From:	James Love
Sent:	Friday, 14 February 2020 11:54 PM
To:	ai2ip
Cc:	Manon Ress; Thiru Balasubramaniam
Subject:	KEI Comments on DRAFT ISSUES PAPER ON INTELLECTUAL PROPERTY POLICY AND ARTIFICIAL INTELLIGENCE

To: ai2ip@wipo.int
From: Knowledge Ecology International (KEI)
Date: February 13, 2020
RE: KEI Comments on Paper on Intellectual Property Policy and Artificial Intelligence

As requested in DRAFT ISSUES PAPER ON INTELLECTUAL PROPERTY POLICY AND ARTIFICIAL INTELLIGENCE prepared by the WIPO Secretariat WIPO/IP/AI/2/GE/20/1 dated December 13, 2019, please find KEI Comments regarding identification of issues related to AI and IPR.

Issue 1: Inventorship and Ownership

Patents should not be granted to inventions by AI. Humans claiming ownership of an invention should be subject to audits and to demonstrate that the inventions were done by a human, and not by AI.

Issue 2: Patentable Subject Matter and Patentability Guidelines

(i) Should the law exclude from patent eligibility inventions that are autonomously generated by an AI application? See also Issue 1(iii), above.

Yes.

ii) Should specific provisions be introduced for inventions assisted by AI or should such inventions be treated in the same way as other computer-assisted inventions?

Yes.

Issue 3: Inventive Step or Non-Obviousness

(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 should be a person skilled in the art, with or without the assistance of AI tools.

(iii) What implications will having an AI replacing a person skilled in the art have on the determination of the prior art base?

It should make it harder to claim an invention is patentable.

(iv) Should AI-generated content qualify as prior art?

        Yes.

Issue 4: Disclosure

(i) What are the issues that AI-assisted or AI-generated inventions present for the disclosure requirement?

(ii) In the case of machine learning, where the algorithm changes over time with access to data, is the disclosure of the initial algorithm sufficient?

        Obviously not.

(iii) Would a system of deposit for algorithms, similar to the deposit of microorganisms, be useful?

        Somewhat, assuming it is accessible.

(iv) How should data used to train an algorithm be treated for the purposes of disclosure? Should the data used to train an algorithm be disclosed or described in the patent application?

        Disclosed if not public and accessible otherwise.

(v) Should the human expertise used to select data and to train the algorithm be required to be disclosed?

Issue 5: General Policy Considerations for the Patent System

(i) Should consideration be given to a sui generis system of IP rights for AI-generated inventions in order to adjust innovation incentives for AI?

        Perhaps, but don't be a rush. People can barely define things, or know where the technology or economics of this are going. You could easily create the wrong set of rights and obligations, impose massive unintended consequences that will be extremely difficult to undo.

(ii) Is it too early to consider these questions because the impact of AI on both science and technology is still unfolding at a rapid rate and there is, at this stage, insufficient understanding of that impact or of what policy measures, if any, might be appropriate in the circumstances?

        Far too early.

In any event, we would like to see the integration in the paper of best practices or principles such as these five OECD AI Principles that should be embraced by WIPO 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/

Issue 6: Authorship and Ownership

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

Only humans should get copyrights.

(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?

Whoa.

(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?

Perhaps, but don't be a rush. People can barely define things, or know where the technology or economics of this are going. You could easily create the wrong set of rights and obligations, impose massive unintended consequences that will be extremely difficult to undo.

Society does not know what type of social obligations should apply when AI and big data are involved, and this is a quite important set of topics, given the economies of scale and concentrated markets we are seeing.

Issue 7: Infringement and Exceptions

(i) Should the use of the data subsisting in copyright works without authorization for machine learning constitute an infringement of copyright? If not, should an explicit

exception be made under copyright law or other relevant laws for the use of such data to train AI applications?

> Data and text mining is needed to develop powerful new AI capacities. It has been very useful for machine translation services and automobile navigation services, which have enormous social value. But at some point, we need to consider the possibility that certain services should have to share data and insights from this type of activity, and respect other norms, some of which we can't even imagine right now.

(ii) If the use of the data subsisting in copyright works without authorization for machine learning is considered to constitute an infringement of copyright, what would be the impact on the development of AI and on the free flow of data to improve innovation in AI?

> Countries that don't have exceptions of one type or another will fall behind in AI applications.

(iii) If the use of the data subsisting in copyright works without authorization for machine learning is considered to constitute an infringement of copyright, should an exception be made for at least certain acts for limited purposes, such as the use in non-commercial user-generated works or the use for research?

> Yeah, at a minimum.

(iv) If the use of the data subsisting of copyright works without authorization for machine learning is considered to constitute an infringement of copyright, how would existing exceptions for text and data mining interact with such infringement?

(v) Would any policy intervention be necessary to facilitate licensing if the unauthorized use of data subsisting in copyright works for machine learning were to be considered an infringement of copyright?

> Compulsory license or other liability rules would be useful for some areas.

(vi) How would the unauthorized use of data subsisting in copyright works for machine learning be detected and enforced, in particular when a large number of copyright works are created by AI?

Issue 8: Deep Fakes

Issue 9: General Policy Issues

(i) Are there seen or unforeseen consequences of copyright on bias in AI applications? Or is there a hierarchy of social policies that needs to be envisaged that would promote the preservation of the copyright system and the dignity of human creation over the encouragement of innovation in AI, or vice versa?

> Copyright policy, such as the extremely long terms of protections and moral rights issues, are really designed with humans in mind.

> The massive potential output from AI generated works or inventions can blow up the current IP regimes, and create a deluge of protected inventions and works that can block all sorts of creative work by humans.

Issue 10: Further Rights in Relation to Data

(i) Should IP policy consider the creation of new rights in relation to data or are current IP rights, unfair competition laws and similar protection regimes, contractual arrangements and technological measures sufficient to protect data?

No, current regimes are already problematic,

(ii) If new IP rights were to be considered for data, what types of data would be the subject of protection?

Data that would be managed in some type of trust for the public.

(iii) If new IP rights were to be considered for data, what would be the policy reasons for considering the creation of any such rights?

Renting seeking actors and anticompetitive practices would likely drive the lobbying efforts. Let 's be realistic about that.

(iv) If new IP rights were to be considered for data, what IP rights would be appropriate, exclusive rights or rights of remuneration or both?

Remunerative, but also, rights AND obligations, such as data portability, interoperability, sharing, entering the public domain of related software, etc.

(v) Would any new rights be based on the inherent qualities of data (such as its commercial value) or on protection against certain forms of competition or activity in relation to certain classes of data that are deemed to be inappropriate or unfair, or on both?

Formalities and greater transparency of all pricing and transparency of licensing and related transactions would be useful for anyone seeking government protections.

(vi) How would any such rights affect the free flow of data that may be necessary for the improvement of AI, science, technology or business applications of AI?

Almost certainly would be a bad idea, and harm innovation.

(vii) How would any new IP rights affect or interact with other policy frameworks in relation to data, such as privacy or security?

Very likely would be an endless cluster of unintended consequences and benefits to anticompetitive activities and trolls.

(viii) How would any new IP rights be effectively enforced?

With very high transaction costs.

See also: Sole-source information banks under the EU Database Directive, Paper presented at Conference 'Antitrust, Patent and Copyright', École des Mines/UC Berkeley, Paris, January 15-16, 2004.[1], Published in F. Lévêque & H. Shelanski (eds.), Antitrust, patents and copyright: EU and US perspectives, Cheltenham: Edward Elgar 2005, p. 203-219. Bernt Hugenholtz
https://www.ivir.nl/publicaties/download/abuseofdataseright.pdf

Issue 11: Authorship and Ownership

(i) Should the law permit or require that design protection be accorded to an original design that has been produced autonomously by an AI application? If a human designer is required, should the law give indications of the way in which the human designer 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 authorship?

No IP design protection should be granted to non-human designers.

(ii) Do specific legal provisions need to be introduced to govern the ownership of autonomously generated AI designs, or should ownership follow from authorship and any relevant private arrangements, such as corporate policy, concerning attribution of authorship and ownership?

Issue 12: Capacity Building

Issue 13: Accountability for Decisions in IP Administration

See also:

KEI Comments on Intellectual Property Protection for Artificial Intelligence Innovation, for USPTO Request for Comments
Re: 84 FR 66176, Docket No. PTO-C-2019-0038
10 January 2020

https://www.keionline.org/32101

--
James Love. Knowledge Ecology International
U.S. Mobile +1.202.361.3040
U.S. office phone +1.202.332.2670
http://www.keionline.org
twitter.com/jamie_love