

Alice Turns 2: How Fed. Circ. Treats Computer-Related Patents

Law360, New York (June 20, 2016, 10:31 AM ET) -- On June 19, 2014, the U.S. Supreme Court ruled that computerized abstract ideas are not patent-eligible. This Law360 Expert Analysis series is examining where we stand two years after the court's landmark decision in Alice Corp. Pty Ltd. v. CLS Bank International.



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The U.S. Supreme Court's decision in *Alice Corporation Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014), has been understood widely as a death knell for many computer-related patents. In the first year after it was decided, one commentator calculated an invalidation rate of 82.9 percent in judicial decisions that cited it. Jasper L. Tran, "Software Patents: A One-Year Review of *Alice v. CLS Bank*," 97 J. Pat. Trademark Off. Soc'y 532, 532 (2015). Those results were neither surprising nor disappointing to the many technology companies that faced a plague of low-quality software patents asserted by "patent trolls." But Alice did not purport to hold that patents on computer-implemented inventions are categorically unpatentable. To the contrary, the Supreme Court has firmly resisted rigid line-drawing in this area, and the test for patent eligibility as articulated by the Alice court does not even mention whether an invention is implemented using a computer.

Courts since Alice have thus faced the thorny question of where to draw the line: When is a patent claim involving the use of a computer patent-eligible, and when is it not? Even though the question before the courts is, from a doctrinal perspective, whether a claim is directed to an "abstract idea," Alice, 134 S. Ct. at 2355, recent jurisprudence from the Federal Circuit suggests that the line may in practice lie between inventions that are sufficiently technological in character and those that are not.

For most computer-related patent claims that have been challenged under 35 U.S.C. § 101, the eligibility question hinges on the now-familiar two-step "framework," adopted in *Mayo Collaborative Services v. Prometheus Labs. Inc.*, 132 S. Ct. 1289 (2012), and reaffirmed in Alice, for determining whether a claim is ineligible because it claims an "abstract idea." Alice, 134 S. Ct. at 2355.

As the Supreme Court made clear in Alice, the first step of the framework requires an analysis, unique in the patent law, under which courts do not focus on the precise language of the patent's claims. Rather, courts look at step one for what some courts have described as the "gist" or "essence" that underpins

the invention. See, e.g., *Open Text S.A. v. Box, Inc.*, 78 F. Supp. 3d 1043, 1046 (N.D. Cal. 2015) (“In evaluating the first prong ... the Court distills the gist of the claim.”). In *Alice*, for example, the court announced that the claims were directed to “the abstract idea of intermediated settlement,” even though all of the claims at issue had additional limitations reciting a particular way that such settlements were to be performed electronically. Only at step two of the *Alice* analysis, if the idea underlying the claim is determined to be abstract, are the claim’s actual limitations considered. The question at step two is whether any limitations that go beyond the identified abstract idea add “enough” to the abstract idea to constitute an “inventive concept” and thereby confer patent-eligibility on what otherwise would be an ineligible claim.

The *Alice*/*Mayo* framework gives rise to several new line-drawing problems. For instance, whether a claim survives *Alice* may depend on which aspects of the claim are identified as part of the underlying “idea” at step one, and whether this idea, now identified, seems sufficiently concrete to pass initial muster under step one. If the court passes step one by having found an abstract idea lurking in a claim, the question then becomes whether the specific claim limitations considered at step two are sufficient to qualify (alone or as an “ordered combination”) as an “inventive concept” and thus to render the claim patent-eligible. In practice, only a minority of computer-related claims have survived the *Alice* inquiry. The algorithmic character of computer-related inventions has meant that they often have been categorized as abstract at *Alice* step one, and in the absence of novel hardware innovations, courts have seldom found them to have an “inventive concept.”

Three recent decisions of the Federal Circuit, however, shed light on which computer-related inventions may remain patent-eligible in the years to come. Consistent with *Alice*, the Federal Circuit’s recent jurisprudence continues to deem ineligible many inventions involving computers, particularly those that simply deploy computer technology in ways that do not appear to require much of any technological advancement, but the court appears to be making an effort to better define criteria under which claims may survive the *Alice* inquiry.

The first of these decisions is *DDR Holdings LLC v. Hotels.com LP*, 773 F.3d 1245 (Fed. Cir. 2014), in which the court upheld claims to a system for dynamically constructing webpages. Specifically, the claims addressed the problem that arises when a user clicks on a web advertisement offered by a third party. Under ordinary web protocols, the user is transported instantly to the third party’s website, and away from the site the user originally was browsing. The patentee developed a system in which elements of the original website are combined with elements of the third-party website so that the user can purchase third-party products without leaving the original website.

The *DDR* court struggled to define the underlying abstract idea at issue, holding that “under any of [the proffered] characterizations of the abstract idea, the ... claims satisfy *Alice* step two.” *Id.* at 1257. And although the court appeared to accept that the underlying idea — whatever it was — was abstract in character, it distinguished the claims from others invalidated in recent years on the ground that “they do not merely recite the performance of some business practice known from the pre-internet world along with the requirement to perform it on the Internet.” *Id.* The claims survived the *Alice* inquiry because they were “necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.”

More recently, the Federal Circuit reversed a district court decision that had invalidated several patent claims in *Enfish LLC v. Microsoft Corp.*, No. 2015-1244, —F.3d.—, 2016 WL 2756255 (Fed. Cir. May 12, 2016). The claims in *Enfish* related to a purported improvement in the way a computer database stores information. Unlike previous databases that stored information using a “relational model,” the *Enfish*

claims were directed to database systems using a “self-referential model” in which database tables contained references to portions of themselves and thus enabled greater flexibility in how databases were configured. *Id.* at *2. The district court in *Enfish* had held that the claims were simply directed to “storing, organizing, and retrieving memory in a logical table,” but the Federal Circuit disagreed, holding instead that the claims “are not simply directed to any form of storing tabular data, but instead are specifically directed to a self-referential table for a computer database.” *Id.* at *6. Once this underlying idea was identified, the *Enfish* court concluded that it was not abstract. Referring back to *Alice*, the court framed its inquiry as “ask[ing] whether the focus of the claims is on the specific asserted improvement in computer capabilities.” *Id.* at *5. The court in *Enfish* answered that question in the affirmative, concluding that the claims “are directed to a specific improvement to the way computers operate, embodied in the self-referential table.” *Id.* The claim thus survived the analysis at *Alice* step one. *Id.*

Just days after the *Enfish* decision, the Federal Circuit applied the test recited in *Enfish* in *In re TLI Communications LLC Patent Litigation*, No. 2015-1372, —F.3d—, 2016 WL 2865693 (Fed. Cir. May 17, 2016). The *TLI* decision applied the same test, but came to the opposite result. The claims at issue in *TLI* were directed to “assigning ‘classification data,’ such as a date or timestamp, to digital images and sending those images to a server,” which then “extracts the classification data and stores the digital images, ‘taking into consideration the classification information.’” *Id.* at *1. These claims, the court held, “are simply directed to the abstract idea of classifying and storing digital images in an organized manner,” *id.* at *5, an idea that failed the test at *Alice* step one because the court held it was not “directed to an improvement in the functioning of a computer,” *id.* at *3.

Although *DDR* decided patent eligibility at *Alice* step two, and *Enfish* and *TLI* focused primarily on *Alice* step one, a common thread runs through all three decisions: The court of appeals inquired as to whether the claims were directed to a sufficiently specific and technological invention to warrant patent protection. The *DDR* claims were upheld because they represented a specific technological solution to a problem that only arose on the internet, and had no nontechnological analog. Likewise, under *Enfish* and *TLI*, a key question for the Section 101 analysis is whether a claim involves a “specific improvement to the way computers operate” — in which case the claim may be patent-eligible — or whether the claim simply covers a more general or less-technological concept implemented on a computer.

Under the Federal Circuit’s post-*Alice* jurisprudence, the question of whether a computer-related claim is patent-eligible may be decided (depending on the invention) at either *Alice* step one or step two, but the dispositive test appears to be a variant of the “technological arts” test that both the Federal Circuit and the Supreme Court previously considered and rejected. See, e.g., *In re Bilski*, 545 F.3d 943, 960 (Fed. Cir. 2008) (en banc), *aff’d sub. nom. Bilski v. Kappos*, 561 U.S. 593 (2010); see also *Bilski*, 561 U.S. at 632-35 (Stevens, J., concurring in the judgment) (arguing for “technological arts” test). But unlike the rejected “technological arts” test, the inquiry is not whether the patent as a whole is in a technological field. The inquiry, rather, at least as to computer-related inventions, considers whether an invention sufficiently advances computer technology itself. It also considers the relative breadth of the claim; both *DDR* and *Enfish* emphasized that the claims they upheld were directed to a “specific” innovation, as compared to claims that “broadly and generically claim ‘use of the Internet’ to perform an abstract business practice,” *DDR*, 773 F.3d at 1258, or “where general-purpose computer components are added post-hoc to a fundamental economic practice or mathematical equation,” *Enfish*, 2016 WL 2756255, at *8.

For a test designed to determine whether a claim is directed impermissibly to an “abstract idea,” the abstractness of the claimed invention seems to play a comparatively minor role in the Federal Circuit’s recent decisions. Taken at face value, the concept of a self-referential database table as in *Enfish* could

certainly be characterized as abstract, or at least no less abstract than the concept in TLI of sending digital photographs to a computer server and categorizing them based on information that has been encoded in them. Instead, the difference appears to lie in whether the court has perceived a precise technological development that is worthy of patent protection, or whether the claims are directed at their core to conventional or generic processes to which computer technology has simply been added.

Two years after the Alice decision, it is clear that the Federal Circuit has begun an attempt to articulate the factors that differentiate patent-eligible from ineligible computer-related inventions under the framework Alice articulated. Computer-related inventions have been controversial, however, for much of the time that there have been computers. After all, the primogenitor of today's Section 101 case law, *Gottschalk v. Benson*, 409 U.S. 63 (1972), concerned a patent application, directed to "data processing method[s]" for converting numbers on a computer from one form to another, that was filed by Bell Telephone Laboratories in 1963. *Application of Benson*, 441 F.2d 682, 682-83 (C.C.P.A. 1971). Only time will tell whether the court's recent Section 101 jurisprudence will prove easier to apply, and longer-lasting, than previous attempts to determine patent eligibility and to use Section 101 to weed out purported inventions that do not merit patent protection.

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DISCLOSURE: The authors were lead counsel for Alice before the Federal Circuit (both the en banc court and the panel) and before the district court, and were co-counsel for Alice in the Supreme Court. They and their firm also represent accused infringers who have brought challenges under Section 101, including in the TLI litigation referred to in this article.

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