U.S. Supreme Court Narrows Patentability of Software Algorithms

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The U.S. Supreme Court this morning issued a unanimous decision in *Alice v. CLS Bank Int'l*, 573 U.S. ___ (2014) (Thomas, J.), holding that the software algorithm invention at issue in the case was not patentable and affirming the Federal Circuit. The Court held that the method and system claims at issue are drawn to the abstract idea of intermediated settlement, and that merely requiring generic computer implementation fails to transform that abstract idea into a patent-eligible invention. This decision will likely make it harder to patent and enforce claims on software algorithms. Below we provide a brief background of the case and summary of the decision, as well as our preliminary analysis of the decision.

**Background**

The patent-at-issue in *Alice* concerns a patent on a method of reducing “settlement risk.” “Settlement risk” is a risk associated with currency transactions: it is the risk that two parties will agree to exchange assets at a future date but, at the agreed-upon date, one party will not have the assets to complete the exchange. The patent discloses and claims methods and systems to help eliminate this risk: an intermediary “supervisory institution” can maintain a “shadow credit record” and “shadow debit record” for each party to the exchange, which updates in real time to reflect anticipated currency transactions. According to the method, when it comes time to accomplish the exchanges, all parties can be assured that the other party has sufficient funds.

Alice sued CLS for patent infringement, and CLS argued that the patent was invalid under 35 U.S.C. §101 because the claims merely covered an abstract idea. After a divided Federal Circuit panel concluded that Alice’s claims were patent eligible subject matter, the en banc Federal Circuit divided 5-5 on the patentability of the system claims, and ruled 7-3 that the method claims were not patentable. Five judges concluded that the system and method claims were not patentable because they were mental processes, and that the bare reference to a computer did not render them patent eligible. Three judges concluded that the system and method claims were patentable because they were real-world practical inventions that used computers. Finally, two judges concluded that the method claims, which did not directly refer to computers, were directed to an abstract idea; however the system claims, which recited specific computer components, were patentable. Alice filed a petition for certiorari, which the Supreme Court granted.

In the Supreme Court, Alice argued that for patentability purposes, “abstract ideas” are either pre-existing fundamental truths (like mathematical formulas) or disembodied thoughts without any real-world application, and that its invention falls into neither category. Alice contended that its invention is directed to a specific machine – a computer. Moreover, the invention does not purport to cover all computer applications of the abstract idea of using third-party intermediation to reduce settlement risk; rather, it “prescribes one particular way of reducing a particular kind of settlement risk by using a computer in a particular way.” In response, CLS argued that Alice’s invention is an abstract idea because it simply reflects the concept of using a third-party intermediary, and the bare assertion that such an idea should be implemented on a computer in an unspecified way should not confer patentability.

**Supreme Court Decision**

The Supreme Court agreed with CLS. It framed its decision in terms of a two-part test from its earlier *Mayo v. Prometheus* decision regarding patent eligibility. First, the Court considered whether the method claims at issue were directed at a patent-eligible concept such as a law of nature, natural phenomena, or abstract idea. Without extensive analysis, the Court concluded that the claims in this case were directed to the patent-eligible abstract idea of intermediated settlement, i.e., the use of a third party to mitigate settlement risk. The Court called this idea a fundamental economic practice that was “squarely within the realm” of abstract ideas.

Second, the Court analyzed if there was any “inventive concept” in the claim to “transform” the method claim into a patent-eligible idea. The Court emphasized that the introduction of a computer into the claims does not “transform” the claim, as required under its previous holdings. The Court said that the process of the claims at issue could be carried out on existing computers long in use. The Court also explained that implementing an
abstract idea in some specific fashion or in a particular technological environment also does not transform the claim to be patent eligible. The Court found the claim invalid.

The Court applied this same analysis to the system claims at issue (Alice conceded that the media claims rose and fell with the method claims). In addition, Justice Sotomayor wrote a short concurrence, joined by Justices Breyer and Ginsberg, to reiterate her view that business method claims should not be patent-eligible.

**Analysis**

This decision will likely make it harder to patent and enforce claims on software algorithms. Before this case, a software algorithm generally could be patented if it involved more than a bare “general purpose” computer and was directed at specific hardware components. For instance, a claim could be patentable under the old standard by including basic electronic hardware such as a microcontroller, a network card, communications ports, sensor, or electronic displays. In this decision, however, the Court specifically ruled that hardware that is “purely functional and generic” does not convey patent-eligibility to an otherwise ineligible claim. The Court rejected the system claims at issue, for example, that recited a “handful of generic computer components” including a data processing system, communications controller, and data storage unit.

At the same time, the Court in this decision declined to rule that software in general is not patentable. Not unlike other recent Supreme Court decisions in patent law (such as *Nautilus* regarding indefiniteness or *Bilski* regarding patentability), the Court in this case declined to make a broad ruling about whether certain types of inventions or technologies are worthy or patent protection. Software remains patentable; but accused infringers will have some new arguments to make against software claims and courts will have to take a closer look at claims directed at this kind of technology.