

LAWBOTICS
Calle Campoamor 18, 1ª
28004 – Madrid
Spain

WORLD INTELLECTUAL PROPERTY ORGANIZATION

34, chemin des Colombettes
CH-1211 Geneva 20
Switzerland

Madrid, February 14th, 2020

RE: OBSERVATIONS ON THE DRAFT ISSUES PAPER ON INTELLECTUAL PROPERTY POLICY AND ARTIFICIAL INTELLIGENCE

To the World Intellectual Property Organization Secretariat:

We, Lawbotics, are a non-profit organization founded in 2017, with seat in Madrid, Spain dedicated to the study of the main issues arising from artificial intelligence mainly from a legal perspective. Our organization is mainly composed by practicing lawyers specialising in the fields of intellectual property, regulatory law and technology and we operate as a sort of think tank in order to address the challenges that IA poses to the current legal environment. You may find more information about us on our website www.lawbotics.org.

First of all, we would like to thank WIPO for its endeavours in tackling such a pressing issue and for giving voice to the different stakeholders involved in IA, including professionals and non-profit organizations like ourselves.

Therefore, we must acknowledge our utmost satisfaction to have the opportunity to submit our comments on the Draft Issues Paper on Intellectual Property Policy and Artificial Intelligence prepared by WIPO Secretariat.

In reply to your invitation to submit comments on the Draft Issues Paper on Intellectual Property Policy and Artificial Intelligence we have drafted a short report that is attached hereto as Schedule 1.

We would also like to express our interest in taking part in the second phase, i.e., providing more extensive answers to the issues raised by WIPO as well as those that might be proposed by other relevant stakeholders.

We hope that our comments prove themselves helpful to WIPO and that our observations are taken into consideration.

We would like to take this opportunity to renew the assurances of our highest consideration.

Scarlett M. Poy Tactuk
Secretary of the Governing Council
LAWBOTICS

Alejandro González Vega
Treasurer and Member of the Governing Council
LAWBOTICS

SCHEDULE 1**OBSERVATIONS TO THE DRAFT ISSUES PAPER ON INTELLECTUAL PROPERTY POLICY
AND ARTIFICIAL INTELLIGENCE****1. Introduction**

The relationship between AI and intellectual property is certainly one of the most relevant topics and one of the fields of law that can more dramatically change. The current pace of development of AI systems is putting policymakers in a position to completely rethink the very core of IP rights, up to now fully linked to human creation.

The debate, from general legal standpoint, revolves around the question of whether or not AI systems and autonomous robots should be accorded legal personality, something that was firstly proposed, albeit with limited effects, by the European Parliament in its Resolution of 16 February 2017 with recommendations to the Commission on Civil Law Rules on Robotics through the concept of electronic personality. For the time being, national and regional legislations do not acknowledge that robots can hold rights or be subject to obligations as the same way a natural person or legal entity is.

Evidently, the lack or recognition of legal personality for intelligent machines rests on the profound ethical implications that such a decision entails and its possible impactful ramifications.

Therefore, and even though this will be a question that will eventually need to be answered by policy, we will focus our observations on the issues presented by WIPO, setting aside the question of whether or not a robot can be considered author or a work or inventor, because those concepts are indisputably connected to the capacity of the persona or entity to be subject to rights and obligations.

2. Observations to Issues on Patents**Issue 1: Inventorship and Ownership**

As regards Issue 1, the first question, i.e., whether an AI can be considered as inventor, should be discarded taking into account the considerations regarding legal personality of AI. There are too many ethical implications as regards equating a machine to a natural or legal persona in the sense that they can be holders of rights. Opening that debate for the time being, even for the purposes of patent law, may result in expanding that debate to other areas of law that are clearly unprepared, such as tort law and liability, tax law or labour rights.

In the case of whether a human inventor should be named, the vast majority of national and regional legislations (e.g. section 81 of the European Patent Convention) require naming a human author in the patent application. We suggest two different options:

1. Considering that the inventors of the IA solution are, at least indirectly, inventors of the AI-generated invention. Even though they may have not directly taken part in the development of the invention and even if the AI has a high level of autonomy and unpredictability, they are responsible for the very existence of the AI system and, therefore, eventually holders of the right to be considered as inventors. Perhaps arrangements can be made in the regulations regarding patent applications that force the applicant to indicate that the invention has been generated by an AI; and
2. Amending the current regulations to eliminate the requirement to name an inventor in the case of AI-generated inventions, in case an human inventor cannot be identified because the invention cannot be reconducted to a natural person.

As regards the question of ownership, we strongly suggest that the issue of employee-developed patents is raised. The applicant of a patent, and therefore is primary owner, is not necessarily (and in practice, not usually) the inventor, but the company or legal entity for which that inventor works or renders services. We believe that a similar scheme might be applicable to AI-generated inventions. This idea combined with the elimination of the requirement to name a human inventor in these types of inventions may help to better address the problem of inventorship and ownership of patents created by an AI system.

Lastly, we do not believe that AI-generated inventions should be totally deprived from accessing the patent system, as this will result in disincentivising innovation based on AI systems. However, we suggest to address other issues. For instance: Should a system of benefit-sharing be applicable to AI-generated inventions protected with patents in order to balance between patent protection and the public interest, considering that AI-generated inventions are not directly, but rather indirectly, the result of human effort and investment?

Issue 4: Disclosure

The main problem that we have observed is that in more complex AI systems sometimes it is impossible to know exactly the details of the “thinking process” of the machine. Many AI systems incorporated the so-called black box algorithms it is very hard or even impossible to determine the decision-making process of the machine, knowing only the initial input and the final output. This may well result in a lack of understanding of the invention itself. Explainability is one of the main problems that AI experts face, as some decisions of the AI are highly unpredictable and even erratic, especially those that are implemented with deep learning and adaptative learning.

This element of uncertainty may result in disclosure problems and even affect industrial replicability, thus depriving the invention of the requirement of industrial application.

We strongly suggest that that the issue of industrial replicability and sufficient disclosure are therefore included in the Draft Issue Paper.

3. Observations to Issues on Copyright and Related Rights

Regarding the matter of AI and Copyrights we have found out some points that would be interesting to open for debate.

Issue 6 on Authorship and Ownership

First, we understand that there is a primary step before talking about copyright of the AI-generated works and it is about the protection of the AI systems and its underlying algorithms themselves.

Although the Berne Convention and WIPO Treaties set as principle that ideas, procedures, methods of operation or mathematical concepts as such are **not** protected under copyright, there are some debate going on regarding the possibility of granting protection to the algorithms and methods used for the AI system to learn and be able to generate content. We consider this must be cleared out and standardized. It is important that algorithms as part of the functional aspects of the software base of the AI system continue to be outside the scope of intellectual property protection.

Instead of copyrights to protect algorithms, we might consider trade secrets. The legislative trend is to pass law referring to trade secrets as rights that can be transmissible upon authorization of the owner, as happened recently in the European Union through Directive (EU) 2016/943 of the European Parliament and of the Council of 8 June 2016 on the protection of undisclosed know-how and business information (trade secrets) against their unlawful acquisition, use and disclosure. This means that trade secrets constitute intangible rights over sensible information of a business, any and all information with value, which might include technology use for the business (AI systems). We believe raising the issue on possible protection of AI system algorithms and routines via trade secrets is necessary.

Now, with respect to AI-generated content which Issue 6 refers to, we believe that another approach to the protection should be consider. The first issue that should be considered is that, any attempts to determine that a work is eligible for protection under copyright must take into account the concept of originality that stem from the Berne Convention, the WCT and regional and national regulations.

Though the concept of originality is not defined in legislations across the world, from a European perspective a work is original when it represents a creation of its own author (see, e.g., section 1.2 of Directive 200/24/CE or Directive 96/9/CE Considering 15). The Court of Justice of the European Union has determined that a work is original when it reflects the personality of its author (see, e.g., Judgment of the CJEU in Case C-45/10). In other words, a work is original when it entails a manifestation of the author's creative genius.

Since AI systems lack personality, not only from a legal perspective, but also from a psychological one, it is clear that a work created by an AI system does not qualify as

original, at least from a European view, and therefore will not be protected under copyright.

Thus, the main issue to be address is if the **concept of originality** should be defined so as to include works that are not original from a subjective perspective but rather from an objective perspective. That is, not to place the focus on the author's personality, but rather on whether or not the work created by the AI is to be considered as objectively novel in relation to other existing works. This would bring to the table a debate that has been persistent in Spanish legal doctrine (e.g. Spanish Supreme Court ruling of 26 April 2017). Notions on novelty from the world of patent law may be therefore considered to tackle with AI-generate works.

Notwithstanding the previous considerations, we are aware that some countries, like China, have recently determined that an AI-generated work can be protected under copyright and, therefore, meet the originality threshold.

Taking the former considerations into account, the next question would be what possible ways may exist or could be created to protect AI-generate works and to determine what rights, if any, should be vested to human participants. There are our suggestions:

- Applying the scheme of collective works or of work-made-for-hire.

Spanish Copyright Act (SCA) establishes one exception to the rule of human authorship, i.e., collective works (art. 8 SCA). This is of particular importance for computer programs (Section 97 SCA). The SCA presumes that the author is the entity or persons who coordinates and publishes the work or the computer program under its name, unless otherwise agreed. This would allow the programmers or legal entity that creates the system to be the authors as a presumption if no agreement is executed between the programmer/legal entity and the person in charge of the input of the data, should there be different persons.

In the case of work-made-for-hire the person commissioning the work is to be considered the author, as it happens in many common-law legislations.

Applying mutatis mutandi this scheme to AI-generated work, it could help determine that the author is that person who coordinates and publishes the work created by the AI system or the person who somehow "commissions" the work to the AI.

Two main problems would arise here, to our opinion. First, this solution does not solve the problem of originality, as the work may not be original, because it does not have a human author whose personality is reflected upon the work.

Second, it would leave open the question of who should be considered author in the case of AI operated by a person different from the creator of the AI system. We would hence be in the area of user generated contend via AI systems. Who should then, under this scheme, be considered author: The creator of the machine, the owner or the user?

In this sense, we consider that clearing the difference between the concepts of authorship and ownership is crucial. Authorship and ownership might be intertwined concepts but should not be confused. In the aforementioned case, a solution could be providing authorship to the programmer/legal entity that invested in such AI system, and allow the parties involved (programmer, entities, machine learning providers and end-users) to determine ownership over the rights of the AI-generated content.

This would permit a more fluid conversation between all participants, allowing them to decide where to allocate liabilities. However, and considering that some other rules may apply, such as consumer protection rules, probably liabilities should never rely on the end-user.

- Establishing a system of copyrighted works generated by AI

The United Kingdom, in its Copyright, Designs and Patents Act (Section 9.3)establishes that in computer-generated works, the author is the person under which all the necessary arrangements for the creation of work are made. Section 178 of said text defines a computer-generated work as that work created under such circumstance in which no human author exists.

However, this provision, although very helpful for many cases, does not solve the problem of originality in the case of AI systems with a high degree of unpredictability where the work is created almost in a spontaneous manner, thus eliminating the element of volition by the human. If no arrangements have been made for the creation of the work, who is then the author?

- Creating a sui generis scheme of rights

Since the lack of originality, in the sense mentioned above, would deprive AI-generated works of copyright protection, this can also hinder the creation of AI-generated works itself, as it can disincentivize investments and research in this type of AI-systems.

Therefore, a sui generis right may be created to protect those who created this type of AI-systems and are ultimately responsible for the works it produces, even if they lack originality. This happens for instance in the case of the sui generis rights for databases existing under European legislation. The main focus of this rights is not to award creativity but rather the investments of the creator of the database, regardless of whether or not the database itself is a work worthy of copyright. This type of right also have more extensive limitations and reduced terms of protection.

We believe this a solution that should be further considered, in order for AI-generated works to sit more comfortably with the widespread notion of originality, as such a solution might protect this type of works even though they are not original from a subjective perspective.

- Creating an equitable remuneration right

As a last option, we deem necessary that the Draft Issues Paper should also consider the possibility of not establishing any exclusive rights when it comes AI-generated works but only bestows upon the developers of the AI-system an equitable remuneration right, where those works are used for commercial purposes. This solution can very effective to balance the economic interests of AI developers and the traditional notions of originality. The public can benefit from the creation of those works without boundaries, thus enriching the cultural sphere, and the developers enjoy a remuneration.

Similar options can be found, for instance, in Spanish law in relation to press reviews. Under Section 32.1 SCA, press reviews are considered quotations, and therefore a limitation to the exclusive rights of the press editors. However, if the press review consist in the mere reproduction of press articles and such activity is carried out for commercial purposes, then the user is bound to pay the press editor an equitable remuneration, provided that the press editor has not oppose to such uses.

Issue 7: Infringement and Exceptions

We understand that another issue that should be included in the WIPO discussion should be what would happen should the AI-generated content infringe the rights of original works.

For example, if the AI- generated content results to be a transformation of an original work, perhaps not even authorized by the author/s, or if the AI systems is fueled with different data on literary works and the result is an exact copy of a book. In such cases, who is going to be held accountable? Would it be the programmer or entity commercializing the AI system? Or could it be the person who is providing the machine with the data?

We believe these issues should be further considered, in connection with the general problem that liability of AI poses.

Issue 8: Deep Fakes

Deep fakes have very useful applications but also have profound ethical implications. The use of a person's voice or appearance, specially if that person has passed away, may deeply affect people who were close to that person, and thus, in some legislation, may even constitute an intromission to the person's intimacy and might enter into conflict with the right to publicity. Using deep fakes for commercial purposes, such as advertising or even films, can be even more prejudicial.

Adding to the questions posed by WIPO, we considered that the issue of balance between self-image and honour rights and deep fakes must definitely be taken into account. In particular, the protection of the image of the deceased is a matter to be tackled with before assessing the possibility of granting deep fakes protection under copyright law.

Issue 9: General Policy Issues

From a general perspective, the creation of AI works may have a meaningful effect on the creation of traditional works. Technologies like 3D printing may make it very easy for an AI system to create works in mass way faster than any human being.

The commercialization of said works, accompanied by high levels of copyright protection, may result in a progressive reduction of artistic creation by human authors. Art, in all its forms, is the finest expression of human intelligence and therefore should be particularly protected as it is paramount for the cultural evolution of humankind.

We believe that leveling the protection of AI-generated works to human created works can relegate artistic creation to a very specific segment of the population and can disincentivize authors from engaging in artistic endeavours. Why would an author create and make a living out of it if a machine may create the same or a similar work in a more swift and precise manner?

In developing a policy to protect AI-generated work the impact on authors and on the cultural assets market must always be considered.

4. Observations on Issues of technology gap and capacity building

Issue 12: Capacity building

The technology gap is a question of capital importance, not only in the field of AI, but also in many others, such as environmental protection.

WIPO should consider proposing schemes of technology transfers between developed States and developing States in the field of A; similar to those existing in the field of environmental protection.

A system of mandatory licenses, such as the ones existing in patent regimes, where there is an insufficient level exploitation of the patent, may also be considered.

Another option for capacity building is fostering initiatives that may help to spread knowledge on artificial intelligence, such as, scholarship programs for least developed states, international funds to help in the development of AI in developing countries or promoting private-public partnerships between technological companies and the governments of developing countries.