From: Erin DeSpain
Sent: Monday, February 25, 2019 8:22 PM
To: Eligibility2019
Subject: Accept new guidelines on subject matter eligibility, Docket No. PTO–P–2018–0053

To whom it may concern,

I represent a nacient R&D firm, BrainThrob Laborotories, based in Sandy, UT. Our business and research & development depends on the U.S. patent system. In order to make R&D investments in technology and business prototypes we require that the rules for patenting be clear, reliable, and predictable. I therefore stand in support of the 2019 changes sought in subject matter eligibility because they increase the reliability and predictability of the US patent system. I urge the USPTO to adopt the guidance on subject matter eligibility set forth in the Request for Comments, Docket No. PTO–P–2018–0053 as put forth.

There are many aspects of these new guidelines that bring significantly greater clarity to the preponderance of judicial rulings since *Alice/Mayo* and bring the United States in greater conformity with the rest of the World as technology advances forward, particularly with the counterpart European Patent Office, where EPO Article 56 applies such that systems and methods are granted where inventor(s) can demonstrate a significant "technical effect" of their invention(s). The EPO rulings and guidelines on this are very similar to recent U.S. rulings and new 2019 USPTO's proposed guidelines subsequent of *Enfish v. McRO*, *Classen Immunotherapies, Inc. v. Biogen IDEC*, *Vanda Pharm v. West-Ward*, etc. as proposed. The similarity between EPO and US guidelines means that technology developed in the US will likewise be easier to interpret and support in the EPO based on similarity of rulings and document and claim construction.

Guidance for Interpreting Section 101
The guidelines provided in the revised steps **2A** and **2B** will provide both examiners and inventors with clarity around how to interpret Section 101 and apply it to inventions. It would be a huge mistake to discard, water-down, or dismiss these proposed guidelines. Since *Alice v. Mayo* there has been considerable irregularity in how businesses and R&D firms like mine have interpreted patent examination the legal ruling of the Supreme Court of the United States.

One of the areas of greatest concern is my own field in data and computer science is that many scientists and engineers creating technology for computers are under the harmful assumption that *any* application of mathematics or information science will be ruled as an abstract idea simply because an invention recites an element which uses a mathematical formula or an operation of an information transformation, regardless of other elements. I'm shocked by the ignorance of many practitioners of the field regarding patentable subject matter. Many of the inventions these practitioners would dismiss due to the above considerations have significant applications in robotics, artificial intelligence, communication, data processing, and machine learning, system automation, and medicine (all fields that will contribute significantly to America's economic well-being far into the future). The current 2016 guidelines unfortunately exacerbate some ambiguity--in spite of recent judicial rulings. Having read and examined the 2019 proposed guidelines, I believe they would add needed clarity around these topics to prevent unnecessary misunderstandings and subsequent concealments of technology that might result due to this

ambiguity if firms cannot trust the US patent system and seek alternatives to protect their technology.

Without the ability to patent intellectual property contributions in these fields research in the United States the work of my firm would be stymied--for we often review and examine the patent documents of other firms to understand technology being advanced by other firms and where our technology differs. If firms such as ours don't feel confident in the reliability of the patent system we will seek alternatives to protect our technology by concealing it and protecting it under the shroud of trade secrets. This would remove it from public review and examination and prevent other researchers from being able to build off of our work. This situation isolates the work of firms like ours who could better collaborate with other firms were information to be made available through the public patent system. We currently rely on the patent system to uncover the work of other researchers who might be working in a similar direction, might have technology useful to our laboratory that we can license or buy, or who might have discarded or abandoned a line of research that we feel might still be fruitful and can breathe new life into through our own initiatives. The publication of these materials provides us with the certainty and reliability to make investments in R&D of money, time, and labor. If there is ambiguity in the field, we are less likely to invest the kind of resources we might otherwise and if all firms do as we would do that would hurt everyone.

On behalf of my firm and other firms like us I wholeheartedly endorse and recommend these new 2019 guidelines on subject matter eligibility as a way to steer a clearer path through potential ambiguity.

Thank you for your time.

--Erin DeSpain
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