

January 10, 2020

The Honorable Andrei Iancu  
Under Secretary of Commerce for Intellectual Property and  
Director of the U.S. Patent and Trademark Office  
600 Dulany Street  
Alexandria, Virginia 22314

RE: Comments of ACT | The App Association on the U.S. Patent and Trademark Office's *Request for Comments on Intellectual Property Protection for Artificial Intelligence Innovation* [Docket No. PTO-C-2019-0038]

Dear Director Iancu:

ACT | The App Association (App Association) writes in response to the Department of Commerce U.S. Patent and Trademark Office's (USPTO) request for comment regarding the impact of artificial intelligence (AI) technologies on intellectual property (IP) law and policy.<sup>1</sup>

The App Association represents over 5,000 small business software application development companies and technology firms located across the mobile economy.<sup>2</sup> Our members develop innovative applications and products that meet the demands of the rapid adoption of mobile technology and that improve workplace productivity, accelerate academic achievement, monitor health, and support the global digital economy. Our members play a critical role in developing new products across consumer and enterprise use cases, enabling the rise of the internet of things (IoT). Today, the App Association represents an ecosystem valued at approximately \$1.7 trillion that is responsible for 5.9 million American jobs.

The small business community that the App Association represents relies on IP to grow and create jobs. The infringement and theft of IP (copyrights, trademarks, patents, and trade secrets) presents a major threat to our members and the billions of consumers who rely on their digital products and services. The App Association urges USPTO to recognize that its approach to AI should prioritize both providing reasonable and technology-neutral protections to IP (including predictive tools that may meet the USPTO's definition of AI) and enabling AI tools to prevent and address IP infringement.

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<sup>1</sup> United States Patent and Trademark Office, *Request for Comments on Intellectual Property Protection for Artificial Intelligence Innovation*, 84 FR 58141 (October 30, 2019).

<sup>2</sup> See <https://actonline.org/about/>.

App Association members are leading the development of AI across consumer and enterprise use cases. We have a strong interest in the policies that impact the development of AI solutions, including those in the context of IP. We recognize that the rise of AI holds great promise, yet also generates many legal and policy questions, with IP being no exception. Below, we discuss AI's impact on copyright, trademark, and trade secret laws, and urge that any changes to such laws in light of AI do not weaken important IP protections that are essential to small business digital economy companies. We commend USPTO for expanding its AI policy examination beyond patents to other kinds of IP and commit to continuing our work with USPTO and other stakeholders to help develop balanced and practical solutions that will preserve the United States' role as the leading global AI innovation hub.

The App Association offers the following responses to questions posed by USPTO:

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?*

The App Association believes that further consultations and study are needed to answer this question. Inevitably, a natural person must be responsible for a work for it to qualify as a work of authorship protectable under U.S. copyright law, which is reflected in existing U.S. law and policy. For example, the U.S. Court of Appeals has held that only humans (as opposed to, in the case, animals) have standing to sue for copyright infringement.<sup>3</sup> Further, the U.S. Copyright Office provides that it will register an original work of authorship, provided that the work was created by a human being; that copyright law only protects “the fruits of intellectual labor” that “are founded in the creative powers of the mind;” and that because copyright law is limited to “original intellectual conceptions of the author,” it will refuse to register a claim if it determines that a human being did not create the work.<sup>4</sup> Any decision to provide copyrightable work authorship to AI may therefore represent a drastic shift in law and policy, and would also lend to defining legal AI personhood (a question that should likely be addressed by Congress comprehensively).

The App Association recognizes that U.S. copyright law provides that non-human legal entities may be considered authors, but only when the work at issue is made for hire by (1) an employee in the scope of their employment or (2) certain specific categories specified in Section 101 of the Copyright Act when agreed to as works made for hire. In practice, such works still need to be created by a human to be works eligible for copyright protection due to the requirement for executing agreements under (1) or (2).

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<sup>3</sup> *Naruto v. Slater*, 818 F.3d 418, 426 (9th Cir. 2018).

<sup>4</sup> Copyright Compendium 306 The Human Authorship Requirement , <https://www.copyright.gov/comp3/chap300/ch300-copyrightable-authorship.pdf>.

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 Start Printed Page 58142 activities? Are there other contributions a person could make in a potentially copyrightable AI-generated work in order to be considered an “author”?*

The App Association continues to study the issues raised by this question and (i-ii). We accept that authorship may extend to the output of AI algorithms where the AI algorithm itself is copyrightable and where the algorithm is primarily responsible for the output (i.e., the downstream user of the AI algorithm that is not its author has a very marginal role). We note that the Ninth Circuit recognized that copyright protections may be extended to a computer program's output if the program “does the lion's share of the work” in creating the output and the user's role is so “marginal” that the output reflects the program's contents.<sup>5</sup>

With respect to a person choosing data used by the algorithm (iii), the App Association believes that such a scenario may be sufficient to qualify for copyright protection when meeting the thresholds for copyrighting a data selection within a compilation<sup>6</sup> (notably, requiring creativity in the data selection).

When addressing the “caus[ing] [of] the AI algorithm or process to be used to yield the work” (iv), the App Association does not believe such an activity should necessarily create copyrightable author rights. As worded, such an allowance would allow a party “causing” the algorithm to “yield work” through simply enacting another author’s algorithm to claim authorship.

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<sup>5</sup> Rearden LLC v. Walt Disney Co., 293 F. Supp. 3d 963 (N.D. Cal. 2018).

<sup>6</sup> “[A] work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship. The term “compilation” includes collective works..” 17 U.S.C. § 101.

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?*

The App Association believes that precedent may need to evolve to address scenarios where an AI algorithm or process learns its function(s) by ingesting large volumes of copyrighted material, including with respect to infringement and fair use. We do not believe this to necessarily be a failing of the Copyright Act’s language, but simply an effect of quickly-evolving technology and controversies arising that can be resolved in new law and policy decisions. Still, it is important that any changes in copyright law and policy do not weaken critical copyright protections.

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?*

The App Association believes that precedent may need to evolve to address scenarios where an AI process creates a work that infringes a copyrighted work. We do not believe this is a shortcoming of the Copyright Act’s language, but instead a result of rapidly evolving technology and disputes that arise may be decided through future law and policy decisions. However, should case law demonstrate that there is a need for revisions to the Copyright Act, the App Association would support such an effort to ensure the fair application of copyright to emerging use cases that involve AI.

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?*

While the App Association continues to study the issues raised by this question, we accept that authorship may extend to the output of AI algorithms where the AI algorithm itself is copyrightable and where the algorithm is primarily responsible for the output (i.e., the downstream user of the AI algorithm that is not its author has a very marginal role). We note that the Ninth Circuit has recognized that copyright protections may be extended to a computer program’s output if the program “does the lion’s share of the work” in creating the output and the user’s role is so “marginal” that the output reflects the program’s contents.<sup>7</sup> With respect to a person training an AI process (i.e., choosing data used by the algorithm), the App Association believes that such a scenario may be sufficient to qualify for copyright protection when meeting the thresholds for copyrighting a data selection within a compilation (notably, requiring creativity in the data selection).

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<sup>7</sup> Rearden LLC v. Walt Disney Co., 293 F. Supp. 3d 963 (N.D. Cal. 2018).

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?*

While some areas of copyright are cleanly applied to AI-related scenarios (e.g., copyright protections of an AI algorithm), others may require further study and development of precedent (e.g., AI output depending on a range of factors). The App Association believes that case law and policy may need to evolve to address these scenarios. This is not due to an inadequacy of the Copyright Act's language, but instead the extremely fast paced and constantly changing environment of technology. Instead we believe that conflicts that arise may be resolved through abundant case law and policy implementations. However, if these legal and policy decisions demonstrate that there is a need to update or amend the Copyright Act, the App Association would support efforts to ensure equitable applications of copyright protections in the emerging AI context.

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

The App Association believes that the use of AI in trademark searching can (and should) have a positive impact by improving and streamlining the trademark search and registration process. Algorithms can handle tasks in seconds that would take trademark professionals and USPTO staff many hours to accomplish, saving time and reducing costs.

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?*

We note that AI enables improved trademark searching and registrations, and that AI tools are also widely used to detect trademark infringement online. However, we do not believe that AI has had a direct impact on trademark law yet, and that alterations to the Lanham Act to address the use of AI are not necessary at this time. However, we urge USPTO to continue to monitor this area to determine if issues with respect to AI and copyright (e.g., ownership of an AI-generated work) also emerge in the trademark space. Should any changes to trademark law be considered in light of AI, it is important that trademark rights are not weakened.

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

Because databases and data sets may enjoy copyright protections as compilations, it is likely that existing laws adequately protect them. However, the law is less clear with respect to AI-generated works (including compilations). The App Association believes that new case law and policy decisions may need to be produced in order to address these scenarios. We believe this is due to the constant advancements in technology, and not a deficiency in the Copyright Act's text. When particular disputes arise, it will be up to the courts and policymakers to determine the next best steps for handling emerging AI technologies. If consensus emerges that revisions to the Copyright Act are necessary, the App Association would support changes to copyright law that permit the U.S. system to address emerging AI use cases while maintaining strong copyright protections.

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?*

The App Association does not believe the existence of AI makes changes to the Defend Trade Secrets Act (DTSA). AI is simply a new kind of technology which should enjoy the same protections the DTSA provides to other technologies. However, should changes to the DTSA be considered, it is important that trade secret protections are not weakened.

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?*

No, the App Association does not believe that changes in law, policy, or practices are needed to ensure an appropriate balance between maintaining trade secrets and obtaining IP protections related to AI.

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?*

We strongly encourage USPTO and the U.S. Copyright Office to provide mandatory training to staff on AI and its capabilities, and the state of the law. This training curriculum should evolve with technology and changes to statute/developments in precedent.

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)?*

The App Association notes that other government agencies are beginning to address AI's impact on IP (e.g., the European Patent Office).<sup>8</sup> The App Association encourages coordination with these agencies and bilateral collaboration, as well as through multilateral efforts such as the World Intellectual Property Organization. Both approaches to engagement with other governments should prioritize alignment with U.S. law and precedent to the maximum extent possible.

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The App Association appreciates the opportunity to submit these comments to the USPTO, and we are committed to working with all stakeholders to address emerging technology issues and developments impacting IP.

Sincerely,



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<sup>8</sup> E.g., <https://www.epo.org/news-issues/issues/ict/artificial-intelligence.html>.