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PATENTS

2016 Rulings Shed Light on Software Patent Eligibility Standards



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Two and a half years after the U.S. Supreme Court's *Alice v. CLS Bank* decision, federal courts and the U.S. Patent and Trademark Office still struggle to interpret and apply *Alice*'s two-step test for patent subject matter eligibility. As one federal judge recently lamented, "the [*Alice*] test provides limited practical guidance for distinguishing software and computer patents that are valid from those that are not." *Synchronoss Techs., Inc. v. Dropbox Inc.*, No. 16-CV-00119-HSG, 2016 BL 428126 (N.D. Cal. Dec. 22, 2016).

Now a recent string of opinions by the U.S. Court of Appeals for the Federal Circuit upholding the patent eligibility of computer-enabled inventions has shed new light on *Alice* and how it should be applied. None of these opinions offer any bright-line test for patent eligibility. In fact, just the opposite—the Federal Circuit has concluded that there is no "single, succinct, usable defini-

tion or test" for what an "abstract idea encompasses." *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294, 120 U.S.P.Q.2d 1527 (Fed. Cir. 2016). No such universal test is possible, in the court's view, because "it is difficult to fashion a workable definition to be applied to as-yet-unknown cases with as-yet-unknown inventions." *Id.* Nevertheless, these opinions offer fresh guidance and lessons for patent litigators and prosecutors.

The Rebirth of Section 101

Starting in 2010 and for the subsequent five years, the U.S. Supreme Court wrestled with the legal standard for determining the subject-matter eligibility of various patents under 35 U.S.C. § 101. First with *Bilski v. Kappos*, 561 U.S. 593, 95 U.S.P.Q.2d 1001 (2010), and on through *Mayo Collaborative v. Prometheus Labs.*, 132 S. Ct. 1289, 101 U.S.P.Q.2d 1961 (2012), and *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 106 U.S.P.Q.2d 1972 (2013) (*Myriad*), the Court repeatedly invalidated patents pursuant to judicial exceptions to Section 101. Notwithstanding having addressed Section 101 in three cases in a relatively short time span, the Court then granted certiorari in *Alice*.

In deciding *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 110 U.S.P.Q.2d 1976 (2014), the Supreme Court relied heavily on its decision in *Mayo* to articulate a two-part inquiry to evaluate patent eligibility under Section 101: (1) is the patent directed to a patent ineligible concept, such as an abstract idea or natural phenomenon, and if so (2) does the claim have an "inventive concept," that is an element or combination of elements "sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself"?

Much has already been written about *Alice* and its impact. *Alice* transformed how patent applicants and litigants view patents claiming computer-enabled inventions. In the context of litigation, *Alice* sparked a sea change in the popularity and success of Section 101 motions. Indeed, such "*Alice* motions" became routine,

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and have been remarkably successful. As of June 19, 2016, *Alice*'s second anniversary, 568 patents had been challenged in Section 101 motions citing *Alice*, resulting in 378 invalid patents—an invalidation rate of 66.5 percent. Jasper L. Tran, *Two Years After Alice v. CLS Bank*, 98 J. Pat. & Trademark Office Society 354, 358-59 (2016).

The Turning of the Tides

Recently, though, things have begun to change. After finding in favor of validity under Section 101 in only one of 25 opinions in the first 23 months after *Alice*, the Federal Circuit has issued four such opinions in the last eight months.

DDR. Until May 2016, the only Federal Circuit decision affirming validity under *Alice* was *DDR Holdings, LLC v. Hotels.com, LP*, 773 F.3d 1245, 113 U.S.P.Q.2d 1097 (Fed. Cir. 2014), which was decided in December 2014. In *DDR Holdings*, the patents related to creating composite web pages—web pages “that combine certain visual elements of a ‘host’ website with content of a third-party merchant.” *Id.* at 1248 (giving the example of combining the logo, background color and fonts of a host website with product information from a merchant.). The district court deemed the claims patent-eligible and, on appeal, the defendant challenged that ruling. A divided panel of the Federal Circuit affirmed.

The majority ruled that the claims satisfied the second step of the *Alice* inquiry because 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. Instead, the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” *Id.* at 1257 (“In particular, the ‘399 patent’s claims address the problem of retaining website visitors that, if adhering to the routine, conventional functioning of Internet hyperlink protocol, would be instantly transported away from a host’s website after “clicking” on an advertisement and activating a hyperlink.”). In so doing, the majority notably sidestepped the step-one inquiry—Is the patent directed to an abstract idea?—noting that it was “not as straightforward” as in other cases. *Id.*

For a year and a half, *DDR Holdings* stood as the only Federal Circuit precedent patentees could point to in defense of their patents against Section 101 attacks. Then, in May 2016, the Federal Circuit decided *Enfish, LLC v. Microsoft*, 822 F.3d 1327, 118 U.S.P.Q.2d 1684 (Fed. Cir. 2016)—the first of what would prove to be a rapid succession of opinions reversing district court Section 101 ineligibility rulings.

Enfish. In *Enfish*, the patents were directed to a “logical model” for a computer database, which explains how various elements of information are related to one another; specifically, the claims were directed to a “self-referential” model. In contrast to *DDR Holdings*, the Federal Circuit decided *Enfish* on the basis of the step-one inquiry, concluding that the claims at issue were “not directed to an abstract idea within the meaning of *Alice*.” *Id.* at 1336. The court paid particular attention to what was being claimed—not just “any form of storing tabular data,” but rather a particular “self-referential” table. *Id.* at 1337.

In closing, the opinion acknowledges that some cases may involve closer calls, and that in such cases one might proceed to step two. *Id.* at 1339. But in finding the claims patent-eligible based on the step-one inquiry, *Enfish* broke new ground.

Bascom. A little over a month after *Enfish*, the Federal Circuit issued its third decision under *Alice* upholding the validity of a software invention—*BASCOM Global Internet Services v. AT&T Mobility LLC*, 827 F.3d 1341, 1348, 119 U.S.P.Q.2d 1236 (Fed. Cir. 2016). The patent at issue in *Bascom* claimed a “system for filtering Internet content,” which the district court found to be directed to an abstract idea and therefore invalid under *Alice*. *Id.* at 1348. The Federal Circuit agreed that “filtering content is an abstract idea because it is a longstanding, well-known method of organizing human behavior, similar to concepts previously found to be abstract.” But the Federal Circuit held that the district court erred in its analysis under step two of the *Alice* test.

In reversing the district court, the Federal Circuit explained that the step-two inventive concept inquiry “requires more than recognizing that each claim element, by itself, was known in the art” because an inventive concept can be found in a non-conventional arrangement of known, conventional pieces. *Id.* at 1349-50. The court went on to conclude that the claims in *Bascom*, like those in *DDR*, involved such a non-conventional, patent-eligible arrangement. According to the Federal Circuit, the “particular arrangement of elements” set forth in the claims “is a technical improvement over prior art ways of filtering such content” and thus sufficiently inventive to be patent-eligible. *Id.* at 1350-51.

McRO. Next, on Sept. 13, 2016, the Federal Circuit decided *McRO, v. Bandai Namco Games Am.*, 837 F.3d 1299, 120 U.S.P.Q.2d 1091 (2016). *McRO* involved patents for automatically lip-syncing and animating facial expressions of three-dimensional animated characters. Reversing the district court, the Federal Circuit concluded, as it had in *Enfish*, that the claims were eligible under the step-one inquiry. Specifically, they were directed to “a specific asserted improvement in computer animation, i.e., the automatic use of rules of a particular type.” *Id.* at 1314.

As in *Enfish*, the court focused on the claim language, ultimately determining that it was limited to rules with specific characteristics, rather than a broader abstract idea. To that end, in the context of addressing the pre-emption concern, the court distinguished between claims that “focus on a specific means or method that improves the relevant technology”—as in *McRO*—and claims that are “instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” *Id.*

Amdocs. Most recently, on Nov. 1, 2016, the Federal Circuit found eligibility under *Alice* in *Amdocs*, 841 F.3d 1288. A divided panel of the court upheld the validity of four patents claiming systems and methods for network service providers to account and bill for internet protocol network communications under step two of the *Alice* test.

In finding the patents in *Amdocs* to be valid, the court confirmed that there is no clear test for determining what is and what is not an abstract idea. Absent such a test, the court endorsed what it called a “classic com-

mon law methodology”—“examin[ing] earlier cases in which similar or parallel descriptive nature can be seen—what prior cases were about, and which way they were decided.” *Id.*

Applying this methodology, the Federal Circuit found that the patents in suit were much closer to those in *Bascom* and *DDR Holdings* than those in prior cases finding patent ineligibility. Notably, to find a sufficient inventive concept in the challenged claims, the court in *Amdocs* relied on both an earlier claim construction and the patent’s specification, which made clear that the claims’ other, generic components “operate in an unconventional manner to achieve an improvement in computer functionality.” *Id.* at 1300-01.

Takeaways for Patent Litigators and Prosecutors

Enfish, *Bascom*, *McRO* and *Amdocs* certainly do not resolve the uncertainty and confusion over subject matter eligibility under Section 101. They do, however, provide important guidance—and perhaps ammunition—for parties in patent litigation as well as patent prosecutors.

The biggest impact of the Federal Circuit’s recent string of validity decisions might simply be their numerosity. Given *Amdoc*’s directive that courts should examine earlier, similar cases to determine whether or not a claim is patent-eligible, the more types of inventions that are upheld under *Alice*, the more likely there is to be an earlier case in which a “similar or parallel” invention was found to be valid.

Enfish, *Bascom*, *McRO* and *Amdocs* provide patent plaintiffs and applicants with a greatly expanded body of patent-eligible claims to which they can point in defense of their own inventions. Conversely, the overwhelming number of earlier decisions finding invalidity under Section 101 continues to provide defendants and the PTO an arguably disproportionate body of patent-ineligible claims to analogize to. That is, while five Federal Circuit opinions have now upheld patentability under *Alice*, there remain many, many more finding the claims ineligible. Each of these opinions represents an opportunity to find a parallel or closely analogous claim that has been rejected.

For Patent Owners. *Enfish*, *Bascom*, *McRO* and *Amdocs* also confirm that an ineligibility finding under *Alice* is far from a given. The Federal Circuit will find claims patent-eligible when it is persuaded that they are directed to an improvement in computer functionality or solve a technology-based problem, even with conventional, generic components, combined in an unconventional manner. For patent plaintiffs and applicants, it is critical to be able to articulate how the claims fit these criteria. Plaintiffs and applicants should characterize their claims as providing a new technical solution to a technical problem, distinguishing any non-technical, “old world” analogies.

Additionally, given the Federal Circuit’s express reliance on claim construction in *McRO* and *Amdocs*, plaintiffs facing an early motion to dismiss or motion for judgment on the pleadings under Section 101 can argue that resolution of the Section 101 challenge should take place only after *Markman*, rather than at the outset of the litigation. Plaintiffs can then use the claim construction process to try to bolster the novelty

and specificity of otherwise seemingly conventional or generic claim elements.

For their part, defendants can focus on formulating a fair abstraction to help clear the step-one hurdle put up by cases like *Enfish* and *McRO*. Now that step one has teeth, it is important for defendants to focus on characterizing the claims as broadly as possible so as to claim an abstract idea instead of a particular solution or implementation. Put another way, defendants should focus on the preemptive effect of the claims as written, noting where they fail to limit themselves to a specific means and instead broadly claim an effect or result.

For Defendants. As for step two, defendants should continue to characterize the challenged claims as simply using generic computer components to implement an abstract idea, without providing meaningful technical innovation in how the idea is implemented. But in so doing, defendants should also be mindful to attack the combination of elements as not amounting to significantly more than the abstract idea.

Defendants bringing a pre-claim-construction motion under Section 101 should be prepared to explain why claim construction is not necessary to resolve the motion—for example, that the patent is invalid under the plaintiff’s own interpretation of the claims. Defendants also might consider using a Section 101 challenge as an opportunity to force the plaintiff to commit to a claim construction and claim scope position that it might otherwise wish to avoid. While claim construction can render claims non-abstract and patent-eligible under Section 101, it can also narrow the scope of the claims and make it more difficult to establish infringement.

Patent prosecutors and examiners should similarly take into account the developing body of case law finding for and against subject-matter eligibility. As in litigation, there are important parallels to be drawn between pending claims and claims that have been deemed valid or invalid; leveraging the developing body of cases, as suggested by *Amdocs*, can aid both sides of the patent prosecution process.

For Patent Applicants. Starting in 2014, the PTO has repeatedly updated its examiner guidelines regarding subject-matter eligibility. First there were interim guidelines in 2014 (shortly after *Alice*), followed by updates in July 2015 and May 2016. As recently as Nov. 2, 2016, the PTO issued a related memo to its examining corps addressing *McRO* and *Bascom*, as well as acknowledging the then-day-old *Amdocs* decision. As the PTO put it, *McRO* and *Bascom* “provide additional information about finding eligibility for software claims.” Robert Bahr memo to Patent Examining Corp. regarding “Recent Subject Matter Eligibility Decisions” at 1 (Nov. 2, 2016) (Written this way, the PTO appears to favor “finding” rather than simply “determining” eligibility.).

Based on *McRO*, the memo recommends that examiners “consider the claims as a whole . . . , and should not overgeneralize it into its ‘gist’ or core principles.” *Id.* at 2. Based on *Bascom*, the memo recommends that “examiners should consider the additional elements in combination, as well as individually, when determining whether a claim as a whole amount to significantly more, as this may be found in the non-conventional and non-generic arrangement of known, conventional elements.” *Id.* at 3 (emphasis in original).

The PTO also continues to maintain a chart of Section 101 decisions that may aid both litigants and applicants in identifying similar claims that may have been rejected or allowed under Section 101. *Available at*

https://www.uspto.gov/sites/default/files/documents/ieg-dec-2016-sme_crt_dec.xlsx.