

To whomsoever it may concern

About Intepat IP Private Limited:

Intepat® is a niche intellectual property services company that provides a broad range of customized services in Intellectual Property matters, that includes patents, trademarks, copyright and industrial design.

We strive to develop an in-depth understanding of each client's business and to deliver intellectual property services in the manner that best suits the needs of each individual client. Our customized and cost-effective approach has enabled our clients to transform their ideas and innovations, into business opportunities. Our clients, from Fortune 500 to SME's to Individual Inventors, are active in a broad variety of technical and scientific areas.

Intepat respectfully submits these comments in response to the request for opinions in 'DRAFT ISSUES PAPER ON INTELLECTUAL PROPERTY POLICY AND ARTIFICIAL INTELLIGENCE' dated December 13, 2019 , for which the deadline was February 14, 2020 .

Intepat thanks WIPO for providing the invaluable opportunity for discussing and asking the opinions over the important issues.

There are several questions in the 'DRAFT ISSUES PAPER ON INTELLECTUAL PROPERTY POLICY AND ARTIFICIAL INTELLIGENCE' prepared by the WIPO Secretariat. Being the questions related to the policy change

required or not with respect to ‘**intellectual property policy and artificial intelligence**’, the broader picture must be taken into consideration since the decisions would impact the global community as a whole and asking for the comments and suggestions is a welcome move.

Our recommendations and comments with respect to the issues identified under various heads are here as under:

PATENTS

Issue 1: Inventorship and Ownership:

- (i) WIPO asks if the law should permit or require that the AI application be named as the inventor or a human being be named as the inventor and the issues pertaining to disputes over inventorship. Our answer to this question would be; No, AI should not be named as the inventor. If we go to the basics of Intellectual property and the rights assigned therein, the basic motivation is to encourage the creativity and human intellect and when we talk about AI is a tool that humans utilize to facilitate their innovation. Therefore AI should not be named as the inventor; rather humans should be named as an inventor. The owner of the machine who has invented should be named as the inventor. AI being Machines should not have patents since they do not have legal personality or independent rights, and cannot own property. Though AI machines could be named as joint inventor alternatively.

- (ii) WIPO further asks that , who should be recorded as the owner of a patent involving an AI application and the requirement for specific legal provisions to govern the ownership of autonomously generated AI inventions concerning attribution of inventorship and ownership. Herein as a suggestion we would like to mention that as already mentioned above the inventor should be the human owning the AI and if this is implemented it would be business as usual. The inventor would be the owner of the patent unless he assigns the ownership to someone.
- (iii) Moreover since we support the person being known as the inventor of the invention done by the AI, there should be no exclusion from Law. Such inventions too should be protected by the law.

Issue 2: Patentable Subject matter and Patentability guidelines:

- (i) Another issue identified by WIPO is that if the law should exclude inventions from patent eligibility that are autonomously generated by an AI application. As a response here we would like to state that As such inventions involving computer programmes or algorithms are being included in non patentability criteria in various jurisdictions including India. There should be separate category introduced to accommodate inventions made by the AI machines and some standards should be determined to conclude the patent eligibility of AI-generated inventions.
- (ii) WIPO also is interested to know that whether specific provisions be introduced for inventions assisted by AI or should such inventions be

treated in the same way as other computer-assisted inventions. We would like to state here that there should be an introduction of a separate provision for dealing with the inventions made by AI or AI assisted inventions. Such provisions should be introduced as one of the patentability criteria. Also there should be a separate category introduced for the inventions by AI-machines, so that they can be used as prior arts but should become a roadblock for innovation and inventiveness of human inventors.

Issue 3: Inventive Step or Non-Obviousness:

- (i) The standard applied for assessing non-obviousness is whether the invention would be obvious to a person skilled in the relevant art to which the invention belongs. WIPO further identified that, what art does the standard refers to in the context of AI inventions. We would humbly like to state here that, as the inventive step condition as a standard is analysed by assessing the non obviousness of the invention in a way that it should not be obvious to a person skilled in the relevant art to which the invention belongs; the same cannot be applied to the inventions by an AI machine since it would not be appropriate for a machine to judge what could be obvious or non obvious to a person (human) skilled in the relevant art.
- (ii) We would further like to submit that there should be a separate provision to analyze and examine the inventions by AI, because if we talk about

- algorithms the possibilities are numerous and the conditions may be that everything if looked upon by the perspective of algorithms may become obvious.
- (iii) We also submit that AI has its own limitations. An AI machine is as smart as their algorithms are. So there still may be requirement of human intervention and; prior art search being such an open ended topic that even patent experts cannot always guarantee 100% accurate results where they apply human ability to think beyond obvious explanations, expecting AI machines to conclude their decisions on the prior art base is beyond logical explanation.
 - (iv) We also state herein that AI generated content can serve as a prior art. The reason is the basic understanding of the technology available or unavailable in the public domain. Therefore there seems to be no harm in considering the invention by AI as a prior art.

Issue 4: Disclosure:

- (i) WIPO mentions about the issues that AI-assisted or AI-generated inventions present for the disclosure requirement. We state herein that, Inventions are made as solutions to human problems or to enhance the quality of human life or in similar situations. But when an AI generates an invention, the logic behind creating or inventing something vanishes. The purpose is lost and it takes a human to deduce the usability of the stuff that AI machine has created. So essentially AI might invent

- something randomly but the usability, usefulness and the features required to make it useful are analysed by the human behind the AI machine. Therefore, there always might be a lack of reasonability and logic behind the AI generated invention that would eventually show up in the disclosure as well.
- (ii) Also disclosure of exact neural network models, hyper-parameters and training settings, and training data sources will in many cases be necessary to fulfill written description and enablement. These disclosures are expected to be massive but imperative for the disclosure of the invention into the public domain.
 - (iii) We also submit that massive disclosures might be required which may contain exact neural network models, hyper parameter and training settings, and training data sources. Here we would also like to reiterate that even if there is a separate category instituted for the inventions by AI machines still it would be imperative that the disclosure is made however massive it tends to become.
 - (iv) The data source should also be disclosed in the disclosure and in the patent application.
 - (v) The human expertise used to select data and to train the algorithm is required to be disclosed, since the humans being the trainers of the AI machines and the inventors too need to disclose the minutest of detail pertaining to the invention.

Issue 5: General Policy Considerations for the Patent System:

- (i) WIPO also mentioned if consideration be given to a sui generis system of IP rights for AI-generated inventions in order to adjust innovation incentives for AI. We state in that regard though we advocate that there should be a separate system of IP rights for AI-generated inventions, but regarding the incentives for AI we have a different opinion, since AI machines cannot really enjoy the incentives nor will they be encouraged by giving them incentives for their inventions. The basic behind the system of incentives is to promote and encourage creativity and innovation in humans and protect their creations so that the inventors enjoy exclusive recognition for their inventions. This won't be the case with the AI machines. To sum it up all the AI machines shall remain unaffected or unbothered whether they are appreciated for its invention or not. Moreover since we have already mentioned above that we believe that the inventor of the AI machine who already owns and enjoys the patent protection also may not need to be incentivized in this case.
- (ii) WIPO also wishes to know that if it is 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. We would like to mention herein that as per our opinion it is not required as of now, since it is against the basic idea of the IPR. Intellect meaning as mentioned in the Merriam Webster

dictionary is ‘the capacity for rational or intelligent thought’ which is not the case with AI machines. Moreover whatever the machines invent has to be substantially approved by the owner of the machine to determine its patent eligibility. And if the owner of the AI machine also happens to be the inventor of the AI machine and has patented the machine in his name, then he is already enjoying his patent rights. Therefore if the inventions of the AI machine are maintained in a separate category used as prior arts and kept in public domain so that these could be utilized by everyone including the human inventors who would then be free to improve these inventions.

COPYRIGHT AND RELATED RIGHTS

Issue 6: Authorship and Ownership:

- (i) We believe that there is no harm if the copyright system is identified as a system for encouraging and favoring the dignity of human creativity over machine creativity, because it is in fact the case here. Copyrights must be granted to original literary and artistic works by human creators and as mentioned above another category in copyright protection system may be maintained for original, literary and artistic works autonomously generated by AI.

The commenter thanks WIPO for providing the opportunity to submit these comments. If there are any remaining issues relating to the matters presented herein, the undersigned would be happy to provide further information as necessary.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Senthil Kumar".

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