

Time For Patent Law To Stop Lagging Innovation

Subject matter eligibility law under Title 35 of the U.S. Code, Section 101, is outdated and needs to change in a way that keeps pace with innovation.

Some of the greatest advancements of the 21st century have been software based, yet patent claims involving software are routinely rejected under Section 101 as being directed to abstract ideas even though, arguably, claims directed to other technologies are just as abstract.

In fact, the U.S. Supreme Court acknowledged as much in the 2014 Alice Corp. v. CLS Bank International decision stating that all inventions at some level "embody, use, reflect, rest upon, or apply [abstract] ideas." [1]

However, the Supreme Court also pointed out that as long as a claim applies the abstract idea to "a new and useful end" the claim is patentable. [2]

Software permeates every aspect of modern life. It runs everything from out toasters to satellites, and gives us access to virtually every piece of knowledge via a smartphone.

Surely, it's hard to argue that claims directed to these advancements — i.e., claims involving software — do not lead to new and useful ends. So why do patent claims involving software face hurdles under Section 101 that claims involving other technologies do not?

The problem ostensibly lies in what is deemed to constitute a new and useful end.

The requirement of application to a new and useful end is often read as requiring something tangible.

At some level, that makes sense given that for the majority much of its 230 year history, the U.S. Patent and Trademark Office, indeed, the human race as a whole, has been dealing with inventions that are primarily mechanical — maybe plant and chemical too, but these are outside the scope of this article.

Even into the late 20th century, when some software inventions were already being developed, inventions were still mostly mechanical and hardware based.

This has led to a body of law, rules and customs that effectively view tangibility as the yardstick for determining whether an abstract idea is applied to a new and useful end.

Take, for example, the USPTO's January 2019 Revised Patent Subject Matter Eligibility Guidance, and more explicitly in the October 2019 update to the guidance.

This guidance conditions the determination of whether a software claim is directed to an abstract idea on whether the claim recites an improvement in the function of a computer, in essence requiring that the novelty, or improvement, be found in the hardware machine — i.e., the computer, not the software itself.

Claims not deemed to improve the computer are commonly rejected as merely implementing the abstract idea using generic computers and or computing components.

This presents a problem since today most computers and computing devices are merely blank slates on which software runs. It is the software that imparts the functionality that makes these devices useful.

Measurements of patent eligibility that require something tangible or physical may work just fine for mechanical and hardware claims, but they are sure to leave many legitimately patentable software claims out in the cold.

Rather than continue to base patent eligibility on antiquated notions of what an invention should be, let's base patent eligibility on measures that adjust and evolve as technology and innovation do.

Let's use prior art to our advantage here and declare the claims as reciting an improvement — i.e., an application to a new and useful end, as the recited claim features are not found in the prior art.

Since prior art changes as technology evolves, this approach will be less likely to stagnate than current approaches, and it also allows for each type of technology to be evaluated by its own yardstick: software against software prior art, mechanical against mechanical prior art, electronic hardware against electronic hardware prior art, etc.

Many of you will be quick to point out that patent eligibility under Section 101 is a threshold question separate from evaluation of the patent claims with respect to prior art. No disagreement there. However, there's nothing requiring patent eligibility under Section 101 must be the first consideration when evaluating patent claims.

The USPTO often includes rejections under Title 35 of the U.S. Code, Sections 102 and 103 — prior-art-based rejections — as well as Section 101 in its office action for the sake of compact prosecution.

Why not start with the prior art considerations and then determine whether the claims recite an improvement based on whether the prior art describes what is recited in the claims or not?

In some ways, this approach is already followed. Implicit in the determination of whether the claims recite an improvement to the computer itself is the notion of novelty — i.e., what is already known cannot be an improvement.

Using prior art as the standard for determining improvement merely allows the inquiry to follow along with innovation.

Perhaps the greatest challenge in patent law is that technology and innovation are ever-changing.

There is no way to predict what the next big thing will be or what form it will take.

Adopting legal standards that evolve along with technology would allow us to foster innovation, not stifle it, potentially making patent law and the patent system as innovative as the technology it oversees.

[1] *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208 (2014) citing *Diamond v. Diehr*, 450 U.S. 175, 187 (1981) and *Gottshalk v. Benson*, 409 U.S. 63, 67 (1972).

[2] *Id.*