Patentability of Software Post-Alice: How Do Courts Determine Whether an Idea is Abstract?

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Since the Supreme Court’s decision in *Alice Corp. v. CLS Bank Int’l* on patentable subject matter, courts have tried to follow the prescribed framework. Under *Alice*, patent claims are invalid if directed to “abstract ideas” and if the ordered combination of those abstract ideas does not amount to an “inventive concept” or is not “meaningfully limited” in scope to prevent sweeping preemption of the field of invention. But what does it mean to be an “abstract idea” or an “inventive concept”? Six months after the Supreme Court’s decision in *Alice*, these legal constructs are far from clear.

In his majority opinion in *Alice*, Justice Thomas wrote, “we need not labor to delimit the precise contours of the ‘abstract ideas’ category in this case.” *Alice Corp. v. CLS Bank Int’l* at 2357 (noting that the concept at issue, “intermediated settlement,” is similar to the basic economic building blocks of the unpatentable “risk hedging” concept in *Bilski* and therefore is unpatentable). Courts have since compared Justice Thomas’ statement to Justice Stewart’s famous test for obscenity: it is hard to define, “[b]ut I know it when I see it.” *McRO, Inc. v. Codemasters Inc.*, No. 2:14-cv-439, 2014 U.S. Dist. LEXIS 136362, 12 (C.D. Cal. Sept. 22, 2014) (quoting *Jacobellis v. State of Ohio*, 378 U.S. 184, 197, 84 S. Ct. 1676, 12 L. Ed. 2d 793 (1964) (Stewart, J. concurring)). We reviewed the past six months of decisions to determine whether a pattern could be discerned that would provide greater clarity of the legal analysis required to determine patent eligibility under *Alice* — simply put, to determine whether the courts are identifying any objective indicia to inform the prescribed *Alice* framework.

At most, we observe that subject matter is often found ineligible for patenting when the court defines the abstract idea broadly enough to cover a human activity, and the court determines that the computer or software feature adds nothing more than generic or conventional functions to the invention. The contrast is also true; that is, subject matter is found ineligible for patenting when the court defines the abstract idea narrowly and finds that the patented technology does not add something more than what is generic or functional. But that pattern, if we could even call it that, is simply application of the framework. Without any objective indicia, the analysis set forth by the majority of the courts, even if well-reasoned, sounds a lot like “I know it when I see it.” That is because the characterization of the patented technology predetermines the patent eligibility conclusion. It is unclear whether it is that the parties’ characterization of the patented technology drives the patent eligibility determination or whether the determination then drives the characterization of the patented technology set forth by the court in its written decision — it is likely both.

In the recent decision, *Fairfield Indus. v. Wireless Seismic, Inc.*, district court judge Roy S. Payne summarized this subjective analysis forced on courts well:

The Court acknowledges that identifying the precise nature of the abstract idea at issue here is not easy. As the Supreme Court recognized in *Alice*, “[a]t some level, all inventions … embody, use, reflect, rest upon or apply laws of nature, natural phenomena, or abstract ideas.” *Alice*, 134 S. Ct. at 2347. Thus, any claim, described at a certain level of generality, can be challenged as directed to an abstract idea. This difficulty is compounded by the fact that the two-part test outlined in *Alice* is
new, and lower courts have received little guidance on how to determine whether a claim is directed to an abstract idea. As discussed below, however, [because even the defendant’s characterization of the claims amounts to an inventive concept,] this Court need not probe this dilemma further.

*Fairfield Indus. v. Wireless Seismic, Inc.*, No. 4:14-cv-2792, 2014 U.S. Dist. LEXIS 176599, 11 (S.D. Tex. Dec. 23, 2014). Thus, even after six months, it appears that, through no fault of the lower courts, analysis required by Alice remains a subjective “I know it when I see it.” Further guidance is imperative to provide courts, practitioners, and patent owners with certainty. In the meantime, recognize the import of the characterization of the patented technology in framing your arguments.

**Background: Legal Standards**

35 U.S.C. § 101 (section 101) defines patentable subject matter. Courts have applied section 101 to exclude laws of nature, natural phenomena, and abstract ideas. *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014). The well-accepted principle underlying section 101 is that abstract ideas are unpatentable because granting a patent for an abstract idea would result in an improper monopoly, preempting the use of that idea by any approach in all fields. *Bilski v. Kappos*, 561 U.S. 593, 610-12 (2010). At the same time, courts “tread carefully in construing this exclusionary principle lest it swallow all of patent law.” *Alice*, 134 S. Ct. at 2354. To balance these competing concerns, the Supreme Court adopted a two-part framework to determine whether patents claiming abstract ideas are patentable subject matter. *Id.* at 2355 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S.Ct. 1289, 1297 (2012)).

First, the court shall determine whether the claims at issue are directed to a patent-ineligible concept, such as an abstract idea or a law of nature. *Id.* In order to do this, however, the court must first define or characterize the concept. As discussed further below, courts have significant discretion in characterizing the patented idea. Having characterized what the claims are directed to, a court will then consider the concept as a patent-ineligible abstract idea when it covers “basic building blocks of human ingenuity.” *Id.* at 2354.

Second, if the concept is patent-ineligible, the court then determines whether the elements of the claims, as a whole, contain either an “inventive concept” sufficient to transform the claimed abstract idea into a patent-eligible invention or otherwise offer a “meaningful limitation” in scope. *Id.* at 2357, 2360. If the claims simply recite the obvious purpose of the relevant function or idea, a court will likely find that the claim carries out steps that are conventional, and not inventive. *See e.g., Enfish, LLC v. Microsoft Corp.*, No. 2:12-cv-07360, 2014 U.S. Dist. LEXIS 156760, *19-22 (C.D. Cal. Nov. 3, 2014) (finding that claims directed to the concept of storing, organizing, and retrieving memory in a logical table, or organizing information using tabular formats, did not amount to an inventive concept and were not patentable). Patent claims that are directed to “a method of organizing human activity” are presumptively patent-ineligible. *See DietGoal Innovations LLC v. Bravo Media LLC*, No. 1:13-cv-8391, 2014 U.S. Dist. LEXIS 92484, *27, *30-32, *44 (S.D.N.Y. July 8, 2014) (holding a patent ineligible because claims were directed to “selecting meals for the day, according to one’s particular dietary goals and food preferences” and because the “computerized elements, taken separately, do nothing to ‘transform’ the nature of the claim from the mental process of meal planning into a novel method or unique application of that idea”).


In the case of many claims that may be challenged under section 101 as abstract ideas, such claims may be salvaged by incorporation of a meaningful limitation directed to computer technology. In order to “salvage an otherwise patent-ineligible process, a computer must be integral to the claimed invention, facilitating the process in a way that a person making calculations or computations could not.” Comcast IP Holdings I, LLC v. Sprint Commc’ns Co. L.P., No. 12-cv-205, 2014 U.S. Dist. LEXIS 96289 at *15 (D. Del. July 16, 2014) (quoting Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.), 687 F.3d 1266, 1278 (Fed. Cir. 2012)). The key to this patent-eligible inquiry is whether the claims tie the abstract idea to a specific way of doing something with a computer, or a specific computer for doing something; if so, they likely will be held to be patent-eligible. Id. at *15-16. For a machine to impose a meaningful limitation on the scope of a claim, it must play a significant part in permitting the claimed method to be performed, and not function solely as an obvious mechanism for achieving a solution more quickly. Data Distrib. Techs., LLC v. Brer Affiliates, Inc., No. 12-4878, 2014 U.S. Dist. LEXIS 115543, *38 (D.N.J. Aug. 19, 2014).

By way of example, Judge Pfaelzer described three different computer programs directed at the longstanding concept of determining the best moves in a chess game. Enfish, 2014 U.S. Dist. LEXIS 156760 at *34. The first program tests various moves—the “brute force” method, where a computer program examines every possible position for a fixed number of moves and selects the move that would lead to the strongest position. Id. The second program considers factors such as safety of the king, and number and development of the pieces of each side. Id. at *34-35. The third program determines moves in a manner similar to the second program, but additionally it “allocates different amounts of computer memory to different factors, and it reallocates memory at different stages of the game, as some factors become more important and others less important.” Id. According to Judge Pfaelzer, the first two are unpatentable; humans have long used those methods to improve their own chess skills. Id. The third chess program would be patentable subject matter because it is directed to the inventive computer concept of using dynamic memory allocation “to solve the modern, computer-specific problem of scarce memory.” Id. at *35-36. But couldn’t one argue that the dynamic memory allocation is a feature of modern programming languages that is practiced every day?

**Characterization of the Patented Idea**

No surprise then that there has been uncertainty about how courts should go about defining a patented idea. This is for good reason because the characterization of the technology at issue often determines the eligibility outcome. In this struggle to characterize the patented technology, an unsurprising pattern emerges: How broadly or narrowly the court defines the idea in any given case will foreshadow the fate of the patent. If the court provides a simple characterization of the patented
technology, the patent is likely to be held to be ineligible subject matter. In one case involving claims directed to “the concept of routinely modifying transaction amounts and depositing the designated, incremental differences into a recipient account,” where the court found the claims to be patent-ineligible, the court almost laments in a footnote that it is unable to come up with a simple, catchy, characterization of the patented technology:

The patents in this action describe an abstract idea that lacks a convenient, catchy moniker, such as Bilski’s “risk hedging” or Alice’s “intermediated settlement.” Perhaps the moniker most precisely identifying the present patent is “salami slicing.” See Larios v. Nike Retail Servs., Inc., 2013 U.S. Dist. LEXIS 112761, 2013 WL 4046680 (S.D. Cal. Aug. 9, 2013) (Curiel, J.) (defining “salami slicing” as the method of “remov[ing] something gradually by small amounts at a time”).


Additional examples are of how courts have characterized the claims of the patents-at-issue are referenced in the chart available at this link.

In Cogent Med., Inc. v. Elsevier Inc., No. C-13-4479, 2014 U.S. Dist. LEXIS 139856 (N.D. Cal. Sept. 30, 2014), the defendant argued for a broad interpretation of the patented concept, the plaintiff argued for a narrow characterization, and the court decided on an interpretation even broader than the defendant’s version:

The court therefore first looks to whether the ‘879 Patent’s claims recite an abstract idea. In the initial briefing, the moving defendants argued that the ‘879 Patent embodies the abstract idea of “providing users with a personal library interface containing medical literature.” Mot. at 11.

The reply and supplemental brief identify the abstract idea as “organizing and presenting information to a user according to the user’s preferences.” Dkt. No. 24 (“Reply”) at 3; Dkt. No. 43 (“Def. Supp. Br.”) at 2. Cogent responds that the ‘879 Patent claims much narrower subject matter than the moving defendants describe. The court finds that the ‘879 Patent claims the abstract idea of maintaining and searching a library of information.

Cogent Med., 2014 U.S. Dist. LEXIS 139856, *10-11 (emphasis added). The opinion provides no insight as to how the court arrived at that characterization of the patented technology. No surprise that based on the court’s characterization of the patented technology, the claimed technology was found to be patent-ineligible.

In another example, the Federal Circuit in DDR Holdings held the patented subject matter to be patent-eligible, relying on the second step of the two-part Alice test. DDR Holdings, 2014 U.S. App. LEXIS 22902 at *25-26. There, the Federal Circuit did not come to its own characterization of the invention, but rather commented on four different characterizations: three offered by defendant-appellants and one offered by the dissenting opinion. DDR Holdings, 2014 U.S. App. LEXIS 22902 at *25-26 (“making two web pages look the same,” “syndicated commerce on the computer using the Internet,” “making two e-commerce web pages look alike by using licensed trademarks, logos, color schemes and layouts[,]” …and the “goal ‘that an online merchant’s sales can be increased if two web pages have the same ‘look and feel[’]”). The Federal Circuit concluded that all the characterizations of the patented technology offered by defendant-appellants and the dissent were
directed to an abstract idea; however, the Federal Circuit held that there was nevertheless an “inventive concept.” Id. at *26-31. The defendant-appellants argued that the claims were not meaningfully limited, contending that “[t]he claims do not define a particular way of achieving the matching of the look and feel description and visually perceptible elements, but rather claim all ways to do so.” Brief for Appellant at 28-29, DDR Holdings, No. 13-1504, Dkt. No. 33 (Fed. Cir. Oct. 9, 2013). The plaintiff-appellee countered by arguing that there were meaningful limitations by pointing out that “[a claim at issue] requires specific stored data and Internet communication to remote web pages; [another claim at issue] requires service of a two-part ‘composite web page’ on the basis of ‘activation of [a] link’ from another computer.” Brief for Appellee at 63, DDR Holdings, No. 13-1504, Dkt. No. 46, (Fed. Cir. Dec. 20, 2013). The Federal Circuit sided with the patent owner, finding that the claims were sufficiently limited as to not “preempt every application of the idea of increasing sales by making two web pages look the same, or of any other variant [characterization] suggested by [defendant-appellant].” DDR Holdings, 2014 U.S. App. LEXIS 22902 at *31. Again, the opinion applies the framework set forth in Alice but does not identify objective indicia used to arrive at the decision.

These decisions still feel a lot like an “I know it when I see it” analysis.

New USPTO Guidelines Reflect the Same Uncertainty


Conclusion

In the 40 decisions by federal courts that have applied the Alice framework, courts have considered 72 patents, 66 of which are computer or software related (the other six patents relate to DNA detection and correlation). Twelve of the 72 patents (or 16.67%) have withstood Alice challenges, while 53 of 72 (or 73.618%) have not. Seven of 72 (or 9.72%) were deferred for a later decision after a claim construction or more facts develop. Many of these decisions may be predictable once the court characterizes the patented concept. Furthermore, 84.72% of the time (for 61 of the 72 patents), the court’s decision on whether the characterization is abstract or patent-ineligible aligns with the overall determination of patentability under section 101. Parties should continue to monitor cases applying Alice for more clues on how courts are delimiting the precise contours of “abstract idea.” For now, it seems that the best course of action is to focus on the real battle: obtaining a favorable characterization of the patented technology.

If you have any questions about this topic, please contact the author(s) or your principal Mintz Levin attorney.

TABLE OF AUTHORITIES (IN CHRONOLOGICAL ORDER)

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