

Clarivate Analytics' Comment on the WIPO Secretariat's Issues Paper on Intellectual Property Policy and Artificial Intelligence

INTRODUCTION AND BACKGROUND

Clarivate Analytics ("Clarivate"), the global leader in providing data and expertise that helps companies and individuals accelerate innovation, appreciates the opportunity to comment on the WIPO Secretariat's Issues Paper on Intellectual Property Policy and Artificial Intelligence (the "Issues Paper").

Clarivate's Intellectual Property Group consists of four global strategic services businesses that help innovators develop, optimize, manage, and protect valuable intellectual property assets including patents, trademarks, copyrights, and domain names. These four businesses are Derwent®, MarkMonitor®, CompuMark® and Darts-IP®. Because of the breadth and depth of its intellectual property service offerings, Clarivate has a unique and valuable perspective on intellectual property rights management and the impact artificial intelligence may have on the future of IP rights creation, registration and defense.

The comments below do not address every issue presented in the WIPO Secretariat's Issues Paper. Rather, Clarivate chooses to comment on items that it feels are most worthy of its input and for which it has the most direct knowledge, data, and expertise. Clarivate welcomes the opportunity to meet with the WIPO Secretariat or other WIPO staff to further explain or discuss the comments provided.

PATENTS

Issue 1: Inventorship and Ownership

Clarivate is aware that artificial intelligence (AI) is currently being utilized to create inventions that may be eligible for patent protection. Historically, inventors have been human beings and patent laws and statutes were always aimed to protect the rights belonging to individual artists, creators, and inventors. Permitting AI systems to become an inventor eligible for patent protection would fundamentally change history and the origin of patent rights. For this reason, Clarivate wishes to express the following:

- The current arguments in the EU are fundamentally around the fact that AI systems or machines have no legal personality at present, and legislation would be required to create one. Therefore, Clarivate believes further discussion about the implication of granting rights and status to machines lacking human perspective is warranted. Legal and ethical considerations should be taken into account before considering inventorship and patent ownership
- Legal attitudes to AI inventors vary subtly around the world so any rules or regulations must incorporate such considerations. In the UK, for example, the programmer who came up with the AI is the inventor; in the US, it's the person who came up with the original idea for the invention, with the programmer deemed simply to be facilitating it.
- Patent ownership involves certain responsibilities that an AI would struggle to satisfy, such as renewing patents, updating government records and keeping licensees informed. These responsibilities are vital to the integrity of the prosecution system.

- While the EU did at one time consider adding 'electronic personality' to the two categories of potential patent owner allowed - 'natural person' and 'legal entity' - it abandoned the idea after receiving a strongly worded letter from more than 150 experts in AI, robotics, IP and ethics.
- In December 2019, the European Patent Office rejected two applications which named inventor "DABUS" described as "a type of artificial intelligence", thus confirming the need for the inventor to be human. The AI concerned, named DABUS, was created by Stephen Thaler, and is described as a connectionist artificial intelligence. According to its inventors, it 'relies upon a system of many neural networks generating new ideas by altering their interconnections. A second system of neural networks detects critical consequences of these potential ideas and reinforces them based upon predicted novelty and salience.' It's common for the inventor of a patent to be an individual, while its owner is the company that employs the inventor. In this case, it was argued that the inventor is Dabus AI and the owner would be Thaler. After hearing the arguments of the applicant in non-public oral proceedings on 25 November the EPO refused EP 18 275 163 and EP 18 275 174 on the grounds that they do not meet the requirement of the EPC that an inventor designated in the application has to be a human being, and not a machine

Issue 2: Patentable Subject Matter and Patentability Guidelines

Clarivate believes that it is important to distinguish between protecting AI related inventions and AI generated or assisted inventions. Regarding AI related inventions: The U.S. Supreme Court's decision in [Alice Corp. vs. CLS Bank International \(573 U.S. 208 \(2014\)\)](#) and subsequent decisions by the Federal Circuit have cast doubt on whether granted patents and new patent applications for AI- and "big data"(BD)-related innovations can satisfy the still-evolving the *Alice* test for patent eligibility. These shifts have dramatically reduced the value of many issued patents in related fields and have changed how patent applications are drafted and prosecuted.

The uncertainty injected by the *Alice* decision will eventually diminish through evolving court decisions and perhaps new legislation. In the meantime, however, AI and BD innovation can still be protected with patents, although patents are not necessarily the only, or the best, protection in a given instance.

Comparison of the treatment of the machine as an inventor with the machine as the author of a work of the mind is interesting as the machine creating a copyright-protected work is much more of a reality than its patent counterpart. Today, a machine can be an artist but not an inventor. As per [R. Abbott](#), "In 1988, the United Kingdom became the first country to provide explicit copyright protection for AI or "computer-generated" works. In circumstances where an otherwise copyrightable work is created but no natural person qualifies as an author, the "producer" of the work is deemed to be the author." China has taken a similar approach very recently whereas the US has refused to do so, maintaining the prevalence of human requirement for authorship (see "monkey case" [Naruto vs Slater](#)

Issue 3: Inventive Step or Non-Obviousness

Clarivate notes that, regarding the examination process, the notion of inventive steps/non-obviousness and the use of the "person skilled in the art" as the legal fiction for its evaluation is under pressure as well.

Issue 4: Disclosure

Whilst the current ability of AI systems to generate an invention on their own is unproven and human input is still necessary for their creation, the rapid evolution makes it foreseeable in a short-term future for specific application inventions. Today, it is far more common for businesses to talk about “computer-assisted innovation.” In all current constructions of AI generated inventions a human is still, to a greater or lesser extent, involved. This means that the reasons to grant patents still exist in relation to AI generated inventions, albeit they might be constrained to a small contribution by a human being. Because the justifications for granting patents might be diminished (although not extinguished) in cases where an AI generated invention is involved, patent policies should also be revisited.

Of all the requirements for patentability, the “inventive step” or “non-obviousness” is the most difficult to assess, both in theory and in practice. With AI assisted inventions the human ingenuity is less visible, while at the same time the inventing activity becomes easier, as most of the mental effort is passed on to the AI. However, this scenario makes it harder to assess whether the invention possesses an “inventive step” – a condition for patentability that requires the invention to be non-obvious to a skilled person (or not-easily invented by a skilled person).

COPYRIGHT AND RELATED RIGHTS

Issue 7: Infringement and Exceptions

Clarivate believes that the use of copyrighted or third-party data should be allowed as long as the output significantly differs from the input. For example, if an AI algorithm drives sentiment from a piece of copyright text, the output does not expose the input.

PATENTABILITY OF DATA

Issue 10: Further rights in Relation to Data

Clarivate strongly supports efforts to recognize and establish the creation of intellectual property rights in data. In increasingly data driven commercial, social, and financial environments, the developers and analyzers of data should have the opportunity to protect the value of their creation.

ACCOUNTABILITY FOR IP ADMINISTRATIVE DECISIONS

Issue 13: Accountability for Decisions in IP Administration

Clarivate believes that when AI is used to support decisions in IP administration, there are explicit steps that need to be included in the process to ensure that the decisions are free of biases inherent to predictive algorithms. For example, an invention made by a large

multinational and an invention made by a startup should have equal odds of being approved or denied, even if the AI algorithm used to support the administrator is biased in favor of applications submitted by large companies because of their prior track record.

OTHER COMMENTS

Clarivate notes with curiosity that the Issues Paper failed to include a section or solicit public comments on the question of AI and domain names. WIPO adjudicates more domain name dispute resolution proceedings (UDRP than any other arbitration forum. WIPO should seek input from domain name authorities and experts regarding the use of AI in domain name registration and protection. For example EURID, the registry operator for .EU domain names is currently experimenting with AI to identify domain name registrants that fit a profile for cybersquatting or infringement. Clarivate would encourage patent, copyright and trademark offices around the globe to explore using AI to screen patent, trademark, copyright, and domain name registrations for infringement and potential fraud by the applicant.

SUMMATION

Microsoft CEO Satya Nadella [once remarked](#) that he “falls into “the camp of thinking AI as augmenting human capability and capacity.” But, should AI be allowed to stand in the same shoes as a human inventor when it comes to intellectual property rights creation, maintenance, and protection? Clarivate does not believe that AI should be entitled to the same rights and interests without further discussion about the impact AI creators would have on human inventors and the IP ecosystem.

Clarivate thanks WIPO for the Issues Paper, its attention to the serious considerations related to AI and intellectual property rights management, and for its solicitation of public comments. Clarivate looks forward to engaging further with WIPO and other organizations focused on this important matter.

Respectfully submitted,

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