Via Electronic Mail to: ai2ip@wipo.int  
Attention: WIPO Secretariat, World Intellectual Property Organization

International Business Machines Corporation [IBM] welcomes the opportunity to comment on the DRAFT ISSUES PAPER ON INTELLECTUAL PROPERTY POLICY AND ARTIFICIAL INTELLIGENCE, WIPO/IP/AI/2/GE/20/1 (13 December 2019).

IBM submits the following comments.

With reference to Section 5:

5. The issues identified for discussion are divided into the following areas:

(a) Patents
(b) Copyright
(c) Data
(d) Designs
(e) Technology Gap and Capacity Building
(f) Accountability for IP Administrative Decisions
Questions relating to trademarks and trade secrets are not raised in this draft paper. Unless such questions are being addressed by WIPO elsewhere, IBM suggests that WIPO at least considers the same issues that the United States Patent and Trademark Office [USPTO] raised in their “Request for Comments on Intellectual Property Protection for Artificial Intelligence Innovation”, 84 Fed. Reg. 58141 (October 30, 2019).

With reference to the Section on Patents, Issue 1:

**Issue 1: Inventorship and Ownership**

6. In most cases, AI is a tool that assists inventors in the invention process or constitutes a feature of an invention. In these respects, AI does not differ radically from other computer-assisted inventions. However, it would now seem clear that inventions can be autonomously generated by AI, and there are several reported cases of applications for patent protection in which the applicant has named an AI application as the inventor.

7. In the case of inventions autonomously generated by AI:

   (i) Should the law permit or require that the AI application be named as the inventor or should it be required that a human being be named as the inventor? In the event that a human inventor is required to be named, should the law give indications of the way in which the human inventor should be determined, or should this decision be left to private arrangements, such as corporate policy, with the possibility of judicial review by appeal in accordance with existing laws concerning disputes over inventorship?

   (ii) The inventorship issue also raises the question of who should be recorded as the owner of a patent involving an AI application. Do specific legal provisions need to be introduced to govern the ownership of autonomously generated AI inventions, or should ownership follow from inventorship and any relevant private arrangements, such as corporate policy, concerning attribution of inventorship and ownership?

   (iii) Should the law exclude from the availability of patent protection any invention that has been generated autonomously by an AI application? See also Issue 2, below.

It may be helpful to include a question that asks submitting parties to describe the general scope of an AI invention, for example, as requested in the USPTO’s “Request for Comments on Patenting Artificial Intelligence Inventions”, 84 Fed. Reg. 44889 (August 27, 2019).

Also, it may be prudent to ask what it means for an invention to be generated autonomously, perhaps by also asking for examples - given the current state of technology and the possible impacts on any definition from other areas of technology, law and policy, we may need to
consider whether we, as a society, are ready to develop a definition or test for autonomously generated inventions at this point in time.

Further, IBM suggests that more detailed questions relating to inventorship and ownership be included, for example, if AI is to be classed as an inventor, what ramifications will that have on related issues, such as, infringement and liability? Also, if AI is classed as an owner, how will the AI enforce and assign rights; hire an attorney; sign court documentation etc.? Note that there may also be ramifications on other areas of law and policy and it should be ensured that multiple, potential outcomes be discussed and explored, by carefully considering various lines of argumentation before any changes to legislation/policy are enacted – asking parties for their views on these broader issues is essential.

With reference to Section 6 (above) and the following phrase: “however, it would now seem clear that inventions can be autonomously generated by AI”, IBM suggests that the language be modified to reflect a broader set of views, for example, as follows: “it has been contemplated that inventions are or will eventually be created autonomously by AI, but many still believe that currently and for the foreseeable future, AI is a mere tool lacking true autonomy”.

With reference to the Section on Patents, Issue 3:

9(ii) Should the standard of a person skilled in the art be maintained where the invention is autonomously generated by an AI application or should consideration be given to replacing the person by an algorithm trained with data from a designated field of art?

The standard of a skilled person in the art may also need to be discussed in the situation where a skilled person has access to more and more advanced AI technology/tools – it may be worth raising this issue as an explicit question.

With reference to the Section on Copyright and Related Rights, Issue 6:

12. AI applications are capable of producing literary and artistic works autonomously. This capacity raises major policy questions for the copyright system, which has always been intimately associated with the human creative spirit and with respect and reward for, and the encouragement of, the expression of human creativity. The policy positions adopted in relation to the attribution of copyright to AI-generated works will go to the heart of the social purpose
for which the copyright system exists. If AI-generated works were excluded from eligibility for copyright protection, the copyright system would be seen as an instrument for encouraging and favoring the dignity of human creativity over machine creativity. If copyright protection were accorded to AI-generated works, the copyright system would tend to be seen as an instrument favoring the availability for the consumer of the largest number of creative works and of placing an equal value on human and machine creativity. Specifically,

(i) Should copyright be attributed to original literary and artistic works that are autonomously generated by AI or should a human creator be required?

(ii) In the event copyright can be attributed to AI-generated works, in whom should the copyright vest? Should consideration be given to according a legal personality to an AI application where it creates original works autonomously, so that the copyright would vest in the personality and the personality could be governed and sold in a manner similar to a corporation?

(iii) Should a separate sui generis system of protection (for example, one offering a reduced term of protection and other limitations, or one treating AI-generated works as performances) be envisaged for original literary and artistic works autonomously generated by AI?

With reference to IBM’s comments above regarding Section 6, we suggest that the following phrase: “AI applications are capable of producing literary and artistic works autonomously” is similarly modified, for example, as follows: “it has been contemplated that works are or will eventually be created autonomously by AI, but many still believe that currently and for the foreseeable future, AI is a mere tool lacking true autonomy”. As in our comment above regarding the Section on Patents, Issue 1, it may be prudent to ask what it means for a work to be generated autonomously, perhaps also by asking for examples.

Further, with reference to subsection 12(i), IBM suggests including more detail in the question, for example, what are the level/types of contributions that would be required?

Further, with reference to subsections 12(i) and (ii), IBM suggests that more detailed questions relating to authorship and ownership be included, for example, what ramifications does authorship and ownership by AI have on related issues, such as, infringement and liability? Note that there may also be ramifications on other areas of law and policy and it should be ensured that multiple, potential outcomes be discussed and explored, by carefully considering various lines of argumentation before any changes to legislation/policy are enacted – asking parties for their views on these broader issues is essential.
General observation – IBM suggests including a specific question(s) requesting details on exemplary/related laws from across jurisdictions.

IBM thanks WIPO for the opportunity to comment and is more than happy to be further involved in these continuing discussions.

Respectfully submitted,

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