Carneiro**



### » Introduction

Discussions regarding the applicability of current law to new technologies have been a frequent topic worldwide for more than a century.

From photography<sup>[1]</sup> to the rise of streaming services, legislators, judges and scholars have studied and attempted to accommodate the latest technology to each territory's legal framework, evaluating the actual need for changes to national laws and regulations. In this regard, the rise of new functionalities to artificial intelligence tools, which allow for creative materials to be organized, enhanced, edited and even entirely developed through them, has presented itself as the latest legal challenge, especially in the copyright industries.

There is an ongoing debate regarding the boundaries of human authorship required for copyright protection, as generative artificial intelligence introduces new complexities to this long-standing issue. While many legal systems and case law concur that animals and companies cannot be deemed authors, the emergence of AI-driven tools - which often segment what is eligible for protection within the same creative work - highlights the need for clearer guidelines. As these mechanisms become increasingly prevalent in assisting human creators, it is essential to define the extent of human intervention necessary for a work to qualify for copyright protection.

Some countries, including the United States and China, now recognize copyright protection for AI-generated works when there is sufficient human contribution. However, many nations are still discussing how to deal with it and the need to update their laws on this issue.

This article aims at presenting the latest developments to the human authorship requirement in artificial intelligence works, focused on the U.S. Copyright Office (“USCO”)’s understanding[2], but also addressing how this matter is currently being studied and enforced in other countries like the United Kingdom, Brazil, France, China, Japan and South Africa.

Given the current ambiguity surrounding the legal regulation and enforcement of AI systems and their outputs globally, which appears to be evolving towards case-by-case adjudication by local courts, this article does not aim to offer definitive solutions regarding questions of human authorship in relation to artificial intelligence. Instead, its purpose is to provide an overview of the issue and examine how various jurisdictions address related concerns in accordance with local laws and enforcement authorities.

Some approaches are still in different stages of enforcement among nations. However, it is interesting to observe that there is a common concern over maintaining a balance between the protection of the human creativity and fomenting technology innovations, assuring that each country can have minimum means to compete in the international market of artificial intelligence.

“ It is interesting to observe that there is a common concern over maintaining a balance between the protection of the human creativity and fomenting technology innovations ”

### **United States**

The United States is home to many large and advanced technology companies. In the

country, copyright is regulated through federal legislation, which is currently being examined by both local courts and the USCO to assess how U.S. copyright law applies to technological developments, particularly artificial intelligence systems.

In 2023, the U.S. District Court for the District of Columbia ruled that only human-created works are protected by U.S. copyright law. The court upheld the U.S. Copyright Office's policy of refusing to register visual arts made solely by artificial intelligence, affirming current and future decisions to deny registration for works with little or no human involvement.

The US Copyright Office issued its first registration for an AI-generated artwork in early 2025, when it accepted Kent Keirse's "A Single Piece of American Cheese" created with the Invoke program. Initially denied, the registration was granted after the agency recognized Keirse's significant creative input in selecting, coordinating, and arranging the image, meeting the threshold for copyright protection.

Based on the above, the USCO has provided guidance on regulating AI domestically, while simultaneously establishing a framework that other nations may reference to address similar technological challenges within their own jurisdictions. Regarding the human authorship requirement, along with previous decisions provided by the agency and judicial courts on the matter, the U.S. Copyright Office also issued a Report on January 29, 2025 (as the second part of a three-part Report based on a public survey made available in 2023), that aimed at further examining the current U.S. copyright law and the issues raised by the latest functions of artificial intelligence.

The January 2025 Report focused on the copyrightability of works created using generative AI[3], and concluded that such works may be protected by copyrights as long as there is a clearly perceptible and expressive human creative contribution in the result. In this context, the portion of the work which is subject to protection and authorship will be solely the one that was produced by a human - while the AI generated elements will not receive the same treatment, due to the lack of such human intervention. The Report compares the separation of content protected or not by copyright in a work developed by generative AI to the figure of derivatives works, since the authors of these types of works are only considered copyright owners of the share of the content added by them to the previous work[4].

Furthermore, the second part of the USCO Report claimed that no update in the current national legislation on copyright would be necessary to accommodate the new functionalities of generative AI mechanisms, stating that the concerns expressed in the comments received by the agency were mostly focused on auxiliary uses of AI (which

would not prevent copyright protection by itself) and that courts would provide “*further guidance on the human authorship requirement as it applies to specific uses of AI (including in reviewing the Office’s registration decisions)*”[5].

Therefore, the 2025 January Report provided more clearance over the human authorship requirements, and the compatibility of AI generated works to the current law in the U.S., reinforcing USCO’s previous decisions to approve the registration of works created with the assistance of artificial intelligence mechanisms[6]. However, the Office also made it clear that it would be up to the Judiciary to decide on the specific parameters of such requisite as cases occur and are brought to their attention.

### **United Kingdom**

On a similar note, the United Kingdom’s Secretary of State for Science, Innovation and Technology launched, in December 2024, a public consultation regarding artificial intelligence and copyrights. The purpose of this consultation is further discussing issues related to this new technology and analyzing possible options to both protect English authors and the national creative industry and allow for AI British companies to compete in the international market in an equal position to other nations, such as the United States and China.

Regarding the human authorship requirement in AI generated works, the consultation points that the current U.K. legislation on copyrights might already present a legal framework that could in theory apply to artificial intelligence. Under British copyright legislation, if a work was created using AI and it is possible to note contributions from both human and machine, the human would be deemed the author[7]. On the other hand, if no human intervention is observed in the final content, it may still be protected by copyrights as a “computer-generated work”[8].

However, it is important to note that the U.K. law around copyright protection was enacted before AI technology emerged in society. Considering the latest functionalities around artificial intelligence, especially the generative format, which allow for a user to create works with minimum human intervention (or even none), it is possible to infer that the current legislation in the United Kingdom might not have considered such a detachment from human authorship when addressing materials developed with computers – which, at the time, might have been seen as merely tools to assist individuals to express their creations[9].

Based on the above and on the fact that the U.K. has not yet decided for a course of action towards regulation of authorship of AI created works – such as maintaining the current law, amending it, or allowing for judicial courts to decide and create case law –

the uncertain scenario around the requirements for a content developed through the use of artificial intelligence to be protected by copyrights remains present at the country.

### **Brazil**

In Brazil, the issue of extending copyright protection to creative works produced by artificial intelligence has yet to be adjudicated in the courts. Nevertheless, it remains a prominent subject within academic discourse, business negotiations, and legislative proposals.<sup>[10]</sup>

Brazilian Copyright Law (Law No 9,610/1998) specifies that an author is defined as the individual who has created a literary, artistic, or scientific work. Based on this provision, AI mechanisms by themselves do not produce content eligible for copyright protection in Brazil, making human involvement necessary for such works to be protected. As a result, unless it can be demonstrated that a person made a clear and significant contribution to a work developed with the aid of artificial intelligence tools, such content would not qualify for protection under Brazilian law.

It is worth noting that the main Bill of Law that addresses regulation of artificial intelligence currently being debated by the Brazilian National Congress mainly covers third-party liability, transparency by developers, and use of copyrighted content for training models by AI. Such matters present great importance, especially considering that in Brazil there is no legislation or regulations addressing artificial intelligence.

Nevertheless, the lack of legal or judicial guidance towards the authorship of works generated by and/or created with the assistance of AI tools inevitably causes legal uncertainties as to how to properly address these situations. This situation has led the creative industry to

“Brazilian law does not require registration of creative works for authors to obtain copyright protection; authors automatically receive full rights upon the creation of their original works”

reference international examples when addressing local cases, which may not provide entirely suitable or conclusive solutions.

Moreover, Brazilian law does not require registration of creative works for authors to obtain copyright protection; authors automatically receive full rights upon the creation of their original works. Certain governmental organizations in Brazil, such as the National Library Foundation, offer registration services, but these are optional and mainly serve as supplementary evidence of authorship and for archival purposes.

In this context, differently from the U.S. Copyright Office, Brazilian registration entities themselves would not be able to create case law to orient authors as to which parts of their work, if created through AI mechanisms, are protected by copyright and owned by them or not because there are no requirements for such registration other than the ones already provided in Brazilian Copyright Law. Hence, unless Brazil's legislators update the local Copyright Act, judicial courts produce case law or other Brazilian entities create guidelines to clarify this matter, it will remain a subject decided case-by-case and oriented by scholars and foreign decisions, maintaining the legal uncertainty around it.

### France

As other European Union countries, AI matters in France will be subject to the enforcement of the Artificial Intelligence Act, approved in March 2024, and fully effective on 2026. Nevertheless, French Bill of Law No 1,630 was presented on September 2023, aiming at amending the French Intellectual Property Code to regulate artificial intelligence in the country, including the protection of local authors regarding the use of their work by AI systems.

Especially on the human authorship requirement, the abovementioned Bill of Law states that materials generated by artificial intelligence technologies that do not incorporate any direct human intervention, would be owned by *“the authors or assignees of the works that made it possible to conceive said artificial work”*. In this regard, the legislative proposal seems not to be clear about the requirements (i) for one's actions within an AI system to be considered “human intervention”, and (ii) to identify the works that created the output produced by artificial intelligence tools in order to establish authorship (considering that the same AI generated material may comprise pieces and inspirations from several different copyrighted content).

Therefore, even though the proposed amendment to the French Intellectual Property Code would not allow for works developed solely by artificial intelligence systems to fall under public domain due to the lack of human intervention (as other legislations would), it would still be uncertain as to how to clearly identify the authors of a material produced by AI. Since this Bill of Law also does not create sanctions for failing to comply with the obligation of specifying the authors responsible for a work created with an artificial intelligence mechanism, its effectiveness may be limited<sup>[11]</sup>.

Considering France's considerable investments in the artificial intelligence industry<sup>[12]</sup>, it is possible to estimate that the proposed legislation cited above will remain under discussion, possibly being altered to clarify the doubts described, to assure the development and protection of the French creative industry, including uses through AI.

## China

While some nations are still in the process of analyzing how to apply local copyright legislation to concrete judicial scenarios involving artificial intelligence, Chinese courts have been addressing this topic for a few years.

In 2019, during the case *“Tencent v Yingxun; Re Dreamwriter”*, a local court in China stated that an article written through the Dreamwriter artificial intelligence assistant could be protected by copyright, because the individuals responsible for the creation of the AI system (who chose which databases and algorithms would be incorporated in Dreamwriter) also decided on the processes for writing the article, thus, the algorithms themselves would be a technical implementation of those people creative work<sup>[13]</sup>. In this case, Tencent’s creative team that developed Dreamwriter were considered the owners of the article in dispute.

On March 2025 Changshu People’s Court issued a decision confirming that images created with artificial intelligence are able to receive copyright protection, and provided an interesting explanation as to how the court reached this understanding<sup>[14]</sup>.

According to the ruling, the court initially reviewed the user agreement entered by and between the plaintiff Lin Chen with the Midjourney AI software (used by Lin to generate an image of a half heart in a city waterfront which was later used by a real estate company in a WeChat posting), and confirmed that all rights to the content produced through the application would belong to the user. After this analysis, the Changshu People’s Court held that the alterations promoted by the plaintiff through photoshop in the image generated in Midjourney would reflect “his unique selection and arrangement” and, therefore, such material was original and protected by China’s Copyright Law<sup>[15]</sup>.

According to this recent judicial decision, the terms and conditions governing artificial intelligence platforms serve as a reliable basis to confirm and clarify whether human authorship may be attributed to works generated by AI systems, thereby reducing subjectivity in the artistic process.

Despite being written by the internal teams of the AI developers (and therefore subject to questioning as to the enforcement of such terms if not considered adapted to countries’ local laws or applicable to concrete scenarios where a work was clearly developed only by the AI), T&C agreements with users may be considered an additional argument to prove authorship of works created through AI. Such terms may allow for more direct and objective rulings on grey area cases and prevent uncertain analysis of the human authorship requirement in situations where it is more difficult to establish

if there was enough human intervention in materials created with the assistance of artificial intelligence software to allow for copyright protection. Nevertheless, it is worth noting that T&C could constitute additional proof of authorship only to the extent that the Court agrees with what is established in them, and local law does not present different understandings of the matters addressed by them.

### Japan

Differently from other countries, Japan already altered its national Copyright Act in 2019 to address artificial intelligence issues. Such change introduced Article 30-4 to the local legislation, allowing for commercial and non-profit uses of copyright protected works by AI software for the purposes of data analysis, excepts if it *“unreasonably prejudices the interests of the copyright owner”*.

A few years later, on May 2024, Japan Copyright Office – through its Copyright Division, Agency for Cultural Affairs – issued a document titled “General Understanding on AI and Copyright in Japan” (“Overview”). The purposes of it was addressing doubts about the relation between artificial intelligence and copyright, considering the expectation that the Judiciary should interpret the Copyright Act on a case-by-case basis. This movement demonstrated Japan’s goals and concern toward the growth and development of its national generative AI industry.

Regarding human authorship requirements, Japan’s Copyright Act states that only a person with a legal personality could be an author and that the *“creatively produced expression of thoughts or sentiments that falls within the literary, academic, artistic, or musical domain”* are copyright protected. Specifically on AI, the Overview clarifies that works that were autonomously created by artificial intelligence (for example, if content is developed without any specific instructions or by basic prompts, such as “draw a heart”) could not be considered within the above definition and hence would not be eligible for protection.

“Japan’s Copyright Act states that only a person with a legal personality could be an author and that the “creatively produced expression of thoughts or sentiments that falls within the literary, academic, artistic, or musical domain” are copyright protected ”

Also, for a work produced with an AI mechanism to be copyrighted, the artificial intelligence should be used merely as a “tool” to express someone’s thought and sentiments (as the Copyright Act demands)

and, in this situation, the user would be deemed the author. In addition, to determine such protection in AI creations, it would be important to confirm, on a case-by-case basis, if a person had the creative intention and made a creative contribution to the output[16].

Japan appears to be delegating enforcement and oversight of artificial intelligence cases to the judiciary on a case-by-case basis, while legislative efforts are also underway to support the development of its national AI industry.

## **South Africa**

The South African Copyright Act states that an author must be a human person, who created an original work fixed in a tangible mean. This Act, effective since 1978, does not address artificial intelligence scenarios, which ends up indirectly demanding from South African Courts to attempt to incorporate AI to the national legal system according to the cases that are brought up to their attention. So far, local courts have not ruled on the human authorship requirement for AI-generated works.

Due to the lack of local legislative or judicial recent developments on this subject in the last years, it could be stated – based only on South African law – that parts of works created using artificial intelligence systems would not be protected by copyrights in the country, due to a lack of human author.

Even though Section 233 of the South African Constitution demands that local courts interpret national law in a manner consistent with international law (which could cause judicial decisions in the country to base their understandings on foreign legislation and case law on artificial intelligence[17]), it would also be very important that AI copyright cases are brought to South African courts in order for the discussion in the country to be fomented, as well as the national artistic and creative industry to have parameters to confirm and clarify what is considered copyrighted protected work.

## **» Conclusion**

As a general worldwide scenario, most countries are still in the process of incorporating artificial intelligence matters into their local copyright legislation and judicial rulings, as well as analyzing the need for updates or changes to their laws to better regulate the latest technology developments .

Recent court decisions issued in the United States and China demonstrate a tendency that human authors can be deemed owners of copyrighted content generated with the assistance of AI as long as there is a perceptive creative human contribution to the

final work. These decisions reflect an effort to strike a balance between advancing the national AI sector and safeguarding the nations' artistic and creative industries.

Regularly tracking recent court rulings and AI laws is crucial for the creative industry's safe growth, ensuring innovation, protecting authors' rights, and minimizing conflicts among partners.

© Copyright 2025, Marcelo Goyanes and Leticia Carneiro

- [1] *When photography emerged in the 19th century, it sparked a major legal and philosophical debate about whether existing copyright laws could or should apply to this new medium. At the heart of the controversy was a fundamental question: Is a photograph a creative work or just a mechanical reproduction? Some argued that photography lacked the originality required for copyright protection, since it relied on a machine to capture reality. Others insisted that the photographer made creative choices (like composition, lighting, and timing) that made each image a unique artistic expression. In 1884, the U.S. Supreme Court weighed in during the case Burrow-Giles Lithographic Co. v. Sarony. The Court ruled that photographs could indeed be protected under copyright law, recognizing the photographer as an “author” of an original work. That decision helped shape how copyright law would evolve to accommodate new technologies.*
- [2] *This article focuses deeply on USCO’s understanding mainly due to the Office’s published studies and reports on the matter of artificial intelligence, copyright and liability, which represented a pioneering movement on the subject. Such reports are often mentioned in academic articles, including in Brazil, due to their debate and conclusions on the copyright protection over AI generated works.*
- [3] *The U.S. Copyright Office defines generative artificial intelligence as “application[s] of AI used to generate outputs in the form of expressive material such as text, images, audio, or video” (U.S. Copyright Office. Copyright and Artificial Intelligence, Part 2: Copyrightability. Pg 1).*
- [4] *“Where a human inputs their own copyrightable work and that work is perceptible in the output, they will be the author of at least that portion of the output. Their own creative expression will be protected by copyright, with a scope analogous to that in a derivative work. Just as derivative work protection is limited to the material added by the later author, copyright in this type of AI-generated output would cover the perceptible human expression. It may also cover the selection, coordination, and arrangement of the human-authored and AI-generated material, even though it would not extend to the AI generated elements standing alone”. U.S. Copyright Office. Copyright and Artificial Intelligence, Part 2: Copyrightability. Pg 24.*
- [5] *U.S. Copyright Office. Copyright and Artificial Intelligence, Part 2: Copyrightability. Pg 40.*
- [6] *“A Collection of Objects Which Do Not Exist”, “A Single Piece of American Cheese” and “Film clip for song Just Like In A Movie”.*
- [7] *“50. Sometimes AI outputs will be co-creations of a human and an AI tool. Examples may include photographs which are digitally enhanced using AI and software written with suggestions from an AI assistant. In such cases, the human creator will be considered the author.”. UNITED KINGDOM. Secretary of State for Science, Innovation and Technology. December 2024. Available at: <https://www.gov.uk/government/consultations/copyright-and-artificial-intelligence/copyright-and-artificial-intelligence#bcopyright-and-artificial-intelligence>. Accessed on 05.23.2025.*
- [8] *“51. If a work is generated without human authorship that work may be protected as a “computer-generated work” in UK copyright law. For example, this could be in response to a simple prompt. Its author will be whoever undertook the arrangements necessary for its creation.”. UNITED KINGDOM. Secretary of State for Science, Innovation and Technology. December 2024. Available at: <https://www.gov.uk/government/consultations/copyright-and-artificial-intelligence/copyright-and-artificial-intelligence#bcopyright-and-artificial-intelligence>. Accessed on 05.23.2025.*

- [9] *"In the case of a literary, dramatic, musical or artistic work which is computer-generated, the author shall be taken to be the person by whom the arrangements necessary for the creation of the work are undertaken."* UNITED KINGDOM. Copyright, Designs and Patents Act. Section 9(3).
- [10] *Brazilian Bill of Law 2,721/2024, for example, aims at amending the Brazilian Copyright Law to state that authors are solely humans, despite of the autonomy of the artificial intelligence system used in the creation of the work.*
- [11] *It is important to note that Article 4 of French Bill of Law No 1,630 states that if an AI generated work is composed by a material whose author is undetermined, a tax should be paid to the organization responsible for collective management.*
- [12] PIQUARD, Alexandre. *AI: With announcement of investments worth €109 billion, Macron intends to take on US.* Available at : [https://www.lemonde.fr/en/economy/article/2025/02/10/ai-with-the-announcement-of-a-109-billion-investment-macron-intends-to-take-on-the-us\\_6737985\\_19.html](https://www.lemonde.fr/en/economy/article/2025/02/10/ai-with-the-announcement-of-a-109-billion-investment-macron-intends-to-take-on-the-us_6737985_19.html). Accessed on 05.23.2025
- [13] CHATTERTON, Edward. LUNG, Wilson. *Legal protections for AI-generated work in China.* Available at: <https://www.globallegalpost.com/news/legal-protections-for-ai-generated-work-in-china-45229593>. Accessed on: 06.26.2025
- [14] *Lin Chen v Hangzhou Gauss Air Film Technology Co., Ltd. and Changshu Qin Hong Real Estate Development Co., Ltd; Re Companion Heart - Changshu People's Court (2025)*
- [15] WININGER, Aaron. *Chinese Court Again Rules AI-Generated Images Are Eligible for Copyright Protection.* Available at: <https://www.chinaiplawupdate.com/2025/03/chinese-court-again-rules-there-is-copyright-in-ai-generated-images/>. Accessed on: 06.26.2025
- [16] *"Examples of factor in determining copyrightability of AI-generated material: Amount of instructions/input: "Detailed instructions that specifically indicate what constitutes creative expression" are more likely to be considered as creative contributions. However, lengthy instructions (i.e., prompts) that merely suggest an idea do not influence the assessment of creative contribution. Number of generation attempts: A large number of attempts alone does not affect the assessment of creative contribution. Repeated attempts, while checking the generated materials and correcting the instructions/input, may be recognized as a creative contribution. Selection from multiple output materials: The mere act of selection itself does not influence the determination of creative contribution. However, certain elements of choice may be involved which may be considered as creative. In addition, any additions or corrections made by humans to AI-generated materials that can be considered creative expressions are generally considered to be copyrighted works".* AGENCY FOR CULTURAL AFFAIRS, GOVERNMENT OF JAPAN. *Overview of the General Understanding: Copyrightability of AI-generated Material.* Pg. 17.
- [17] PPM Attorneys. *Can a natural person in South Africa copyright works created by AI software for self-benefit?* Available at: [https://www.ppmattorneys.co.za/ai-copyright-self-benefit/#\\_ftn9](https://www.ppmattorneys.co.za/ai-copyright-self-benefit/#_ftn9). Accessed on: 06.26.2025