

KEI Comments on Intellectual Property Protection for Artificial Intelligence Innovation

Re: 84 FR 66176, Docket No. PTO-C-2019-0038

1. Should a work produced by an AI algorithm or process, without the involvement of a natural person contributing expression to the resulting work, qualify as a work of authorship protectable under U.S. copyright law? Why or why not?

No. One reason that a work produced by an AI algorithm or process should not qualify as a work of authorship under U.S. copyright law is that copyright has a term of protection which is completely inappropriate for intellectual property granted on the basis of investments. A *sui generis* type of protection may or may not be appropriate at some point for some situations, but granting 95 years of exclusive rights, subject to restrictive three-step tests (in treaties) on exceptions, is not appropriate.

2. Assuming involvement by a natural person is or should be required, what kind of involvement would or should be sufficient so that the work qualifies for copyright protection? For example, should it be sufficient if a person (i) designed the AI algorithm or process that created the work; (ii) contributed to the design of the algorithm or process; (iii) chose data used by the algorithm for training or otherwise; (iv) caused the AI algorithm or process to be used to yield the work; or (v) engaged in some specific combination of the foregoing activities? Are there other contributions a person could make in a potentially copyrightable AI-generated work in order to be considered an “author”?

When the AI generates the work, the framework for copyright is no longer appropriate, due to the extraordinarily long term of protection under copyright (95 years for corporate works) and the restrictive conditions in copyright treaties regarding exceptions, which are also inappropriate. One can imagine a situation in which AI could generate endless versions of software implementations, music compositions or possible plots for drama that would create significant licensing thickets and high costs of clearing rights.

To the extent that the creative work is generated by software programs, *sui generis* regimes may be more appropriate, particularly if such a regime or regimes could be designed in such a way as to create the appropriate public interest balance on issues like the extent to which exclusive rights or remunerative rights are granted, the appropriate term and exceptions to such rights, and requirements (where appropriate) to link rights to obligations for disclosures of data, algorithms, code or outcomes.

Registration of works created by AI may also be appropriate, and this is something problematic under the Berne Convention and the WIPO Copyright Treaty, although it is permitted under the Rome Convention, and is a standard condition of patent protection.

3. To the extent an AI algorithm or process learns its function(s) by ingesting large volumes of copyrighted material, does the existing statutory language (e.g., the fair use doctrine) and related case law adequately address the legality of making such use? Should authors be recognized for this type of use of their works? If so, how?

Congress may want to consider a statutory exception for text and data mining to provide greater certainty regarding the freedom to develop AI tools and resources.

4. Are current laws for assigning liability for copyright infringement adequate to address a situation in which an AI process creates a work that infringes a copyrighted work?

No, because, among other things, the current rules on damages are not appropriate for cases where the liability rules are a more appropriate remedy, and the term “knowing” infringement becomes harder to define.

5. Should an entity or entities other than a natural person, or company to which a natural person assigns a copyrighted work, be able to own the copyright on the AI work? For example: Should a company who trains the artificial intelligence process that creates the work be able to be an owner?

Copyright is the wrong type of protection for AI-generated works, period.

6. Are there other copyright issues that need to be addressed to promote the goals of copyright law in connection with the use of AI?

7. Would the use of AI in trademark searching impact the registrability of trademarks? If so, how?

8. How, if at all, does AI impact trademark law? Is the existing statutory language in the Lanham Act adequate to address the use of AI in the marketplace?

9. How, if at all, does AI impact the need to protect databases and data sets? Are existing laws adequate to protect such data?

AI actually creates a public interest in forcing third-party access to datasets, to avoid monopolization. The apparent economies of scale and scope for the collection and analysis of data should be a clear warning to policy makers that monopoly power may be

closely associated with the rising importance of AI, unless policies are undertaken to ensure access to data, treated as an essential facility in competition law, subject to appropriate protections for privacy.

One example of how access and privacy can be in balance is the Genomics England use of a trusted intermediary as a custodian of patient genomics data, that provides useful but context limited access to researchers, under strict rules on maintaining the privacy of individuals.

10. How, if at all, does AI impact trade secret law? Is the Defend Trade Secrets Act (DTSA), [18 U.S.C. 1836](#) et seq., adequate to address the use of AI in the marketplace?

One of the problems with current intellectual property law is the ability to claim trade secret, confidential business information, copyright, trademark and patent protection at the same time. One of the tradeoffs for protection should be a realistic and timely path for protected works, data or inventions to enter the public domain, for many cases, subject to some exceptions, and appropriate safeguards for privacy.

11. Do any laws, policies, or practices need to change in order to ensure an appropriate balance between maintaining trade secrets on the one hand and obtaining patents, copyrights, or other forms of intellectual property protection related to AI on the other?

KEI is concerned that the Obama and Trump administrations have both promoted and entered into a series of international agreements limiting the ability of governments to force more transparency of software code or algorithms. The public is now faced with an astonishing expansion of the role of software and algorithmic guided decisions and influence over almost every aspect of our lives, from the music and films we view to sources of news, criminal sentencing and parole, voting, credit, dating, employment, compensation, compliance with environmental regulations, automobile safety, and the marketing of an ever expanding set of goods and services. Vast amounts of data are shared outside of formal rules and contractual agreements, and considerable harmful activities including financial fraud, tampering with elections and the theft of confidential information are present. It will be important to have the ability to audit and evaluate the software and algorithms the increasingly control our lives.

12. Are there any other AI-related issues pertinent to intellectual property rights (other than those related to patent rights) that the USPTO should examine?

The potential volume of AI-generated IP claims is something that should be evaluated very carefully, because it can create massive demands on the legal system and society at large to resolve disputes and license rights. The type of rent-seeking activity we see in the areas of software, business methods and pharmaceutical patents illustrates the costs

that low quality or monopolistic IP claims can impose on society, and creates a system where AI can generate a fantastic number of potential claims. This is something that is very dangerous.

13. Are there any relevant policies or practices from intellectual property agencies or legal systems in other countries that may help inform USPTO's policies and practices regarding intellectual property rights (other than those related to patent rights)?

These five OECD AI Principles should be embraced for responsible stewardship of trustworthy AI:

1. AI should benefit people and the planet by driving inclusive growth, sustainable development and well-being.
2. AI systems should be designed in a way that respects the rule of law, human rights, democratic values and diversity, and they should include appropriate safeguards – for example, enabling human intervention where necessary – to ensure a fair and just society.
3. There should be transparency and responsible disclosure around AI systems to ensure that people understand AI-based outcomes and can challenge them.
4. AI systems must function in a robust, secure and safe way throughout their life cycles and potential risks should be continually assessed and managed.
5. Organisations and individuals developing, deploying or operating AI systems should be held accountable for their proper functioning in line with the above principles.

Source: <https://www.oecd.org/going-digital/ai/principles/>

From Andres Guadamuz, “Artificial intelligence and copyright,” October 2017.

https://www.wipo.int/wipo_magazine/en/2017/05/article_0003.html

In Europe the Court of Justice of the European Union (CJEU) has also declared on various occasions, particularly in its landmark Infopaq decision (C-5/08 Infopaq International A/S v Danske Dagbaldes Forening), that copyright only applies to original works, and that originality must reflect the “author’s own intellectual creation.” This is usually understood as meaning that an original work must reflect the author’s personality, which clearly means that a human author is necessary for a copyright work to exist.

The second option, that of giving authorship to the programmer, is evident in a few countries such as the Hong Kong (SAR), India, Ireland, New Zealand and the UK. This approach is best encapsulated in UK copyright law, section 9(3) of the Copyright, Designs and Patents Act (CDPA), which states:

“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.”

Furthermore, section 178 of the CDPA defines a computer-generated work as one that “is generated by computer in circumstances such that there is no human author of the work”. The idea behind such a provision is to create an exception to all human authorship requirements by recognizing the work that goes into creating a program capable of generating works, even if the creative spark is undertaken by the machine.

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