

From: Ronald Zhang

Sent: Monday, March 4, 2019 9:23 AM

To: Eligibility2019

Subject: I Strongly Support the 2019 Revised Patent Subject Matter Eligibility Guidance

I am writing in support of the 2019 Revised Patent Subject Matter Eligibility Guidance. My name is Guangsheng (Ronald) Zhang, a PhD. I am the inventor of 32 issued patents in the field of artificial intelligence and natural language processing and other high-efficiency data processing methods. I want to say that as an inventor and research scientist, I am very much disturbed and frustrated by the current way software-related patents are being handled at USPTO, both at the technology centers and the PTAB.

The recent section 101 abstract idea issue has not only wasted a huge amount of resources in terms of time and money spent in the patent prosecution process for unnecessary arguments and clarification due to confusions in the definition and criteria for an abstract idea, but also created a huge amount of uncertainty in the values of my decades long research. Even though I have 32 issued patents, given the current practice of the PTAB with regard to the software-related patents, there is no certainty that my invention can be protected. And this has made it very difficult to commercialize my inventions in making better products. As a result, I have given up efforts in developing new methods in the field, and begun to abandon many of my pending applications. I also had to physically move out of the country in order to implement my inventions in places where there is better protection than in the US. This is sad and is not what I wanted to do, but I was forced to do so in order to realize the value of my inventions as well as to make a living as an inventor.

In support of the new guidance, I would like to make a special point regarding the abstract idea issue, especially regarding the so-called mental process issue. In my view, all human inventions start as a mental process. In the industrial age or even in the agricultural or hunter-gatherer age, such inventive mental processes were mainly implemented on mechanical devices to strengthen or extend our human muscle power. Now we have advanced from the industrial age to the current stage of information age, new inventions are mainly for processing information such that the devices can serve mankind in a more intelligent manner, and such inventions are mainly implemented on a computer to extend our brain power as compared to extending only our muscle power in the past. In order to extend our brain power, an inventor will have to invent specific logical steps to enable a machine to correctly or efficiently process information, otherwise it will be random steps. Even though such logical steps may often be interpreted as resembling a mental process, the key question for patent eligibility is not whether it is a mental process or not, or whether it can be played out with pen or paper. The key is whether the invention can produce new and useful results that have never been seen before, or the invention itself is something that has never before been seen but can improve our way of processing information to serve our needs in the modern society where technological advancements are more and more in the methods of processing information. I believe that the judicial exceptions as defined in the Supreme Court's Rulings on Alice case refer to those processes that are not new or not producing new results even if they are implemented on a computer, but if an invention can produce new, useful, and tangible results, it is a genuine invention and cannot be an abstract idea because an abstract idea by itself cannot produce a tangible result.

I strongly support the 2019 Revised Patent Subject Matter Eligibility Guidance, and hope the once-great US patent system as well as my confidence in it can be restored.

Guangsheng (Ronald) Zhang, PhD

[email address redacted]

March 2, 2019