

## IP FRONTIERS

# What constitutes patentable subject matter, again

The United States Patent and Trademark Office (USPTO) and the courts have had difficulty determining whether computer, software and diagnostic method inventions qualify as patentable subject matter. Now, the Court of Appeals for the Federal Circuit (“CAFC”) has expanded the subject matter confusion to include claims in the electrical and mechanical arts.

In the wake of Supreme Court decisions in *Bilski v. Kappos*, 561 U.S. 593 (2010) (“Bilski”), *Mayo v. Prometheus*, 566 U.S. 66 (2012) (“Mayo”), and *Alice Corp. v. CLS Bank International*, 573 U.S. 208 (2014) (“Alice”), inventors, practitioners and even the courts have been left scratching their heads as to what exactly is patentable subject matter. It has reached the point where Congress recently held hearings on proposed amendments to patentable subject matter eligibility.

Three decisions in the past year by the CAFC have raised eyebrows. In *Chargepoint, Inc. v. Semaconnect, Inc.*, 920 F.3d 759 (C.A. Fed. 2019) (“Chargepoint”) a networked automobile charging system was considered an abstract idea. Likewise, in *The Chamberlain Group, Inc. v. Techtronic Industries Co., et. al.*, 935 F.3d 1341 (C.A. Fed. 2019) (“Chamberlain”), a garage door opener was considered an abstract idea. Finally, in *American Axle & Manufacturing, Inc. v. Neapco Holdings LLC, et. al.*, 939 F.3d 1355 (C.A. Fed. 2019) (“AAM”) a method for making driveshafts was considered an attempt to patent a law of nature.

### What is the problem?

In order to receive a patent, an invention



By  
**ALEKSANDAR NIKOLIC**  
Daily Record  
Columnist

publicly disclosed. 35 U.S.C. §103 requires that the invention not merely be an obvious change over the prior art to one having ordinary skill in the art. 35 U.S.C. §112 requires that an invention be described sufficiently to enable one skilled in the art to make and use the invention.

§101 is a very short section, despite covering two of the five elements, stating: “Whoever invents or discovers any new and useful process, machine, manufacture or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” This language has been unchanged and part of the patent act since 1952.

While the statutory language and the congressional record indicated that “anything under the sun that is made by man” is patentable, the Supreme Court created judicial exceptions excluding laws of nature, natural phenomena, and abstract ideas as patentable subject matter. *Diamond v. Diehr*, 450 U.S.

175 (1981). To help inventors, practitioners and the courts determine whether an invention is unpatentable due to one of the exceptions, the Supreme Court created the Alice/Mayo analysis framework (Alice test). The CAFC has used that framework to make decisions that have resulted in an ever-growing number of exceptions and clarifications. In fact, it seems the confusion interpreting and applying the test has even created a split within the court. In an effort to help inventors, patent examiners, and practitioners, the USPTO has published examiner guidelines that incorporate CAFC decisions. In 2019 alone, two patent examiner guidelines have been published. Yet conformity between court subject matter analysis and USPTO subject matter analysis remains inconsistent.

### The cases

In interpreting §101 and the judicially created exceptions, the Alice test involves two-steps. The first step checks whether the claim is directed to one of the judicially excluded subject matter exceptions. If it does not, the invention passes the suitable subject matter test. If the invention is directed to a judicial exception, then the court will examine whether there is something more in the claim to transform the claim to contain patentable subject matter. To do so, the CAFC looks for an “inventive concept” within the claim elements over the existing prior art. “The ‘inventive concept’ step requires us to look with more specificity at what the claim elements add, in order to determine whether they identify an ‘inventive concept’ in the application of the ineligible subject matter to

which the claim is directed.” Chamberlain, 935 F.3d at 9. A court may then examine the claim to see if the elements are “well-understood, routine and conventional to a skilled artisan.” *Chargepoint*, 920 F.3d at 22.

In *Chargepoint*, the CAFC affirmed a decision by the Maryland District Court that four granted patents for a system of networked electrical vehicle charging stations did not have patentable subject matter. To summarize the CAFC’s reasoning, the court found that all four patents amounted to adding networking and/or networked communications to existing charging stations. Communication over a network was deemed an abstract concept. Since these elements are “well-understood, routine and conventional to a skilled artisan,” the CAFC decided that nothing new was being added over the prior art. The CAFC was concerned that if the four Chargepoint patents were allowed to stand, the claims would preempt any networked charging system inventions.

In Chamberlain, a garage door opener that used wireless communication to monitor and gather status information about the garage door system was deemed to be nothing more than an abstract idea. The CAFC determined the “inventive concept” was an addition of wireless communication. The CAFC proceeded to investigate whether there was an “inventive concept.” Since wireless communication was “well-understood, routine and conventional,” nothing was added to the garage door opener over the prior art.

In AAM, the patent was directed to a method for manufacturing driveline propeller shafts with liners to dampen vibrations. The use of liners existed in the prior art, and so did methods with liners and liner attunement to dampen vibrations; however, AAM described a method that would provide attunement in two vibration modes, which was not described in the prior art. The CAFC decided that since there was insuffi-

cient disclosure in the patent for how liner attunement was to be performed, the method claimed by AAM was merely an instruction to apply Hooke’s Law (a mathematical calculation and a natural law determining the relationship between mass, stiffness, and vibration frequency). Under the Alice test, the CAFC determined that the invention concept was directed to a natural law. Since the natural law was well-understood, routine and conventional, the invention was directed to impermissible subject matter.

### Something more

In Chamberlain, the CAFC stated that it is not whether the claim as a whole, but whether the inventive concept over the prior art is something more than the impermissible subject matter. The term “inventive concept” is poorly defined, allowing for broad or narrow interpretation, depending on the subjective position of an interpreting court.

Five elements must be met in order to receive a patent. In the three cases described, the CAFC’s analysis appears to conflate other sections of the Patent Act into a subject matter analysis. In Chamberlain and Chargepoint, both patents were deemed novel and non-obvious before the USPTO, yet the CAFC determined that the inventions were well-understood, routine, and conventional to one skilled in the art. The inventions would seemingly appear to be either not novel or obvious. Yet, both were overturned due to impermissible subject matter. In AAM, the court determined that the invention subject matter was directed to a natural law due to insufficient description, despite the USPTO determining that the invention was sufficiently described. Based on these decisions, the CAFC appears to be combining multiple patentability elements into its analysis under §101.

There are currently multiple petitions for Supreme Court review, including one by *Chargepoint*, seeking clarification of §101.

It can be argued that the Chamberlain, Chargepoint, and AAM patents should not have been granted. However, by conflating different sections of the Patent Act, the CAFC is creating a perception of subjective decision-making and uncertainty for patent holders. It also appears that some members of the CAFC are also not happy with the direction of the court’s decisions. In her dissent, Judge Moore referred to the majority’s analysis in AAM as “validity goulash.”

### But there is hope

All is not lost. A key issue highlighted by the CAFC in *Chargepoint*, Chamberlain, and AAM is that there was insufficient description within the patents to support the claims or that claims were too broad for what was disclosed. For example, in AAM the court indicated that the presence of tuning instructions or details would have been sufficient to avoid being overturned under §101. Also, additional description could also have provided support as to why Chargepoint and Chamberlain were not merely routine and well-known. Specific structure or functional descriptions within the patents for Chamberlain and Chargepoint, beyond the presence of wireless communication or networking, would likely have avoided the court’s §101 finding.

In conclusion, until there is guidance from the Supreme Court or Congress over §101, patent applications should be drafted so that there is sufficient disclosure to support what is claimed and care should be taken so that claims are not drafted to encompass material that is overly broad for the disclosure.

*Aleksandar Nikolic, Esq. is an Associate in the Rochester office of Heslin Rothenberg Farley & Mesiti, P.C. He practices and advises in business development and all areas of intellectual property law. Aleksandar can be reached at (585) 288-4832 or aleksandar.nikolic@hrfmlaw.com.*