

IP Frontiers: Welcome to Wonderland, electronics practitioners: The expansion of Alice



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Those patent attorneys and agents who practice in the worlds of biological sciences and computer arts have been working through the ether that is 35 U.S.C. §101 for quite some time. Based on the recent decision of the Federal Circuit in *Yu v. Apple*, it looks like we

may have some company from other areas of industry. I am hoping that this June 11, 2021, opinion is not a last word on the application of the “abstract” standard as articulated in *Alice Corp. v. CLS Bank International* to patentability and applied through what is referred to as the *Alice/Mayo* framework. Not only does expanding *Alice* scrutiny to digital cameras, as is done in the *Yu v. Apple* decision, add more swimmers to the murky waters in which many practitioners already tread, but the decision also further blurs the lines between subject matter patentability and novelty.

Speaking as a practitioner who works in the computer arts, since the Supreme Court’s decision in *Alice Corp. v. CLS Bank International*, 573 U.S. 208, I advise clients that any advice that I provide on patentability is the best information that I have at a given moment in time. Decisions of the Federal Circuit, updates to the guidelines by the United States Patent and Trademark Office, and decisions by the Patent Trial and Appeal Board further define what was a relatively “abstract” standard every few months. I have joked with many patent examiners that it would be helpful if judges rendering decisions in this area were more acquainted with the technology itself and we have all agreed that arguing that soft-

ware improves the functionality of a computer is an interesting argument because, generally speaking, executing software will slow a processor. I offer this opinion having worked as a software developer myself. But we do our best to spot trends and to create our own best practices that bring us success. For me, I include paragraphs in my applications that explain: 1) how the invention is inextricably linked to computing; 2) the practical application of the invention; and 3) specifics regarding how the invention is better than previous approaches. Gone are the days when there was an assumption by an examiner reviewing an application that there was a reason to file an application, that there was some improvement, that there was some need addressed, or else the application would not have been filed. Now, *Alice* appears to demand, in the application itself, an explicit recitation of why one bothered to file an application. (Of course, exploring this area has an upside as asking an inventor why his/her/their invention is important can bring levity and humor to an inventor interview.)

Another trick when working with *Alice* is including structural elements with specificity in a claim. This is not always possible, but many inventions are an intersection between software and hardware and electronics. Logically, the inclusion of structure, beyond what can be considered a generic computer, should render a claim no longer abstract. In one interview, an examiner mentioned to me that in another case she was working on, the applicant adding a sensor to a claim and explaining its functionality had convinced her that the claim was no longer abstract. This particular practice is adversely impacted by *Yu v. Apple*.

The decision in *Yu v. Apple* is concerning because the claims that the Court said

lacked an inventive concept included structural elements. Independent claim 1 recited, in part, “An improved digital camera comprising: a first and second image sensor closely positioned with respect to a common plane, said second image sensor sensitive to a full region of visible color spectrum; two lenses, each being mounted in front of one of said two image sensors ... an analog to digital converting circuitry coupled to said first and said second image sensor ...” Rather than take the side of Judge Newman, who dissented from the decision and stated that a camera is an electronic device of a defined structure and mechanism (and hence should not be analyzed for whether it is “abstract”), the majority focused on the recited functionality in claim 1 where the claim recites producing a first and second image. The majority considered the claim directed to the abstract idea of taking two pictures and using one picture to enhance the other. But given that the claim was not to a method of enhancing a picture and instead, to a camera, it is disconcerting that the Court even applied the *Alice/Mayo* framework.

The decision in *Yu v. Apple* adds a patentability requirement to electronic devices that, per Judge Newman, constitutes “a review they have never received.” As stated by Judge Newman, in this decision, the majority converted a mechanical/electronic device into an abstract idea. Judge Newman stated that the decision has enlarged the instability created in biological and computer-implemented technologies to all fields. Given that electronic devices have applications that are often recited in the claims, this decision might be read to suggest that electronic devices that were already found to be novel and non-obvious are only patentable if the application itself is specific. One issue with this standard is that a lot of

electronic devices do the same thing. Building a better mousetrap is certainly a reasonable goal for an inventor. But this decision begs the question that even if the structure of the mousetrap itself is novel and non-obvious, is one required to describe catching the mouse in a manner that is specific? What if the mousetrap just traps the mouse the same way that other traps do, but the trap is configured differently?

The line between 102/103 and 101 was already becoming blurred and *Yu v. Apple* continues to blur the line. The majority states that the structural elements of the camera were well known and that using one image to enhance another was well known. This reads like an analysis under 102/103, but the original examiner who allowed the claims found that the combination of the elements was novel and non-obvious. This contrast highlights a problem with

101 scrutiny in that now an invention need not only be novel and non-obvious, it has to be “specific” or original in some intangible way. It is not enough that no one did something before, it appears that the building blocks to do that something also cannot have been available at the time. The substitution of 101 for 102/103 appears to require applicants to include an original physical/structural element in inventions in the electronics area. Given that most circuits are comprised of the same components, applying this type of standard could adversely affect innovation in electronic arts.

Innovation is encouraged by the patent system. Innovation is generally understood to include doing new things, but it also includes doing older things, just better. Practitioners, such as me, who work in the software area, have long understood that of course the software runs of a generic com-

puter (portability is desirable in this industry) and that demanding a specific or original hardware component (which is a tactic some examiners take) can be incompatible with that goal, and hence, the portability of the software should not render the claim abstract. Now, it appears similar conversations will be taking place in the electronic arts. Being a practitioner who also works extensively with circuitry, I will plan to start including recitations regarding the practical application of the invention and the specifics regarding how the invention is better than previous approaches to applications that I draft in the future in this area.

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