

## From *Bilski* to *Alice Corp.*: §101 Now a Tougher Hurdle to Overcome

35 U.S.C. §101 discloses what can be patented, it states “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.” During the development of software and business methods, 35 U.S.C. §101 used to be somewhat of an afterthought. Patent attorneys, the USPTO, and the courts were primarily concerned with other 35 U.S.C. statutes, such as §102, §103, and §112. For a period of thirty years the Supreme Court remained quiet on the topic of the patent-eligibility of computer-implemented business methods. The silent streak ended with the Supreme Court’s rulings on *Bilski v. Kappos*<sup>i</sup> in 2010 and *Alice Corp. v. CLS Bank Int’l*<sup>ii</sup> in 2014. In both, *Bilski* and *Alice*, the business method claims were held to not be patent eligible. The claims at issue in *Alice* fell into the category of abstract ideas. In *Alice*, a more stringent test was implemented to determine what would fall into the category of an abstract idea. Due to the use of the more stringent test, a larger amount of claims may end up in the category of ineligible subject matter. This presents new challenges to the drafters of patent claims, especially in the area of software and business methods. Post *Alice*, questions such as “what is the definition for an *abstract idea*?” and “what will be considered to be *significantly more*?” remain unanswered.

The patentability of software and business methods has a long and tortured history.<sup>iii</sup> The Supreme Court in the 1970s struggled with mathematical algorithm and software patents, initially refusing to patent a mathematical algorithm, but later holding that a process may be patented even though its novel elements included software, so long as that software was tied to a particular machine.<sup>iv</sup> In 1998, the Supreme Court went a little bit further in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, holding that both software and business methods were patentable regardless of the form in which they were implemented, as long as the invention produced a “useful, concrete, and tangible result”.<sup>v</sup> After the holdings, §101 was rarely a problem as software patents populated the pool.

However, the §101 analysis began to change with *Bilski*. In the Federal Court's decision, en banc, it crafted the *machine-or-transformation test*, where “a claimed process is patent-eligible under §101 if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing”.<sup>vi</sup> Following which, the Supreme Court granted certiorari and placed further limits on §101 by rejecting the use of the Federal Circuit's *machine-or-transformation test* as the exclusive test of patentability, even though all the Justices thought the test provided an “important clue” to patentability.<sup>vii</sup> The Court in *Bilski* opined that even if a process meets the threshold of the *machine-or-transformation test*, it is unpatentable if the machine or transformation component is merely an incidental extra-solution activity.<sup>viii</sup> Furthermore, an invention that preempts all use of a law of nature or algorithm, including those in a particular field of use, is not patentable even if it could otherwise survive the test.<sup>ix</sup>

Even though the Supreme Court in *Bilski* held that the *machine-or-transformation test* is not the sole test for the determination of patent eligibility of a process, after *Bilski*, the courts and the USPTO continued to apply the *machine-or-transformation test*. Decades after the *Bilski* decision, the Supreme Court in *Alice* attempted to build upon that decision by applying a two-

part test from *Mayo Collaborative Services v. Prometheus Labs., Inc.* The two-part test is as follows: (1) determine whether a claim is directed to a patent-ineligible subject matter (i.e., laws of nature, natural phenomena, or abstract idea); if so, (2) determine whether any element, combination of elements, in the claim is sufficient to ensure the claim amounts to significantly more than the patent-ineligible subject matter itself.<sup>x</sup> *Mayo* was a biotechnology case where the Court articulated that in order “to transform an unpatentable law of nature into a patent-eligible application of such a law, one must do more than simply state the law of nature while adding the words ‘applying it.’”<sup>xi</sup>

After the application of the *Mayo* two-part test, the Supreme Court held that “the claims at issue [were] drawn to the abstract idea of intermediated settlement, and merely requiring generic computer implementation [failed] to transform that abstract idea into a patent-eligible invention.”<sup>xii</sup> The Court found the claims to be patent-ineligible under 35 U.S.C. §101. Even though *Alice* was a software case, much unlike *Mayo*, the Court opined that the applicability of the *Mayo* test can cross over to software claims with abstract ideas. Before the *Alice* decision was issued, the USPTO had been applying the *Mayo* test only to analyze laws of nature claims and applying the *Bilski* analysis to analyze claims directed to abstract ideas.<sup>xiii</sup> Post *Alice*, examiners began applying the *Mayo* test to analyze claims directed to abstract ideas.<sup>xiv</sup> The take away message of *Alice* is that the same analysis (the *Mayo* test) should be used for all types of judicial exceptions (i.e., laws of nature, natural phenomena and abstract ideas) and all categories of claims (i.e., product and process claims).<sup>xv</sup>

First, the Supreme Court in *Alice*, expanded “abstract ideas” to include fundamental economic practices, certain methods of organizing human activities, an idea itself, and mathematical relationships or formulas. Next, for the second prong, the Court stated that by simply adding the words “apply it”, providing mere instructions to implement an abstract idea on a generic machine, or requiring the usage of a generic computer to implement an activity which is no more than a common industry practice is not enough to transform an abstract idea into an “inventive concept”, nor into something that is “significantly more” and patent-eligible.<sup>xvi</sup>

Unfortunately, the Court does not provide a clearer definition for an “abstract idea” and it does not set outer limits for how much would be enough to satisfy the “significantly more” transformation requirement.<sup>xvii</sup> As an extension of *Bilski*, the Court continued to define what is patent-ineligible, raised the bar for potential software inventions, and failed to provide anything more than a theoretical and vague explanation of what would be patent-eligible. Can software implementing a business method be declared patent-eligible and how can software implementing a business method be made patent-eligible? These are questions everyone will likely struggle with until the courts can provide a clearer definition and flush out the requirements of the tests.

Even with all the questions that remain, it is clear that the Supreme Court is raising the threshold to software patenting. The Court is becoming more restrictive, is broadening the scope of what constitutes an abstract idea, and the *Mayo* test is now applicable to software cases. 35 U.S.C §101 can no longer be browsed over with ease and claims may have to be constructed to be narrower than in decades past.

## **Biography**

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<sup>i</sup> *Bilski v. Kappos*, 561 U.S. 593 (2010); The Supreme Court Affirmed the judgment of the Federal Circuit in *In re Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (Fed. Cir. 2008).

<sup>ii</sup> *Alice Corp. v. CLS Bank Int'l*, No. 13-298 (2014). Slip op.

<sup>iii</sup> Mark A. Lemley, Michael Risch, Ted Sichelman, and R. Polk Wagner, *Life After Bilski*, 63 Stan. L. Rev. 1315 (2011).

<sup>iv</sup> *Id.*

<sup>v</sup> *State St. Bank & Trust Co. v. Signature Fin. Grp.*, 149 F.3d 1368, 1373 (Fed. Cir. 1998).

<sup>vi</sup> *In re Bilski*, 545 F.3d 954 (Fed. Cir. 2008).

<sup>vii</sup> *Bilski*, *supra* at note i.

<sup>viii</sup> *In re Bilski*, *supra* at note 4, at 957.

<sup>ix</sup> Lemley, *supra* at note iii.

<sup>x</sup> Preliminary Examination Instructions in the USPTO in view of the Supreme Court Decision in *Alice Corporation Pty. Ltd. v. CLS Bank International, et al* (June 25, 2014).

<sup>xi</sup> *Mayo Collaborative Services v. Prometheus Labs., Inc.*, 566 U.S. \_\_\_\_\_, \_\_\_\_\_ (2012) (slip op., at 3).

<sup>xii</sup> *Alice*, *supra* at note ii, slip op., at 1.

<sup>xiii</sup> [http://www.uspto.gov/patents/announce/alice\\_pec\\_25jun2014.pdf](http://www.uspto.gov/patents/announce/alice_pec_25jun2014.pdf), at 1.

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<sup>xiv</sup> *Id.*, at 2.

<sup>xv</sup> *Id.*, at 2.

<sup>xvi</sup> *Id.*, at 3

<sup>xvii</sup> *Mayo, supra* at note xii, slip op., at 3, 11.