

## *In CyberSource Corporation v. Retail Decisions, Inc.,* The Federal Circuit Cuts Back On Software Patent Eligibility

Computer chips are becoming smarter than ever before, more like human brains. Nascent ideas like “massively parallel processing” and “cognitive computing chips” are becoming a new reality. Eventually, of course, these new super-computers will need something to do.

Against this technology backdrop, on August 16, 2011, the Court of Appeals for the Federal Circuit held that software for detecting fraud in a credit card transaction was not eligible for patent protection under Supreme Court precedents interpreting 35 U.S.C. §101, thus affirming the lower court’s ruling. One of the claims invalidated was directed to software stored on a medium (sometimes called a “Beauregard claim”) and the other invalidated claim was directed to a method that could be performed by software, although it may be important to note that the method claim was not explicitly limited to software.

### **The Northern District Of California**

The plaintiff’s patent involved examination of the pattern of credit card numbers used at a single IP address as a way of detecting fraud. The claims were broad in the sense that they did not specify what patterns were to be deemed fraudulent, and attempted to cover any method where credit card usage history at an IP address was used as the basis for detecting a likely fraud situation.

In the District Court, J. Hall Patel applied the (then prevailing) “machine-or-transformation” test to decide that the claims neither involved a “transformation” nor were “tied to a particular machine.” On the machine prong, the only putative machine that was present in the method claim was the Internet, and this was held to not be properly considerable as a machine. For the computer readable medium claim, the recited “computer readability” was held not to be a sufficient nexus to a particular machine either. On the transformation prong, the fact that associations between IP addresses and credit card numbers was used as the basis for a fraud determination was held not to be a “transformation” of the addresses / numbers.

The District Court opinion closed with an ominous line that has gained some notoriety among patent practitioners: “The closing bell may be ringing for business method patents, and their patentees may find they have become bagholders.”

### **The Federal Circuit**

A three judge panel affirmed on the basis of the failure of the claims to meet the machine-or-transformation test, but also acknowledged that an intervening Supreme Court case has now required that older Supreme Court precedents on patent-eligible subject matter law be considered in addition to the machine-or-transformation test. The Federal Circuit opinion, by J. Dyk, found that these precedents further bolstered the side of patent-ineligibility in this case.

The Federal Circuit focused on “mental processes” as a category of subject matter that has been held ineligible for patent protection by Supreme Court precedent. The Federal Circuit disposed easily of the method claim because all of its steps could be performed in a person’s head. The method claim did not even recite “post-solution activity” that might have been claimed, such as stopping a commercial transaction because of the fraud detection made under the claimed method.

On the software medium claim, the Federal Circuit had to deal with the fact that “mental processes” is often thought of as a limitation on patent-eligibility of method claims (that is, the “process” category of 35 U.S.C. §101) and not necessarily on patent-eligibility of product claims (that is, the “manufacture” category of 35 U.S.C. §101). J. Dyk explained this distinction away, stating that “the incidental use of a computer to perform the mental process of [the invalidated method claim] does not impose a sufficiently meaningful limit on the claim’s scope.” While *CyberSource* does not deal with computer system claims (the other popular type of claim for framing software inventions besides method and software medium), this quote bodes badly for software-dominated system claims.

### **How To Cover Software Post-CyberSource**

*CyberSource* may be read as an injunction against patenting the replacement of anything that is, or could be, human-being-based mental “work” with computer based algorithms. It is inevitable that patentees will fight back against this limitation and they well should. But how?

One way is to use the patent application to stress the impracticality of using a human to do the mental work involved. For example, imagine that an inventor invents software to control your office door so that it closes when you are on the telephone and opens up again when you hang up. A person could do that for you. However, it is not practical, cost-effective or desirable to always have a person in your office watching your every move. A claim that makes at least some reference to “structural” features can make clear the qualitatively different manner that software and humans do this process. For example, a claim might recite the “structure” of a wire that carries the signal which indicates whether the telephone line is active or inactive. This signal carrying wire is something tangible that would be used by the computer door control software, but not by a human doing the same door control function, and would hopefully distinguish from the *CyberSource* precedent.

It may now be helpful for patent applications to stress the performance-based reasons that software algorithms are better than a person for a given application – quicker, cheaper, more responsive to evolving conditions, more reliable – whatever the case may be. It may also be helpful to write into the patent claims the “software structure” that gives rise to the superior performance parameters. For example, imagine that anti-fraud method of the *CyberSource* case could detect a fraudulent pattern within one second when performed by computer due to use of an inference engine built within the software that has learned the differences between legitimate credit card use and fraudulent credit card use. Imagine that the *CyberSource* software could do this quickly enough to block further fraudulent transactions, while a human would not be able to do the equivalent mental process fast enough to block further fraud. If the software really worked that way and this had been recited in a claim of *CyberSource*’s patent, then the judges might have better understood that computer based solutions can sometimes be fundamentally different, and better, than human-being-based solutions, even for solutions that heavily involve what is traditionally thought of as “thinking.”

If you have any questions, please contact George R. McGuire, Chair, Intellectual Property Practice Group, at 315.218.8515 or [gmcguire@bsk.com](mailto:gmcguire@bsk.com).

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