UK Intellectual Property Office

Thank you for your inquiry. My reply is as follows:

Patent

1.

The patent system will play a role of hindering patent application and increasing distribution disputes in encouraging the development and use of artificial intelligence technology; if the existing patent system is slightly improved, it can play a role in promoting the healthy development of artificial intelligence.

Inventors use AI to invent, and censors do not need AI to do censorship, which will lead to flood patents and produce a large number of garbage patents. Garbage patents are not beneficial to technological progress, but they are difficult to be eliminated in the process of profit distribution. The threshold of valid patents entangled by garbage patents is very low, which will lead to the shrinkage of patent market.

The patent office should first establish its own AI.

2.

3.

Human beings are always willing to invent with the help of AI, and always hope that the stronger the ability of AI, the better. Therefore, AI will have the ability to automatically produce patents one day, but AI will not automatically declare patents.

AI should be owned and controlled by people. This is the boundary of AI.

Because AI has made a major contribution, awarding the inventor to AI will not encourage AI's labor enthusiasm. It will only let the patent owner create profit space by using AI's humanlike and inhuman characteristics.

4.

5.

AI is not the inventor, but there are still inventors.

With the aid of AI, those who did not make inventions (investors, managers, etc.) can also make inventions effectively, thus expanding the space for inventors. The newly added inventors tend to have a broader vision than traditional inventors (those with professional expertise) and have the conditions to produce high-quality inventions.

AI will progress all the time. If AI progresses to the point where human beings need to take care of AI's emotions and desires, human beings will define AI as another kind of person, which will solve the problems we are facing today. Obviously, AI has not developed to this level. Although the intellectual property system is more sensitive to the "human nature" of AI, it is difficult and unnecessary to make a perfect definition of another person only in a narrow scope.

All the achievements of invention (including honor) belong to people. AI is a tool for human use. At this stage, it will be very smooth to manage the patent market in this spirit.

7.

It will hurt people's creativity, because:

7.1 Responsibility: the ultimate bearer of any responsibility is human, and can only be human. The inventor has always been human. If AI can now be granted and shared with AI, then this is tantamount to giving AI human attributes. This kind of blurring the boundary between human and AI will create a space for mutual prevarication between human and AI, which will void the responsibility and encourage or guide people to profit from the loopholes in the system rather than concentrate on R & D.

7.2 Honor: it is man who created AI and always needs human intervention in the process of AI progress. In the relationship between man and AI, man is decisive, and honor is the minimum confirmation of this relationship. In the whole invention activity, those who are just inventors get only honor. It is a disregard for human dignity to give the honor that people need to AI who has no sense of honor.

8.

The patentability of AI exists now and will be more in the future. As long as AI is defined as human owned, the development and change of AI will not be a problem.

9.

The introduction of AI makes the application of simulation system develop on a large scale. The results of simulation system exploration often have high value because of its great influence. Because of avoiding physical investment and saving huge resources, using simulation system in industrial field is an important technical means to promote technological progress in industrial field in the next stage.

However, the patentability of the results of the simulation system is not obvious. Because, the result is often a large system, including many processes. The current patent laws and regulations tend to support partial and minor patents, which greatly reduces the value of simulation results.

For example, the technological process in the field of basic raw material processing is generally backward. Although the government's climate policy has exerted great pressure on the enterprises concerned, almost no new process has been produced to meet the climate target (net zero emission). The reason is that the cost of process exploration is very high, the cycle is very long, and the results are almost impossible to apply for patent (inherent characteristics).

If the technological achievements of simulation can be patented, such as process flow, then technology and research departments with light assets can invest in large numbers to assist enterprises in technological research, and it is expected to achieve "net zero production" within the time limit set by the government.

11.

Patent requirements provide sufficient details to enable technical personnel to implement the invention requirements without causing problems to AI invention, because:

A patent applicant with a black box is prepared to keep some details secret so that the technical personnel can not implement the invention, which is more important than the invention authorization. Therefore, not granting patents with black boxes will not affect the passion of patent development.

Every detail that is not clear is deliberately unclear, unless he is not the real inventor.

12.

Social reasons are the greater premise, and patent law should not contradict it. If there is a contradiction, we should take the initiative to avoid it.

13.

AI is a tool, which is not fundamentally different from all the tools created since the birth of human beings. However, the gradient of change brought by this tool is a little larger. For the examiner, it means to learn more. It will not affect the examiner's judgment ability of "whether the invention is obvious to those skilled in the art". What's more, the examiner can also use AI to examine AI. Therefore, for the issue of creativity, the examiner can still make appropriate judgment according to the spirit of the existing patent law.

14.

Should not. Because:

The ability of technical personnel includes the ability of machines. Human-made goods can only serve people, and can not go to the opposite side of people to compete with people.

15.

No one should be responsible.

Especially when people are not expected to be responsible for this behavior, it will lead to more confusion.

For example, clouds float from country to country, and eventually fall in one country, turning into water to irrigate the farmland. Countries that harvest food do not need to pay the countries under the cloud's past track.

But why can't our patent infringement system be so concise and reasonable?

16. There will be bigger problems than before

The use of AI will lead to a surge in the number of patents. It is impossible for later generations to make use of the achievements of predecessors' thinking. In the stage of thinking, we should take into account the problem of infringement, which will greatly limit and interfere with thinking.

The direction of patent system trying to exhaust the infringement behavior is tiring. We should turn our attention to the direction of how to distribute patent profits quickly. The value of a patent is often not realized by one person or the same group of people. The person who makes the distributable value of the patent is the automatic partner of the patent stakeholders. Therefore, the term "infringement" is only valid when "the profits should be shared but not be distributed".

The patent system should reduce and limit the legal disputes that may arise before the patent profits, and should be conducive to making profits for patents and the social cooperation for quick distribution (if any) after the profits.

Suggestion: Intellectual Property Office should set up a weight analysis (or APP) software to define the weight of other patents contained in the patent, and use it as the basis for distribution. The absolute value of patent value is determined by the market, and the

remaining fuzzy space (if any) is determined by the court.

Weight analysis software is made with AI technology to ensure that it can be used by the public and deal with a large number of requests at the same time. The working principle of weight analysis software is as open as other regulations. The public can carry out repeated tests according to their own conditions to judge its rationality, so that they can naturally join the crowd of policy thinking, which is more efficient than the present way of soliciting opinions.

Copyright

1.

disagree

The Internet makes the display space of copyright expand rapidly. The Internet also needs a lot of copyright works or similar things. It can be predicted that the profit of copyright will be realized mainly on the Internet. However, the operation mode of the Internet is to give first and then charge (if any); all copyrights with preconditions should be avoided first. And the Internet has a wide range of choices, and copyrights that don't need a license can operate as usual. The vast majority of AI also runs through the network. Therefore, the copyright laws and regulations should be conducive to the connection between copyright and the Internet, and the infringement laws and regulations should be changed from protecting the psychological feelings of copyright owners to promoting the realization of the value of copyright. Only by turning the easy infringement into infringing not easy, can AI be completely liberated and the creation of AI can be rapidly enriched.

5.

AI generated content can be granted copyright, but the owner, inventor, etc. must be human. No matter whether a person has participated in the creation or not, it must be the person who makes a judgment and submits the work to the patent application. This behavior expresses the value of human judgment. Like an archaeologist or cosmologist, he will pick up a "stone" which has been ignored by countless people on the roadside. Although he has done nothing about the generation of this "stone", the society will not be stingy to give him something similar to patent, or even higher honor and more interests.